



February 8, 2016

Project #14411

Mr. John Hnat  
Hydrogeologist  
Wisconsin Dept. of Natural Resources  
2300 N. Martin Luther King Drive  
Milwaukee, WI 53212

RE.: Project Status Update  
Village of Whitefish Bay Landfill  
5201 W. Good Hope Road, Milwaukee, WI 53223  
License Number 356 FID: 241218670 BRRTS: 02-41-000254

Dear Mr. Hnat:

In accordance with the WDNR e-mail dated July 1, 2015, The Sigma Group, Inc. (Sigma) on behalf of the Village of Whitefish Bay (the Village), has initiated a semi-annual groundwater monitoring program at the former landfill site located at 5201 W. Good Hope Road, Milwaukee, Wisconsin (**Figure 1**). The monitoring program is designed to collect groundwater samples from select sampling points to demonstrate ongoing natural attenuation of the dissolved VOC plume at the site. Prior to groundwater sampling activities a damaged piezometer was replaced with a replacement well and all the wells were purged for sampling. The following sections present well installation and groundwater sampling activities.

**Replacement Piezometer Installation** – A replacement piezometer was installed on the MPS property in September 2015. The replacement piezometer (MPS: P-1R) was installed in the vicinity of the damaged well MPS:P-1 at the northwest corner of the MPS property (**Figure 1**).

On September 18, 2015, Sigma coordinated the mobilization of a Geoprobe drill rig to install the replacement piezometer (screen interval 30 to 35' below ground) using the hollow stem auger (HAS) drilling method. Based on historical soil and groundwater information shallow soil and shallow groundwater at this location were considered clean and therefore, drill cuttings generated from the upper zone (0 to 20') were managed as clean fill. Drill cuttings generated from depth intervals 20 to 35' bgs were considered impacted and contained in two 55-gal drums for waste characterization and disposal.

At the completion of drilling a 5-ft section of PVC screen attached to a 30-ft length of PVC riser was installed per the Wisconsin Administrative Code NR 141 and completed with flush

mount cover. The well was developed on the following week to ensure good hydraulic connection with the underlying saturated materials.

**Groundwater Monitoring** - Following the well installation activities, Sigma completed the semi-annual groundwater monitoring during the week of September 28, 2015. Consistent with the approved monitoring program select monitoring wells were sampled for water level and in situ field parameters including dissolved oxygen (DO), oxidation-reduction potential (REDOX), pH, conductivity and temperature. The wells were then purged and water samples were collected for laboratory analysis of VOCs. Attached **Tables 1 through 4** include comprehensive summaries of all water level data, water quality data, groundwater inorganic analytical data and in situ biodegradation parameters collected at the site. The groundwater sampling field logs are included in **Appendix A** and laboratory analytical reports are included in **Appendix B**.

The following monitoring wells/piezometers were included in the monitoring program. With the exception of monitoring well MW-E, which was found dry during repeated attempts at sampling, all the selected wells/piezometers were sampled.

Landfill Property: MW-D/PZ-D/MW-22, MW-E/W-MW-10, W-MW-11,  
MW-4, W-MW-5S and MW-C/PZ-C

MPS Property: MW-26, MPS:P-1 (replacement well), MPS:P-2,  
MPS:P-3, MPS:P-4, MPS:P-5, MPS:P-6 and MPS:P-7.

Residential Area: MW-11 and P-11.

**Groundwater Flow** – The groundwater elevation data observed at the site and its vicinity in 2015 was used to interpret the groundwater flow. Consistent with historical observations, the shallow groundwater within the clay unit generally flows to the east and northeast. The mid-depth groundwater flow within the silty sand unit generally occurs to the east-southeast. Further south on the MPS property the mid-depth groundwater flow within the more permeable sand and gravel unit is predominantly to the south and southeast. The direction of deeper groundwater flow within the lower silty clay/bedrock interface zone is also predominantly to the southeast.

**Groundwater Quality** – A review of the data indicates no petroleum related compounds (toluene, ethyl benzene and xylenes) were detected above the laboratory detection limit or groundwater enforcement standards; however, the presence of chlorinated compounds above the groundwater enforcement standards are evident in several of the sample locations.

Groundwater samples collected from monitoring wells located at the east-central portion of the site (W-MW-5S and PZ-C) continue to exhibit relatively low CVOCs impacts. Review of the historical data collected over the last 20 years continues to suggest decreasing trend of both the parent compounds PCE/TCE and the breakdown compounds cis-1,2-DCE and vinyl chloride at these locations. Although the shallow groundwater flow is to the east-northeast, it is evident that the relatively high groundwater impacts are limited to the southwestern portion of the landfill property and the migration of dissolved CVOCs to the east and north has not occurred.

Review of the groundwater data from monitoring well cluster MW-D/MW-22/PZ-D located at the southwest corner of the site (suspected source area) indicates the presence of relatively high concentrations of CVOCs in groundwater. Please note, a re-sampling was performed in December 2015 at sources area monitoring well MW-D to verify the relatively high concentrations detected during September 2015 sampling event. The results correlate with the historical data and indicates no significant change near the source area over time.

Similar groundwater impacts are also evident at two other sampling points (MW-10 and MW-11) located within the southwest quadrant of the landfill. One parent compound TCE and the daughter compounds Cis-1,2-DCE and vinyl chloride are present at concentrations several orders-of-magnitude higher than their respective groundwater enforcement standards. However, the detected concentrations appear to be stable or decreasing.

Review of the data also indicates the groundwater quality continue to improve further downgradient (south and southeast) of the landfill property. No parent compounds were detected at off-site downgradient locations and the degree of breakdown compounds also appear to decrease further south from the landfill.

**Comparison with Historical Data** - To further assess the historical trends of the groundwater quality several concentration versus time plots were developed for select on- and off-site wells and are included in **Appendix C**. A review of the plots clearly indicates decreasing or stable concentration trends for all four CVOC constituents at most of the sample locations with the exception of the source area monitoring well MW-D located at the southwest corner of the landfill property.

Also included in **Appendix C** are three plots of groundwater CVOC distribution across several properties which include: the Presidio Apartment Complex to the west, the MPS property to the south and the residential subdivision and the cemetery further south. The plots represent three sampling events: 2002, 2014 and 2015. Based on a review of these distribution plots it is evident that the dissolved CVOC plume is fairly stable over twelve year period, and despite persistently high concentrations at the source area (southeast quadrant of at the landfill property) natural attenuation processes are on-going at the site.

**Conclusions** – The following conclusions are provided based on recent round of data:

- A review of the time-series data plots continue to indicate decreasing or stable concentration trends for all four CVOC constituents at most of the sample locations.
- Although relatively high CVOC concentrations persist at the source area wells, the groundwater quality downgradient of the source area continues to improve with increasing distance from the landfill.
- The improvements can likely be attributed to the natural attenuation processes ongoing at the site.

Sigma will continue the semi-annual monitoring program at the selected locations of the site and present the data to WDNR on a periodic basis.

Please do not hesitate to call either of the undersigned at 414-643-4125 if you have any questions or would like to discuss the report.

Sincerely,

THE SIGMA GROUP, INC.

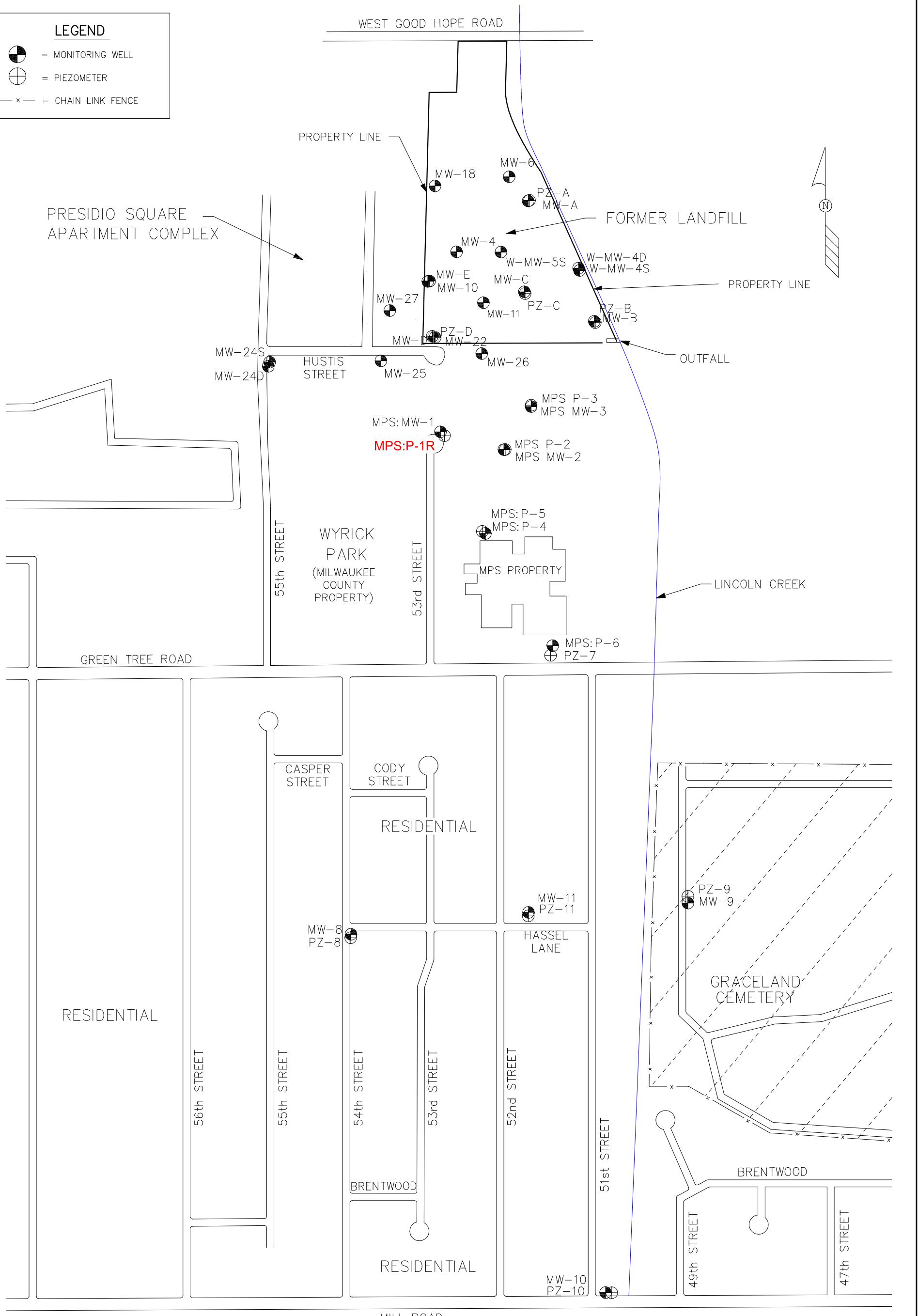
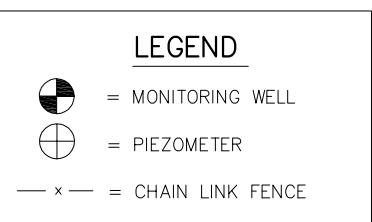
  
Mafizul Islam, P.E.  
Senior Project Engineer

  
Randy E. Boness, P.G.  
Geoscience Group Manager

/attachments

cc: Steven Sheiffer / Village of Whitefish Bay

## **FIGURES**



0 200 400 800

NOTES:

1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY LANDFILL  
MILWAUKEE, WI

DATE: 01-19-15 DR. BY: NKB DR.# 3125-149 SCALE: 1" = 400'

MONITORING WELL  
AND PIEZOMETER LOCATIONS

**SIGMA**  
THE SIGMA GROUP, INC.

FIGURE 1

## **TABLES**

**Table 1**  
**Static Groundwater Level Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 3125**

Well ID	DNR Well ID	Top of Casing Elevation (ft MSL)	Depth of Well (ft)	Screen Length (ft)	Top of Screen (ft-MSL)	Depth to Water (ft)	Groundwater Elevation (ft-MSL)	Date	
MW-A	VN630	697.36	16.4	10.0	690.96	11.89 11.27 10.10 11.19 12.99 9.62 DRY	685.47 686.09 687.26 686.17 684.37 687.74 DRY	06/19/97 07/21/97 03/27/98 04/29/98 07/15/98 08/18/98 06/26/02	
						Well found obstructed at 10.90 ft on 7/21/06			
			11.0			DRY DRY 10.65 DRY	DRY DRY 686.71 DRY	12/05/13 12/18/13 06/23/14 09/29/15	
PZ-A	VN631	697.20	22.0	3.0	678.20	13.20 12.38 12.25 11.21 14.06 12.58 13.78 15.35 16.24 16.33 13.24 15.42	684.00 684.82 684.95 685.99 683.14 684.62 683.42 681.85 680.96 680.87 683.96 681.78	06/19/97 07/21/97 03/27/98 04/29/98 07/15/98 08/18/98 06/26/02 07/21/06 12/05/13 12/18/13 06/23/14 09/29/15	
MW-B	---	693.04	15.6	10.0	687.44	8.05 7.80 5.79 5.38 8.22 7.85	684.99 685.24 687.25 687.66 684.82 685.19	06/19/97 07/21/97 03/27/98 04/29/98 07/15/98 08/18/98	
(see note 1)		693.63	16.2	10.0	687.48	10.41	683.22	06/26/02	
						Well found vandalized and filled w/ debris. Abandoned on 7/21/06			
PZ-B	---	692.61	25.3	5.0	672.31	8.65 7.87 7.77 6.97 9.63 8.09	683.96 684.74 684.84 685.64 682.98 684.52	06/19/97 07/21/97 03/27/98 04/29/98 07/15/98 08/18/98	
			692.41	24.8	5.0	672.66	9.20 10.37	683.41 682.24	06/26/02 07/21/06
						Well found vandalized and filled w/ debris. Abandoned on 12/04/13			
MW-C	VN615	700.24	17.0	10.0	693.24	15.78 11.97 10.22 9.29 16.50 10.02 13.42 16.55 DRY DRY 7.23 DRY	684.46 688.27 690.02 690.95 683.74 690.22 686.82 683.69 DRY DRY 693.01 DRY	06/19/97 07/21/97 03/27/98 04/30/98 07/15/98 08/18/98 06/26/02 07/17/06 12/05/13 12/18/13 06/25/14 09/29/15	
PZ-C	VN616	700.45	28.4	5.0	677.05	16.41 15.64 15.53 14.74 17.40 15.86 16.99 18.53 19.51 19.61 16.39 18.71	684.04 684.81 684.92 685.71 683.05 684.59 683.46 681.92 680.94 680.84 684.06 681.74	06/19/97 07/21/97 03/27/98 04/30/98 07/15/98 08/18/98 06/26/02 07/17/06 12/05/13 12/18/13 06/25/14 09/29/15	

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MW-D	VN617	709.20	19.1	10.0	700.10	14.20 13.16 12.78 15.01 13.48 13.65 13.74 18.94 DRY 11.69 18.65	695.00 696.04 696.42 694.19 695.72 695.55 695.46 690.26 DRY 697.51 690.55	06/19/97 07/21/97 03/27/98 07/15/98 08/18/98 06/26/02 07/17/06 12/05/13 12/18/13 06/23/14 09/29/15
PZ-D	VN618	709.17	31.3	5.0	682.87	25.23 24.45 24.33 26.22 24.70 25.75 27.35 28.38 28.46 25.43 27.60	683.94 684.72 684.84 682.95 684.47 683.42 681.82 680.79 680.71 683.74 681.57	06/19/97 07/21/97 03/27/98 07/15/98 08/18/98 06/26/02 07/17/06 12/05/13 12/19/13 06/23/14 09/29/15
MW-E	VN619	708.68	18.60	10.0	700.08	12.90 12.20 11.33 15.37 13.18 12.68 18.10 DRY DRY DRY DRY	685.52 686.22 697.35 693.31 695.50 696.00 690.58 DRY DRY DRY DRY	06/19/97 07/21/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06 12/05/13 12/19/13 06/23/14 09/29/15
MW-4	VM609	698.42	20.7	5.0	682.77	13.15 16.10 14.40 13.51 15.38 13.86 14.93 16.62	685.27 682.32 684.02 684.91 683.04 684.56 683.49 681.80	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06
UNABLE TO LOCATE 12/04/13								
						14.54 16.75	683.88 681.67	6/23/2014 9/29/2015
MW-6	VN614	703.30	22.3	5.0	686.00	18.42 17.40 17.11 15.86 19.57 17.27 18.90 20.88 DRY 18.04 21.24	684.88 685.90 686.19 687.44 683.73 686.03 684.40 682.42 DRY 685.26 682.06	06/19/97 07/21/97 03/27/98 04/30/98 07/15/98 08/18/98 06/26/02 07/21/06 12/18/13 06/23/14 09/29/15
W-MW-10	VN632	708.69	30.4	5.0	683.29	23.44 26.37 24.70 23.81 25.68 24.15 25.22 26.92 27.82 27.93 24.87 27.06	685.25 682.32 683.99 684.88 683.01 684.54 683.47 681.77 680.87 680.76 683.82 681.63	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06 12/05/13 12/19/13 06/23/14 09/29/15

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W-MW-11	VN633	705.29	27.85	5.0	682.44	20.78 23.00 21.31 20.44 22.30 20.78 21.86 15.18 24.55 21.51 23.68	684.51 682.29 683.98 684.85 682.99 684.51 683.43 690.11 680.74 683.78 681.61	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06 12/18/13 06/23/14 09/29/15
MW-18	VN634	703.65	27.5	10.0	686.19	16.42 21.36 19.51 17.60 20.52 17.47 NM 21.75 22.66 22.75 17.52 21.88	687.23 682.29 684.14 686.05 683.13 686.18 NM 681.90 680.99 680.90 686.13 681.77	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06 12/05/13 12/18/13 06/23/14 09/29/15
MW-22	VN635	709.47	28.4	10.0	691.07	24.31 25.57 24.68 26.54 25.02 26.07 27.65 28.40 DRY 25.72 27.88	685.16 683.90 684.79 682.93 684.45 683.40 681.82 681.07 DRY 683.75 681.59	06/07/96 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/17/06 12/05/13 12/18/13 06/23/14 09/29/15
MW-25	VN638	705.48	21.8	10.0	693.64	10.54 12.16 11.59 10.86 12.30 11.43 11.25 14.75 14.16	694.94 693.32 693.89 694.62 693.18 694.05 694.23 690.73 691.32	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 12/17/13 09/29/15
MW-26	VN639	702.47	24.1	10.0	688.39	17.33 20.25 18.57 17.82 17.69 19.55 18.03 19.09 20.79 21.70 21.79 18.68 20.92	685.14 682.22 683.90 684.65 684.78 682.92 684.44 683.38 681.68 680.77 680.68 683.79 681.55	06/07/96 01/06/97 06/19/97 03/27/98 07/15/98 08/18/98 06/26/02 07/21/06 12/05/13 12/18/13 06/23/14 09/29/15

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W-MW-4S	VN640	696.64	18.1	10.0	688.54	8.72	687.92	05/13/98
						10.28	686.36	07/15/98
		695.93	17.9	10.0	688.08	12.53	683.40	06/26/02
						15.25	680.68	12/05/13
						15.33	680.60	12/18/13
						11.77	684.16	06/23/14
						14.51	681.42	09/29/15
		695.63	22.8	5.0	677.83	11.90	683.73	05/12/98
						14.10	681.53	07/15/98
						13.69	683.23	06/26/02
						16.23	680.69	12/05/13
						16.32	680.60	12/18/13
						13.25	683.67	06/23/14
						15.42	681.50	09/29/15
W-MW-5S		696.48	16.4	10.0	690.08	11.38	685.10	05/12/98
						13.94	682.54	07/15/98
		696.73	17.3	10.0	689.43	13.30	683.18	06/26/02
						16.08	680.65	12/05/13
						16.15	680.58	12/18/13
						12.87	683.86	06/25/14
						15.28	681.45	09/29/15
UNABLE TO LOCATE/DESTROYED 12/04/13								
MPS: MW-1	VN643	708.95	18.2	10.0	700.75	9.41	699.54	08/18/98
						8.92	700.03	08/19/98
		708.99	32.3	5.0	681.69	9.45	699.50	08/26/98
						9.13	699.82	12/08/00
						9.12	699.83	01/12/01
						7.93	701.02	06/26/02
						14.54	694.41	07/17/06
UNABLE TO LOCATE/DESTROYED 12/04/13								
MPS:P-1R						25.10	683.89	09/29/15
MPS: MW-2	VN645	703.42	17.8	10.0	695.62	DRY	DRY	08/18/98
						DRY	DRY	08/19/98
		703.58	33.4	5.0	675.18	DRY	DRY	08/26/98
						16.96	686.46	01/12/01
						16.92	686.50	06/26/02
						17.11	686.31	07/17/06
						DRY	DRY	12/05/13
						DRY	DRY	12/18/13
						DRY	DRY	06/23/14
MPS: P-2	VN646	703.58	33.4	5.0	675.18	19.63	683.95	08/18/98
						19.68	683.90	08/19/98
		703.58	33.4	5.0	675.18	19.91	683.67	08/26/98
						22.09	681.49	01/21/99
						21.98	681.60	01/12/01
						20.65	682.93	06/26/02
						22.27	681.31	07/17/06
						23.29	680.29	12/05/13
						23.38	680.20	12/18/13
						20.38	683.20	06/23/14
						22.51	681.07	09/29/15

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MPS: MW-3	VN642	696.41	11.0	6.0	691.41	10.73 10.82 DRY DRY DRY DRY 3.25	685.68 685.59 DRY DRY DRY DRY 693.16	08/18/98 08/19/98 08/26/98 01/12/01 06/26/02 12/18/13 06/23/14
MPS: P-3	VN648	696.58	31.1	5.0	670.48	12.58 12.64 12.90 15.06 14.94 13.63 16.34 13.25 15.47	684.00 683.94 683.68 681.52 681.64 682.95 680.24 683.33 681.11	08/18/98 08/19/98 08/26/98 01/21/99 01/12/01 06/26/02 12/18/13 06/23/14 09/29/15
MPS: P-4	VN649	703.01	32.45	5.0	675.56	19.42 21.23 21.47 20.12 21.75 22.79 22.86 19.85 22.03	683.59 681.78 681.54 683.08 681.45 680.41 680.34 683.35 681.17	01/18/99 12/08/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/23/14 09/29/15
MPS: P-5	VN660	703.12	75.7	5.0	632.42	19.55 21.04 21.43 20.37 23.70 23.35 23.38 20.64 22.69	683.57 682.08 681.69 682.93 679.60 679.95 679.92 682.66 680.61	01/25/99 12/08/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/23/14 09/29/15
MPS: P-6	VN661	693.22 693.30 693.32	19.9 19.9	5.0 5.0	678.32 678.47	9.75 11.50 11.79 10.44 14.00 12.07 13.15 13.20 10.11 12.56	683.47 681.80 681.51 682.88 679.32 681.25 680.17 680.12 683.21 680.76	02/13/99 12/07/00 01/12/01 06/26/02 10/02/03 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
MPS: P-7	VN662	693.04	41.9	5.0	656.14	10.97 11.20 10.21 15.36 14.30 13.38 13.49 10.37 12.71	682.07 681.84 682.83 677.68 678.74 679.66 679.55 682.67 680.33	12/07/00 01/12/01 06/26/02 10/02/03 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
PZ-8	VN663	696.21	67.4	5.0	633.81	13.88 14.06 12.41 15.55 15.40 15.36 12.05 14.81	682.33 682.15 683.80 680.66 680.81 680.85 684.16 681.40	12/07/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15

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PZ-9	VN665	697.68	60.5	5.0	642.18	11.29 11.71 9.81 15.87 16.37 16.27 10.75 15.18	686.39 685.97 687.87 681.81 681.31 681.41 686.93 682.50	12/07/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
MW-9	VN666	697.70	19.8	15.0	692.90	7.47 8.19 5.35 10.83 13.98 13.92 3.38 10.43	690.23 689.51 692.35 686.87 683.72 683.78 694.32 687.27	12/07/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
PZ-10	VN667	686.84 686.95	42.5 42.5	5.0	649.34 649.45	13.75 14.05 10.21 11.87 12.18 12.25 9.33 11.14	673.09 672.79 676.63 674.97 674.66 674.59 677.51 675.70	12/07/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
MW-10	VN668	687.10 687.21	19.5 19.5	15.0	682.60 682.71	15.53 15.94 11.75 12.87 13.59 13.68 11.17 12.93	671.57 671.16 675.46 674.34 673.62 673.53 676.04 674.28	12/07/00 01/12/01 06/26/02 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
PZ-11	VN669	691.46	48.5	5.0	648.01	8.63 12.24 10.33 11.37 11.46 8.35 10.53	682.83 679.22 681.13 680.09 680.00 683.11 680.93	06/26/02 10/02/03 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15
MW-11	VN636	691.68	17.7	15.0	688.98	8.84 12.46 10.53 11.58 11.64 8.55 10.78	682.84 679.22 681.15 680.10 680.04 683.13 680.90	06/26/02 10/02/03 07/17/06 12/05/13 12/17/13 06/24/14 09/29/15

**Notes:**

1. Well/piezometers located on the landfill property were surveyed by Sigma.
2. Top of casing elevations for MPS wells were obtained from NRT report (4/4/99). Top of casing elevations for MPS:P-6 thru MW-11/PZ-11 were surveyed by Northshore Engineering on December 2000.
3. Depth of well and depth of water level measured from top of casing.
4. NM - Water level not measured.

**Table 2**  
**Groundwater Quality Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 14411**

MW-A	Screened Interval: 4 to 14 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units.	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	0.45	<0.23	<0.26	<0.28	<0.28	<0.25	<0.23	NA	NA	<0.27	<0.28	<0.27	<0.20	<0.23
04/21/98	0.44	NR	NR	<0.47	<0.90	NR	NR	NR	<0.41	NR	NR	<0.49	<0.52	
12/18/13	WELL DRY - COULD NOT BE SAMPLED													
06/25/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

PZ-A	Screened Interval: 17 to 20 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<b>2.1</b>	<0.23	<0.26	<0.28	0.64	<0.25	0.59	NA	NA	<b>1</b>	0.74	<0.27	<b>2</b>	<b>0.79</b>
04/21/98	<0.44	NR	NR	<0.47	2.7	NR	NR	NR	NR	<0.41	NR	NR	<0.49	<0.52
12/18/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/25/14	0.44 "J"	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<b>0.30 "J"</b>

**Table 2**  
**Groundwater Quality Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
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MW-C		Screened Interval: 5 to 15 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<2.0	<1.2	<1.3	<1.4	270	3.4	<1.2	NA	NA	73	<1.4	<1.4	540	14
04/21/98	0.58	NR	NR	<0.47	51	NR	NR	NR	NR	81	NR	NR	13	3.1
12/18/13														
06/25/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
WELL DRY														
PZ-C		Screened Interval: 21 to 26 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<0.41	<0.23	0.89	0.62	110	2.3	<0.23	NA	NA	0.27	<0.28	<0.27	1.5	150
04/21/98	<0.44	NR	NR	0.8	200	NR	NR	NR	<0.41	NR	NR	NR	16	230
07/15/98	<0.44	NR	NR	<0.47	82	NR	NR	NR	<0.41	NR	NR	NR	0.89	150
12/18/13	<0.24	<0.33	<0.3	<0.4	4.5	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	8.8
06/25/14	<0.24	<0.33	<0.3	<0.4	37	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	34
09/29/15	<0.44	<0.51	<1.1	<0.65	6	<0.54	<0.71	<1.3	<1.6	<0.49	<0.44	<0.84	<0.47	11.3
WELL DRY														
MW-D		Screened Interval: 7 to 17 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<100	<58	120	<70	26,000	62	1,800	NA	NA	4,500	660	400	9,900	520
06/27/02	<86	<110	<110	<110	21,000	<120	<100	<120	<280	460	<130	<110	1,400	280
12/18/13														
06/25/14	<12	<16.5	<15	<20	3,010	52 "J"	<27.5	<25	<85	980	<34.5	40 "J"	1,400	<9
09/29/15	<22	<25.5	77 J	66 J	158,000	1190	<35.5	<65	<80	920	<22	580	2,550	206
12/17/15	<440	<530	<1100	<650	28,900	<540	<710	<65	<80	1330 J	<440	<840	1,640	<170
WELL DRY														
PZ-D		Screened Interval: 24.5 to 29.5 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<41	<23	81	42	19,000	84	36	NA	NA	51	<28	<27	1,900	4,100
06/27/02	<86	<110	<110	<110	19,000	<120	<100	<120	<280	<100	<130	<110	5,000	3,500
12/19/13	<24	<33	<30	<40	3,700	42 J	<55	<50	<170	<33	<69	<33	<33	1,200
12/19/13 DUP	<12	<16.5	<15	<20	3,400	<17.5	<27.5	<25	<85	<16.5	<34.5	<16.5	<16.5	1,000
06/25/14	<24	<33	<30	<40	2,840	<35	<55	<50	<170	<33	<69	<33	<16.5	790
09/29/15	<22	<25.5	<55	<32.5	3,150	<27	<35.5	<65	<80	<24.5	<22	<42	<23.5	1,140

**Table 2**  
**Groundwater Quality Data**  
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MW-E	Screened Interval: 7 to 17 feet bgs													
Sampling Date	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/19/97	<8.2	<4.6	<5.2	<5.6	390	<5.0	<4.6	NA	NA	510	<5.6	<5.4	2,700	<4.6
06/27/02	<4.3	<5.6	<5.7	<5.7	140	<5.9	<4.9	<6.0	<14	290	<6.3	<5.7	330	<1.2
12/18/13	WELL DRY													
06/23/14	WELL DRY													
09/29/15	WELL DRY													

MW-4	Screened Interval: 14.2 to 19.2 feet bgs													
Sampling Date	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
10/05/88	<1.0	<1.0	3.6	<1.0	NA	<1.0	<1.0	<1.0	NR	400	<1.0	<1.0	425	<1.0
11/10/88	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NR	223	<1.0	<1.0	341	<1.0
04/19/89	<1.0	<1.0	6	2.3	NA	229	<1.0	<1.0	NR	110	<1.0	<1.0	264	<1.0
11/16/93	<0.2	<0.5	2.3	1.0	212	2.2	<1.0	<2.5	NR	87.1	<1.0	<0.5	104	38.7
06/07/96	NA	NA	ND	NA	190	ND	ND	NA	NR	1,400	ND	ND	1,100	18
06/20/97	<0.82	<0.46	1.6	0.72	150	0.92	<0.46	NA	NA	270	<0.56	<0.54	170	18
06/27/02	<4.3	<5.6	<5.7	<5.7	170	<5.9	<4.9	<6.0	<14	640	<6.3	<5.7	310	7.4
12/18/13	WELL COULD NOT BE LOCATED													
06/25/14	<2.4	<3.3	<3	<4	4.7 "J"	<3.5	<5.5	<5	<17	780	<6.9	<3.3	139	<1.8
09/29/15	<4.4	<5.1	<11	<6.5	61	<5.4	<7.1	<13	<16	89	<4.4	<8.4	54	27.7

MW-6	Screened Interval: 15.3 to 20.3 feet bgs													
Sampling Date	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
11/16/1993	0.3	<0.5	<0.5	<0.4	0.9	<0.5	<1.0	NA	NA	<0.5	<2.0	<0.5	0.7	1.3
6/7/1996	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	
6/20/1997	<0.41	<0.23	<0.26	<0.28	0.45	<0.25	<0.23	NA	NA	<0.27	<0.28	<0.27	<0.20	0.37
04/21/98	<0.44	NR	NR	<0.47	<0.90	NR	NR	NR	NR	<0.41	NR	NR	<0.43	0.99
07/15/98	<0.44	NR	NR	<0.47	<1.1	NR	NR	NR	NR	<0.41	NR	NR	<0.49	1.3
12/18/13	WELL DRY													
06/26/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

**Table 2**  
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W-MW-10		Screened Interval: 23.3 to 28.3 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
10/05/88	<1.0	<1.0	23	46	NR	<1.0	<1.0	8.2	NA	138	24	30	2,630	<1.0
11/10/88	3.9	<1.0	31	54	NR	<1.0	<1.0	<1.0	NA	34	3.4	<1.0	877	<1.0
04/19/89	<1.0	<1.0	18.8	35.6	NR	10,400	3.5	<1.0	NA	477	11.5	<1.0	3,400	3,400
11/16/93	0.3	<0.5	2.4	2.3	61.8	20.2	<1.0	<2.5	NA	751	<2.0	<0.5	2,740	303
06/07/96	NA	NA	ND	NA	740	ND	ND	NA	NA	300	ND	ND	1,700	640
06/20/97	<8.2	<4.6	<5.2	<5.6	1,400	19	<4.6	NA	NA	460	<5.6	<5.4	2,000	620
06/27/02	<43	<56	<57	<57	17,000	<59	87 "J"	<60	<140	<49	460	<57	<73	4,600
12/19/13	<24	<33	<30	<40	820	<35	<55	<50	<170	<33	<69	<33	73 J	500
06/25/14	<24	<33	<30	<40	600	<35	<55	<50	<170	194	<69	<33	780	202
09/29/15	<4.4	<5.1	<11	<6.5	520	7 J	<7.1	<13	<16	8.8 J	<4.4	<8.4	220	168

W-MW-11		Screened Interval: 20.6 to 25.6 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
10/05/88	<1.0	<1.0	19.4	18.7	NA	<1.0	<1.0	<1.0	NA	15.6	3.6	27.9	<1.0	<1.0
11/10/88	<1.0	<1.0	20.6	20.8	NA	<1.0	<1.0	<1.0	NA	9	<1.0	42.6	11.9	<1.0
04/19/89	3.6	<1.0	30.2	26	NA	9,130	0.7	<1.0	NA	11.8	2.2	48.4	69	825
11/16/93	1.1	<0.5	22.9	7	2,660	21.3	39.8	<2.5	NA	<0.5	30.4	21.8	7.2	1,750
06/07/96	NA	NA	ND	NA	28,000	NA	400	NA	NA	ND	1,000	ND	ND	7,500
06/20/97	<41	<23	32	<28	9,300	54	45	NA	NA	<27	110	<27	<20	2,100
06/27/02	<86	<110	<110	<110	1,300	<120	<100	<120	<280	1,300	<130	<110	3,900	400
12/18/13	<24	<33	<30	<40	4,300	<35	<55	<50	<170	<33	<69	<33	<33	254
06/25/14	<24	<33	<30	<40	20,300	128	<55	<50	<170	<33	281	39 "J"	<33	1,780
09/29/15	<88	<102	<220	<130	4,700	<108	<142	<260	<320	<98	<88	<168	<94	304

MW-18		Screened Interval: 15.7 to 25.7 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/19/88	<1.0	<1.0	4.8	0.4	NA	106	<1.0	<1.0	NA	<1.0	<1.0	<1.0	9.4	<1.0
11/16/93	0.2	<0.5	2.5	<0.4	111	1.8	<1.0	<2.5	NA	<0.5	<2.0	<0.5	3.2	30.5
06/07/96	NA	NA	ND	NA	15	NA	ND	NA	NA	ND	ND	ND	1.4	2.3
06/20/97	<0.41	<0.23	0.94	0.33	83	1.4	<0.23	NA	NA	<0.27	<0.28	<0.27	3.2	11
12/18/13	<0.24	<0.33	<0.3	<0.4	39	0.61 J	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	0.50 J	15.4
06/26/14	<0.24	<0.33	<0.3	<0.4	2.8	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	0.84

**Table 2**  
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MW-22	Screened Interval: 15.9 to 25.9 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
4/19/1989	<b>16.8</b>	ND	<b>165</b>	<b>82.3</b>	NA	<b>22,200</b>	<b>24.7</b>	<1	NA	<b>36.4</b>	<b>25.3</b>	<1	<b>1,180</b>	<b>2,490</b>
11/16/93	<b>13.8</b>	<b>20.1</b>	<b>153</b>	<b>58.7</b>	<b>1,830</b>	<b>195</b>	<b>3,680</b>	NA	NA	<b>823</b>	<b>2,310</b>	<b>468</b>	<b>1,720</b>	<b>770</b>
06/27/95	<40	NA	<100	<80	<b>17,400</b>	<100	<b>12,600</b>	NA	NA	<b>7,290</b>	<b>1,360</b>	<b>251</b>	<b>13,400</b>	<b>3,460</b>
06/07/96	<600	<1000	<1000	<1000	<b>73,000</b>	<1000	<b>5,100</b>	<1000	<1000	<b>4,100</b>	3,100	<b>1,100</b>	<b>83,000</b>	<b>2,800</b>
12/18/13	WELL DRY													
6/25/2014	<200	<165	<150	<200	<b>19,900</b>	<175	<275	<250	<850	<165	<345	<165	<b>480 "J"</b>	<b>500</b>
9/29/2015	<88	<102	<220	<130	<b>4,200</b>	<108	<142	<260	<320	<98	<88	<168	<b>&lt;94</b>	<b>920</b>

MW-25	Screened Interval: 10 to 20 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/27/95	NA	<4.0	<10	<8.0	<b>632</b>	<10	<20	NA	NA	<10	<40	<10	<4.0	<b>59.5</b>
06/07/96	NA	NA	ND	NA	<b>19</b>	ND	ND	NA	NA	ND	NA	ND	ND	<b>1.8</b>
06/20/97	NA	<4.1	<2.6	<b>7.1</b>	<b>1,000</b>	6.6	<2.3	NA	NA	<2.7	<2.8	<2.7	<2.0	<b>250</b>
08/18/98	NA	<0.27	<0.35	<b>0.78</b>	<b>85</b>	<0.79	<0.32	<0.36	NA	<0.43	<0.27	<0.30	<0.37	<b>16</b>
07/20/06	70	0.2 "J"	0.57 "J"	<b>6.0</b>	<b>780</b>	11	<0.5	<0.1	<0.25	<0.5	<0.5	<0.5	<0.2	<b>300</b>
05/21/08	9.8	<3.2	<8.0	<8.0	<8.0	<8.0	<8.0	<16	<4.0	<3.2	<8.0	<8.0	<3.2	
03/04/09	NA	<2	<5	<5	<b>720</b>	<b>52</b>	<5	<16	<4.0	<5	<5	<8.0	<2	<b>440</b>
10/11/12	NA	<5	<5	<5	<b>750</b>	<b>30.1</b>	<5	<16	<4.0	<4.4	<5.3	<8.0	<2	<b>286</b>
06/25/13	NA	<0.24	<0.3	<0.4	<b>3.5</b>	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<b>0.56 "J"</b>
12/17/13	NA	<2.4	<3.3	<3	<b>610</b>	4.9 J	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	<b>300</b>
06/24/14	8.68	<0.24	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
12/11/14	<0.24	0.25 J	<0.3	<0.4	<b>650</b>	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<b>259</b>
07/21/15	<4.4	<0.24	<0.3	<0.4	<b>720</b>	<0.35	<0.55	<0.5	<1.7	<0.49	<0.69	<0.33	<4.7	<b>221</b>
09/29/15	<22	<25.5	<55	<32.5	<b>600</b>	<27	<35.5	<65	<80	<24.5	<22	<42	<23.5	<b>213</b>

MW-26	Screened Interval: 12 to 22 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/27/95	<20	<50	<50	<40	<b>3,070</b>	<50	<100	NA	NA	<50	<200	<50	<20	<b>712</b>
06/07/96	NA	NA	ND	NA	<b>1,100</b>	ND	ND	NA	NA	ND	NA	ND	ND	<b>690</b>
06/20/97	<4.1	<2.3	<2.6	<2.8	<b>1,000</b>	9	<2.3	NA	NA	<2.7	<2.8	<2.7	<2.0	<b>350</b>
06/27/02	<2.2	<2.8	<2.9	<2.9	<b>220</b>	<3.0	<2.5	<3.0	<7.0	<2.5	<3.2	<2.9	<3.7	<b>160</b>
12/18/13	<12	<16.5	<15	<20	<b>1,280</b>	<17.5	<27.5	<25	<85	<16.5	<34.5	<16.5	<16.5	<b>560</b>
12/18/13 DUP	<2.4	<3.3	<3	<4	<b>1,270</b>	5.1 J	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	<b>560</b>
06/25/14	<0.24	<0.33	<0.3	<0.4	0.76 "J"	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
09/29/15	0.44 J	<0.51	2.54 J	1.63 J	<b>2,040</b>	35	<0.71	<1.3	<1.6	1.01 J	<0.44	<0.874	10.4	440

**Table 2**  
**Groundwater Quality Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 14411**

W-MW-1S		Screened Interval: 5 to 15 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
07/15/98	<0.44	NA	NA	<0.47	<0.9	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
WELL REMOVED IN EARLY 2000														
W-MW-2S		Screened Interval: 5 to 15 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	<0.9	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
07/15/98	<0.44	NA	NA	<0.47	<0.9	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
WELL REMOVED IN EARLY 2000														
W-MW-3S		Screened Interval: 3 to 13 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
07/15/98	<0.44	NA	NA	<0.47	<0.9	NA	NA	NA	NA	<0.41	NA	NA	<0.63	<0.52
WELL REMOVED IN EARLY 2000														
W-MW-4S		Screened Interval: 5 to 15 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
07/15/98	<0.44	NA	NA	<0.47	<0.9	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
12/18/2013	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
6/26/2014	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

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W-MW-4D		Screened Interval: 15 to 20 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	<0.90	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
07/15/98	<0.44	NA	NA	<0.47	1.3	NA	NA	NA	NA	<0.41	NA	NA	<0.49	<0.52
12/18/13	<0.24	<0.33	<0.3	<0.4	0.43 J	0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/26/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
W-MW-5S		Screened Interval: 5 to 15 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
04/21/98	<0.44	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.41	NA	NA	<0.49	22
07/15/98	<0.44	NA	NA	<0.47	12	NA	NA	NA	NA	<0.41	NA	NA	1.2	43
12/18/2013 **	<0.24	<0.33	<0.3	<0.4	19	0.45 J	<0.55	<0.5	<1.7	1.67	<0.69	<0.33	14	8.6
06/26/14	<0.24	<0.33	<0.3	<0.4	5.7	<0.35	<0.55	<0.5	<1.7	1.87	<0.69	<0.33	15	1.3
09/29/15	<0.44	<0.51	<1.1	<0.65	25.2	<0.54	<0.71	<1.3	<1.6	0.69 J	<0.44	<0.33	8.4	52
MPS MW-1		Screened Interval: 6 to 16 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
08/19/98	<0.27	NA	<0.35	<0.43	<0.28	<0.79	<0.32	<0.36	<0.35	<0.43	<0.27	<0.30	<0.37	<0.20
12/08/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25
12/18/13														
WELL NO LONGER EXISTS														
MPS P-1/P-1R		Screened Interval: 25 to 30 feet bgs												
Sampling Date Units:		VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
08/19/98	<5.4	NA	8.4	<8.6	2,600	<16	<6.4	<7.2	<7.0	<8.6	<5.4	<6.0	<7.4	820
01/21/99	<6.8	NA	11	<11	3,200	<20	<8.0	<9.0	<8.8	<11	<6.8	<7.5	<9.2	1,100
12/08/00	<10	NA	<25	<25	3,200	<25	<25	<25	<25	<25	<10	<25	<25	1,600
12/00 Dup.	<10	NA	<25	<25	3,100	<25	<25	<25	<25	<25	<10	<25	<25	1,400
WELL NO LONGER EXISTS														
09/29/15	<22	<25.5	<55	<32.5	1,600	<27	<35.5	<65	<80	<24.5	<22	<42	<23.5	780

**Table 2**  
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**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
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MPS P-2	Screened Interval: 25.6 to 30.6 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
08/19/98	<2.7	NA	5.2	<4.3	<b>1,000</b>	8.9	<3.2	<b>3.7</b>	<3.5	<4.3	<2.7	<3.0	<3.7	<b>810</b>
01/21/99	<5.4	NA	8.2	<8.6	<b>1,900</b>	<16	<6.4	<7.2	<7.0	<8.6	<5.4	<6.0	<7.4	<b>1,600</b>
06/27/02	<22	<28	<29	<29	<b>1,400</b>	<30	<25	<30	<70	<25	<32	<29	<37	<b>2,100</b>
06/25/13	<4.8	<6.6	<6	<8	<b>740</b>	<7	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	<b>600</b>
12/18/13	<4.8	<6.6	<6	<8	<b>1,080</b>	<7	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	<b>940</b>
06/25/14	<4.8	<6.6	<6	<8	<b>1,530</b>	<7	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	<b>670</b>
09/29/15	<4.4	<5.1	<11	<6.5	<b>1,290</b>	6.6 J	<7.1	<13	<16	<4.9	<4.4	<8.4	<4.7	<b>800</b>

MPS MW-3	Screened Interval: 5 to 11 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units.	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/18/13	WELL DRY													
06/25/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

MPS P-3	Screened Interval: 25 to 30 feet bgs													
Sampling Date	VOCs													
	Benzene Units: µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
08/19/98	<0.54	NA	<0.70	<0.86	320	1.7	<0.64	1.0	<0.70	<0.86	<0.54	<0.60	<0.74	150
01/21/99	<0.54	NA	0.78	<0.86	340	3.7	<0.64	<0.72	<0.70	<0.86	<0.54	<0.60	<0.74	240
06/27/02	<22	<28	<29	<29	2,200	<30	<25	<30	<70	<25	<32	<29	<37	1,500
12/18/13	<0.24	<0.33	<0.3	<0.4	91	0.43 J	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	144
06/25/14	<0.24	<0.33	<0.3	<0.4	33	0.37 "J"	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	0.59
09/29/15	<0.44	<0.51	<1.1	<0.65	89	<0.54	<0.71	<1.3	<1.6	<0.49	<0.44	<0.84	<0.47	83

**Table 2**  
**Groundwater Quality Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 14411**

MPS P-4	Screened Interval: 28 to 33 feet bgs													
Sampling Date	VOCs													
	Benzene Units: µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
01/18/99	<2.7	NA	7.9	<4.3	1,500	11	<3.2	7.2	<3.5	<4.3	<2.7	<3.0	<3.7	1,000
12/08/00	<4.0	NA	<10	<10	880	<10	<10	<10	<10	<10	<4.0	<10	<10	760
06/27/02	<22	<28	<29	<29	2,200	<30	<25	<30	<70	<25	<32	<29	<37	1,500
06/25/13	<4.8	<6.6	<6	<8	910	<7	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	510
12/17/13	<12	<16.5	<15	<20	1,880	<17.5	<27.5	<25	<85	<16.5	<34.5	<16.5	<16.5	790
12/17/13 DUP	<2.4	<3.3	<3	<4	1,940	15.7	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	700
06/26/14	<4.8	<6.6	<6	<8	1,350	10.2 "J"	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	500
09/29/15	<8.8	<10.2	<22	<13	1,500	<10.8	<14.2	<26	<32	<9.8	<8.8	<16.8	<9.4	460

MPS P-5	Screened Interval: 71.5 to 76.5 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
	NR 140 ES 0.5	5 0.5	5 85	850 0.7	7 7	70 20	100 140	700 0.5	5 8	40 0.5	5 200	1,000 40	200 0.5	5 0.02
01/25/99	<0.27	NA	<0.35	<0.43	<b>18</b>	<0.79	<0.32	<0.36	0.38	<0.43	0.98	<0.30	<0.37	<b>110</b>
12/08/00	<0.20	NA	<0.50	<0.50	<b>10</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.20	<0.50	<0.50	<b>91</b>
06/27/02	<0.43	<0.56	<0.57	<0.57	<b>25</b>	<0.59	<0.49	<0.6	<1.4	<0.49	<0.63	<0.57	<0.73	<b>53</b>
06/25/13	<4.8	<6.6	<6	<8	<b>259</b>	<7	<11	<10	<34	<6.6	<13.8	<6.6	<6.6	<b>840</b>
12/17/13	<2.4	<3.3	<3	<4	<b>158</b>	<3.5	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	<b>470</b>
06/26/14	<2.4	<3.3	<3	<4	<b>247</b>	<3.5	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	<b>540</b>
09/29/15	<4.4	<5.1	<11	<6.5	<b>82</b>	<5.4	<7.1	<13	<16	<4.9	<4.4	<8.4	<4.7	<b>88</b>

MPS P-6	Screened Interval: 15.5 to 20.5 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
02/13/99	<2.7	NA	4.7	<4.3	850	<7.9	<3.2	<3.6	<3.5	<4.3	<2.7	<3.0	<3.7	810
12/07/00	<0.10	NA	3.2	<0.25	670	3.6	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	530
06/27/02	<2.2	<2.8	<2.9	<2.9	290	<3.0	<2.5	<3.0	<7.0	<2.5	<3.2	<2.9	<3.7	290
10/02/03	<4.1	<4.9	<7.5	<5.7	1000	<8.9	<5.4	<4.3	<7.4	<4.5	<6.7	<9.0	<4.5	880
12/17/13	<2.4	<3.3	<3	<4	580	5.4 J	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	490
06/26/14	<2.4	<3.3	<3	<4	590	3.7 "J"	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	460
09/29/15	<4.4	<5.1	<11	<6.5	640	<5.4	<7.1	<13	<16	<4.9	<4.4	<8.4	<4.7	410

**Table 2**  
**Groundwater Quality Data**

MPS P-7	Screened Interval: 45 to 50 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<b>33</b>	<0.25	<0.25	<0.25	0.36	<0.25	0.63	<0.25	<0.25	<b>1,400</b>
06/27/02	<2.2	<2.8	<2.9	<2.9	<b>15</b>	<3.0	<2.5	<3.0	<7.0	<2.5	<3.2	<2.9	<3.7	<b>360</b>
10/02/03	<0.41	<0.49	<0.75	<0.57	1.2 / 1.2 *	<0.89	<0.54	<0.43	<0.74	<0.45	<0.67	<0.90	<0.48	<b>64 / 73 *</b>
12/17/13	<0.24	<0.33	<0.3	<0.4	1.28	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<b>26.2</b>
06/26/14	<2.4	<3.3	<3	<4	<b>24.4</b>	<3.5	<5.5	<5	<17	<3.3	<6.9	<3.3	<3.3	<b>490</b>
09/29/15	<4.4	<5.1	<11	<6.5	<b>24.8</b>	<5.4	<7.1	<13	<16	<4.9	<4.4	<8.4	<4.7	<b>380</b>

PZ-8	Screened Interval: 63 to 68 feet bgs													
Sampling Date Units:	VOCs													
	Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

MW-8	Screened Interval: 5.5 to 20.5 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

**Table 2**  
**Groundwater Quality Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
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PZ-9		Screened Interval: 56 to 61 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	3.2	<0.25	2.2	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

MW-9		Screened Interval: 5 to 20 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

PZ-10		Screened Interval: 38 to 43 feet bgs												
Sampling Date	Units:	VOCs												
		Benzene µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2- DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	2.8	<0.25	0.79	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

**Table 2**  
**Groundwater Quality Data**  
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MW-10	Screened Interval: 5 to 20 feet bgs													
Sampling Date	VOCs													
	Benzene	Carbon Tetrachloride	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	Naphthalene	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride
Units:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
12/07/00	<0.10	NA	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18

PZ-11	Screened Interval: 44 to 49 feet bgs													
Sampling Date	VOCs													
	Benzene Units: µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/27/02	<0.43	<0.56	<0.57	<0.57	<0.53	<0.59	<0.49	<0.6	<1.4	<0.49	<0.63	<0.57	<0.73	<0.12
10/02/03	8.9	<0.49	<0.75	<0.57	<0.83	<0.89	<0.54	<0.43	<0.74	<0.45	<0.67	<0.90	<0.48	<0.18
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	0.31 J
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
09/29/15	<0.44	<0.51	<1.1	<0.65	<0.45	<0.54	<0.71	<1.3	<1.6	<0.49	<0.44	<0.84	<0.47	<0.17

MW-11	Screened Interval: 5 to 20 feet bgs													
Sampling Date	VOCs													
	Benzene Units: µg/l	Carbon Tetrachloride µg/l	1,1-DCA µg/l	1,1-DCE µg/l	cis-1,2-DCE µg/l	trans-1,2-DCE µg/l	Ethylbenzene µg/l	Methylene Chloride µg/l	Naphthalene µg/l	PCE µg/l	Toluene µg/l	1,1,1-TCA µg/l	TCE µg/l	Vinyl Chloride µg/l
NR 140 ES	5	5	850	7	70	100	700	5	40	5	1,000	200	5	0.2
NR 140 PAL	0.5	0.5	85	0.7	7	20	140	0.5	8	0.5	200	40	0.5	0.02
06/27/02	<0.43	<0.56	<0.57	<0.57	<0.53	<0.59	<0.49	<0.6	<1.4	<0.49	<0.63	<0.57	<0.73	<0.12
10/02/03	<0.41	<0.49	<0.75	<0.57	<0.83	<0.89	<0.54	<0.43	<0.74	<0.45	<0.67	<0.90	<0.48	<0.18
12/17/13	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<0.18
06/27/14	<0.24	<0.33	<0.3	<0.4	<0.38	<0.35	<0.55	<0.5	<1.7	<0.33	<0.69	<0.33	<0.33	<b>0.73</b>
09/29/15	<0.4	<0.51	<1.1	<0.65	<0.45	<0.54	<0.71	<1.3	<1.6	<0.49	<0.44	<0.84	<0.47	<b>&lt;0.17</b>

#### **Notes:**

1. NR 140 ES = Wis. Adm. Code Chapter NR 140 Enforcement Standard
  2. NR 140 PAL = Wis. Adm. Code Chapter NR 140 Preventive Action Limit
  3. ES Exceedances: **BOLD**  
PAL Exceedances: **BOLD**
  4. NS = no standard

\*\* W-MW-5S was mislabeled as MW-4 during Dec 2013 sampling event.  
\* Second value represents duplicate sample result.

## 5 Abbreviations:

ND = Not Detected	NS = Not Sampled
1,1-DCA = 1,1-Dichloroethane	1,1-DCE = 1,1-Dichloroethene
cis-1,2-DCE = cis-1,2-Dichloethene	trans-1,2-DCE = trans-1,2-Dichloethene
TCE = Trichlorethane	PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane	

**Table 3**  
**Groundwater Inorganic Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 14411**

MW-A	Screened Interval: 4 to 14 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DRY						
6/25/2014	308	<0.5	<0.7	<1			

PZ-A	Screened Interval: 17 to 20 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	158	<0.5	<0.7	<1	115	481	349
06/25/14	164 "J"	<0.5	<0.7	<1			

MW-B	Screened Interval: 4 to 14 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DAMAGED - COULD NOT BE SAMPLED						

PZ-B	Screened Interval: 18.5 to 23.5 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DAMAGED - COULD NOT BE SAMPLED						

**Table 3**  
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MW-C	Screened Interval: 5 to 15 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DRY				WELL DRY		
06/25/14	116 "J"	<0.5	<0.7	<1			

PZ-C	Screened Interval: 21 to 26 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	<60.1	<0.5	<0.7	<1	127	324	140
06/25/14	85.6 "J"	<0.5	<0.7	<1			

MW-D	Screened Interval: 7 to 17 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DRY				WELL DRY		
06/25/14	119 "J"	<0.5	<0.7	<1			

PZ-D	Screened Interval: 24.5 to 29.5 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/19/13	69	<0.5	<0.7	<1	577	1028	330.00
6/25/2014	87.3 "J"	<0.5	<0.7	<1			

**Table 3**  
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MW-E	Screened Interval: 7 to 17 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DRY				WELL DRY		

MW-4	Screened Interval: 14.2 to 19.2 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL COULD NOT BE LOCATED						
6/25/2014	73.4 "J"	<0.5	<0.7	<1			

MW-6	Screened Interval: 15.3 to 20.3 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL DRY				WELL DRY		
06/25/14	1,250	<0.5	<0.5	<1			

W-MW-10	Screened Interval: 23.3 to 28.3 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/19/13	93	<0.5	<0.7	<1	541	965	345
06/25/14	83.5 "J"	<0.5	<0.7	1.6 "J"			

**Table 3**  
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W-MW-11		Screened Interval: 20.6 to 25.6 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/18/13		84	<0.5	<0.7	<1	289	834	375
06/25/14		242	<0.5	<0.7	1.4 "J"			

MW-18		Screened Interval: 15.7 to 25.7 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/18/13		92	<0.5	<0.7	<1	755	429	309
6/26/2014		761	<0.5	<0.7	<1			

MW-22		Screened Interval: 21.8 to 31.8 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/18/13		WELL DRY				WELL DRY		
6/25/2014		94	<0.5	<0.7	<1			

**Table 3**  
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MW-25	Screened Interval: 10 to 20 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1	157	763	305

MW-26	Screened Interval: 12 to 22 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	87	<0.5	<0.7	<1	250	808	351
06/25/14	<60.1	<0.5	<0.7	<1			

W-MW-1S	Screened Interval: 5 to 15 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
WELL NO LONGER EXISTS							

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<b>W-MW-2S</b>		Screened Interval: 5 to 15 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
WELL NO LONGER EXISTS								

<b>W-MW-3S</b>		Screened Interval: 3 to 13 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
WELL NO LONGER EXISTS								

<b>W-MW-4S</b>		Screened Interval: 5 to 15 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
12/18/2013	<60.1	<0.5	<0.7	<1	390	1830	609	
6/26/2014	<60.1	<0.5	<0.7	8.8				

**Table 3**  
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W-MW-4D Screened Interval: 15 to 20 feet bgs							
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/2013	<60.1	<0.5	<0.7	<1	150	409	154
6/26/2014	<60.1	<0.5	<0.7	<1			

W-MW-5S Screened Interval: 5 to 15 feet bgs							
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/2013 **	<60.1	<0.5	<0.7	<1	252	778	337
06/26/14	<60.1	<0.5	<0.7	<1			

MPS MW-1 Screened Interval: 6 to 16 feet bgs							
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL NO LONGER EXISTS						

MPS P-1 Screened Interval: 25 to 30 feet bgs							
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/18/13	WELL NO LONGER EXISTS						

**Table 3**  
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MPS MW-2		Screened Interval: 8 to 18 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
12/18/13		WELL DRY			WELL DRY			

MPS P-2		Screened Interval: 25.6 to 30.6 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
12/18/13	69	<0.5	<0.7	<1	289	815	334	
06/25/14	93.5 "J"	<0.5	<0.7	<1				

MPS MW-3		Screened Interval: 5 to 11 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	NS
12/18/13		WELL DRY			WELL DRY			
06/25/14	<60.1	<0.5	<0.7	<1				

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<b>MPS P-3</b>		Screened Interval: 25 to 30 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/18/13	88	<0.5	<0.7	<1	249	642	322	
06/25/14	107 "J"	<0.5	<0.7	<1				

<b>MPS P-4</b>		Screened Interval: 28 to 33 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	79	<0.5	<0.7	<1	297	765	342	
06/26/14	98.1	<0.5	<0.7	<1				

<b>MPS P-5</b>		Screened Interval: 71.5 to 76.5 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	96	<0.5	<0.7	<1	239	745	296	
06/26/14	137 "J"	<0.5	<0.7	<1				

<b>MPS P-6</b>		Screened Interval: 15.5 to 20.5 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	71	<0.5	<0.7	<1	336	771	319	
06/26/14	201	<0.5	<0.7	<1				

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MPS P-7		Screened Interval: 45 to 50 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	<60.1	<0.5	<0.7	<1	205	355	41	
06/26/14	<60.1	<0.5	<0.7	<1				

PZ-8		Screened Interval: 63 to 68 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	116	<0.5	<0.7	<1	32.5	391	176	
06/27/14	69.1 "J"	<0.5	<0.7	<1				

MW-8		Screened Interval: 5.5 to 20.5 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS	
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS	
12/17/13	120	<0.5	<0.7	<1	83.4	591	284	
06/27/14	<60.1	<0.5	<0.7	<1				

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<b>PZ-9</b>		Screened Interval: 56 to 61 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1		8.53	635	295
06/27/14	<60.1	<0.5	<0.7	<1				

<b>MW-9</b>		Screened Interval: 5 to 20 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1		5.29	669	351
06/27/14	84.9 "J"	<0.5	<0.7	<1				

<b>PZ-10</b>		Screened Interval: 38 to 43 feet bgs						
Sampling Date Units:		Inorganic Metals				General Wet Chemistry		
		Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES		1,000	5	15	50	NS	NS	NS
NR 140 PAL		200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1		262	276	46.7
06/27/14	93.5 "J"	<0.5	<0.7	<1				

**Table 3**  
**Groundwater Inorganic Data**  
**Village of Whitefish Bay - Former Good Hope Road Landfill Site**  
**Sigma Project No. 14411**

MW-10	Screened Interval: 5 to 20 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/17/13	72	<0.5	<0.7	<1	259	973	301
06/27/14	72.4 "J"	<0.5	<0.7	<1			

PZ-11	Screened Interval: 44 to 49 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1	380	1190	304
06/27/14	67.1 "J"	<0.5	<0.7	<1			

MW-11	Screened Interval: 5 to 20 feet bgs						
Sampling Date Units:	Inorganic Metals				General Wet Chemistry		
	Boron (Dissolved) ug/l	Cadmium (Dissolved) ug/l	Lead (Dissolved) ug/l	Selenium (Dissolved) ug/l	Chlorides (Filtered) mg/l	Total Hardness (Filtered) mg/l	Total Alkalinity (Filtered) mg/l
NR 140 ES	1,000	5	15	50	NS	NS	NS
NR 140 PAL	200	0.5	1.5	10	NS	NS	NS
12/17/13	<60.1	<0.5	<0.7	<1	171	819	312
06/27/14	119 "J"	<0.5	<0.7	1.6 "J"			

**Notes:**

1. NR 140 ES = Wis. Adm. Code Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wis. Adm. Code Chapter NR 140 Preventive Action Limit
3. ES Exceedances: **BOLD**  
PAL Exceedances: **BOLD**
4. NS = no standard

\*\* W-MW-5S was mislabeled as MW-4 during Dec 2013 sampling event.

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

<b>Biodegradation Parameters</b>								
<b>MW-A</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
06/19/97	168	356	341663					
09/29/15				WATER LEVEL				
<b>Biodegradation Parameters</b>								
<b>PZ-A</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
12/18/13				1.28	95.5	7.93	1.8	11.2
09/29/15				WATER LEVEL				
<b>Biodegradation Parameters</b>								
<b>MW-B</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
06/19/97	64	107	170461					
<b>Biodegradation Parameters</b>								
<b>PZ-B</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
<b>Biodegradation Parameters</b>								
<b>MW-C</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
09/29/15				--	--	--	--	--
<b>Biodegradation Parameters</b>								
<b>PZ-C</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
12/18/13				72.7	1.22	8.08	2	10.7
09/29/15				2.5	-68	8	4	8.4
<b>Biodegradation Parameters</b>								
<b>MW-D</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
06/19/97	38009	22792	407794					
06/27/02	3300	8000	31000	0.2	-102.7	7	0	15.3
09/29/15				1	-25	7.5	--	9.8
<b>Biodegradation Parameters</b>								
<b>MW-22</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE								
09/29/15				3	-51	7.8	2.6	9.6

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

<b>PZ-D</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02	2500	870000	1500000	0.2	-142.9	7	0	14.8
12/19/13				3.74	175	7.6	5.2	8.5
09/29/15				2.4	45	7.6	4.2	9.2

<b>MW-E</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02	16	25	680	0.27	-59.4	7	0	15.4
09/29/15				--	--	--	--	--

<b>MW-4</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02				0.22	-77.9	7	0	15.1
12/18/13				2.2	39	8	0	9.7
09/29/15								

<b>W-MW-4S</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/18/13				0.67	82.1	7.35	3.8	10.9
09/29/15								

<b>W-MW-4D</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/18/13				1.48	86.3	7.81	2.2	11.4
09/29/15								

<b>W-MW-5S</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/18/13				1.44	67.1	7.72	0	10
09/29/15				2.4	33	8.1	0	10.9

<b>MW-6</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
09/29/15								

<b>W-MW-10</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02	130	53000	38000	0.29	-31.8	7	0	14.9
12/19/13				2.15	139.9	7.56	3.2	8.2
09/29/15				2.3	12	7.9	1	9.1

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

<b>Biodegradation Parameters</b>								
<b>W-MW-11</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
DATE				0.23	-131.1	7	0	14.9
06/27/02				1.51	106.5	7.37	1.8	9.3
12/18/13				3	42	7.8	0	8.7
09/29/15								
<b>MW-18</b>	<b>Biodegradation Parameters</b>							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
09/29/15								
WATER LEVEL								
<b>MW-25</b>	<b>Biodegradation Parameters</b>							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/17/13				1.52	74.2	7.82	0	10.8
09/29/15				4.4	-12	7.8	2	9.3
<b>MW-26</b>	<b>Biodegradation Parameters</b>							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02				0.19	-146.9	7	0	15.1
12/18/13				1.39	88	7.65	4.2	10.1
09/29/15				3	-10	7.9	0	9.6
<b>MPS MW-1</b>	<b>Biodegradation Parameters</b>							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.61	109.6	7	0	12.0
<b>MPS P-1</b>	<b>Biodegradation Parameters</b>							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.31	47.2	7	0	13.1
09/29/15				4	-32	7.4	4	8.7

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

MPS MW-2	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.61	109.6	7	0	12.0

MPS P-2	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.61	109.6	7	0	12.0
06/27/02				0.28	-169.6	7	0	14.5
12/18/13				2.23	161.5	7.72	2	11.1
09/29/15				3.4	-78	7.9	4	9.4

MPS MW-3	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.61	109.6	7	0	12.0

MPS P-3	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02				0.24	-178.4	7	0	14.7
12/18/13				2.25	94.1	7.76	3	10.8
09/29/15				4.6	85	7.1	0	9.6

MPS P-4	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.42	22.3	7	0	13.7
12/17/13				1.26	117.3	7.53	2.4	10.9
09/29/15				5.2	162	7.1	3.6	8.8

MPS P-5	Biodegradation Parameters							
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00	<5.0	64	520	0.61	19.7	7	0	13.4
06/27/02				0.22	-106.7	7	0	13.7
12/17/13				1.13	120.2	7.86	0	10.7
09/29/15				2.8	192	7.3	3	9

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

<b>Biodegradation Parameters</b>								
<b>MPS P-6</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.43	38.9	7	0	14.2
06/27/02	520	4400	4400	0.47	110.6	7	0	15.2
10/02/03	8300	1000	38000	0.28	67.6	7	0	15
12/17/13				1.37	89.2	7.97	1.8	13.3
09/29/15				2	261	7.4	3	9.3

<b>Biodegradation Parameters</b>								
<b>MPS P-7</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.32	-43.7	7	0	13.5
06/27/02	6600	260000	550000	0.44	96.7	11	0	13.9
10/02/03	7200	490	10000	0.27	55.3	7	0	14.4
12/17/13				1.29	56.1	8.37	0	12.7
09/29/15				2	110	7.4	0	9.1

<b>Biodegradation Parameters</b>								
<b>PZ-8</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.61	136.1	7	0.8	13.7
12/17/13				1.7	107.9	7.91	0	12.6
09/29/15								

<b>Biodegradation Parameters</b>								
<b>MW-8</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				1.09	212.2	7	0.2	13.9
12/17/13				1.15	148	8.07	1.2	13.7
09/29/15								

<b>Biodegradation Parameters</b>								
<b>PZ-9</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.79	157.7	7	0	13.5
12/17/13				1.27	139.9	8.62	3.6	11.4
09/29/15								

<b>Biodegradation Parameters</b>								
<b>MW-9</b>	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/00				0.62	133.4	7	0	12.2
12/17/13				1.11	164.2	7.84	0	12.1
09/29/15								

**Table 4**  
**Groundwater Biodegradation Parameters**  
**Former Good Hope Road Landfill Site and Vicinity**  
**Sigma Project No. 3125**

<b>PZ-10</b> <b>Biodegradation Parameters</b>									
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)	
12/07/00				0.39	18.9	11	0	13.2	
12/17/13				1.4	189.1	8.49	0	13.1	
09/29/15				WATER LEVEL;					

<b>MW-10</b> <b>Biodegradation Parameters</b>									
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)	
12/07/00				0.56	79.4	7	0	15.4	
12/17/13				1.17	219.3	7.69	0	14.0	
09/29/15				WATER LEVEL					

<b>PZ-11</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02	510	900	6800	0.37	192.7	7	0	13.8
12/17/13				1.84	172.2	7.76	4	12.7
09/29/15				5.7	276	7	6.2	9.1

<b>MW-11</b> <b>Biodegradation Parameters</b>								
DATE	Ethene (ng/L)	Ethane (ng/L)	Methane (ng/L)	DO (mg/L)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
06/27/02	560	110	16000	0.45	160.5	7	0	15.2
10/02/03	19	360	1300	0.24	-32.6	7	0.8	14.5
12/17/13				1.06	165.4	7.77	0	13.8
09/29/15				3.6	280	7.3	0	9.6

Notes:

- Abbreviations:
  - mg/l = milligrams per liter (equivalent to parts per million, ppm)
  - µg/l = micrograms per liter (equivalent to parts per billion, ppb)
  - NA = Not Analyzed
  - DO = Dissolved Oxygen
  - REDOX = Reduction-oxidation potential
  - mV = millivolts
  - °C = Degrees Celcius

**APPENDIX A**

**GROUNDWATER SAMPLING FIELD LOGS**



SIGMA ENVIRONMENTAL SERVICES, INC.  
REQUEST FOR GROUNDWATER SERVICES

Project #	14411	Phase	001	Task	FLD	Budget	2-3 days
Project Manager Signature	Mafizul Islam						
Field Crew Signature							
Company	Good Hope Road Landfill Site			Date Issued	6/12/2014	By Daniel Schwartz	
Address	5201 W. Good Hope Road			Route Notes To Mafizul Islam			
City, State	Milwaukee			Phone			
Contact				By	DD/MM	Date	9-29-15 / 9-30-15
Date of Service	June 2014			Log #	509		
Confirmed by: (date)							
<b>Services Requested:</b>							
<input checked="" type="checkbox"/> Water Levels (all wells unless noted otherwise)				<input checked="" type="checkbox"/> Dissolved Oxygen (see list)			
<input type="checkbox"/> Product Levels (as indicated)				<input checked="" type="checkbox"/> Redox (see list)			
<input type="checkbox"/> Well Abandonment (see list)				<input checked="" type="checkbox"/> pH			
<input type="checkbox"/> Well Development				<input checked="" type="checkbox"/> Ferrous Iron (see list)			
<input checked="" type="checkbox"/> Well Sampling (see list)				<input checked="" type="checkbox"/> Temperature			
<input type="checkbox"/> Surveying (see list)				<input checked="" type="checkbox"/> Conductivity			
<b>Laboratory Information</b>							
Sample Destination / Lab Bid#	Synergy Lab			Name of Laboratory			
Sample Supplies Order/By/Date	MI			Date / Name			
Route Results To:	Mafizul Islam						
Analytes	Landfill Monitoring Wells		Off-site Monitoring Wells				
	MW-C, PZ-C, MW-D, PZ-D, MW-22, MW-E, W-MW-10, W-MW-11, MW-4 & W-MW-5S	MW-A, PZ-A, W-MW-4S, W-MW-4D, MW-6 & MW-18	MW-25, MW-26	MPS: P-1R, MPS:P-2, MPS:P-3, MPS:P-4, MPS:P-5, MPS:P-6, MPS:P-7, MW-11 & P-11	MW-8, PZ-8, MW-9, PZ-9, MW-10 & PZ-10		
VOC	X		X	X			
WATER LEVEL	X	X	X	X		X	
DO, REDOX, pH, Temp & Cond.	X		X	X			
Fe+ Iron	X		X	X			
<b>Development / Purge Water</b>				<b>Invoicing / Purge Water</b>			
<input checked="" type="checkbox"/> Transport to Port Washington				<input type="checkbox"/> Sigma			
<input type="checkbox"/> Leave on site				<input type="checkbox"/> Other			
<input type="checkbox"/> Sample Water							
<b>Notes:</b>							
1. Develop replacement well MPS:P-1R							
2. Bring 4x4 truck to move within the landfill site.							
3. Mix purge water with potassium permanganate (1 cup per drum of purge water) and take to the Port Wash. Treatment Plant.							
4. Attach WDNR well ID stickers to pvc well casings (see attached sheet)							

9-29-15 Goodhope Landfill Site

# 14411 001

55th & Goodhope Rd.  
Milw. WI

- Purged and sampled W·mw·55, mw·4,  
W·mw·10, PZ C, W·mw·11, mw·25 and mw·26 for VOC's.
- mw·C and mw·E and mw·A are Dry
- mps·mw·2, mps·mw·3 are also dry.
- Took water Levels at all wells on site, see  
ground water sampling sheet for all Levels.
- Job took longer trying to find these wells that  
are in thick wooded cover.
- 9-30-15 → Developed MPS-P-1R
- Purged and Sampled mw·D "·PZ·D,  
mw·22, MPS-PIR, MPS-P-2, MPS-P-3, MPS-P-4, MPS-P-5,  
MPS-P-6, ~~MPS-P-7~~, mw·11 and PZ·11 for VOC.
- only able to collect 1·40ml. vial at mw·D "goes dry; no recharge.
- Dup. #1 at MPS-P-3 / Dup. #2 at MPS-P-4
- Used disposable bailers "no Equip. blanks"
- Samples to "Synergy Labs" in Appleton, WI
- All purge water drummed and taken to Port Washington  
W.W.T.P.

~~XXXXXX~~  
~~X~~ 122 gals. ~~X~~ ← In on 9-30-15  
~~XXXXXX~~

Continued on Page \_\_\_\_\_

J Pailey  
Signed

9-30-15  
Date

Read and Understood By

Signed

Date

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <i>Goodhope Rd. Landfill site</i>	County Name <i>Milwaukee</i>	Well Name <i>MPS P-1R</i>
Facility License, Permit or Monitoring Number	County Code ____	Wis. Unique Well Number _____

1. Can this well be purged dry?  Yes  No

2. Well development method

- surged with bailer and bailed  4 1
- surged with bailer and pumped  6 1
- surged with block and bailed  4 2
- surged with block and pumped  6 2
- surged with block, bailed and pumped  7 0
- compressed air  2 0
- bailed only  1 0
- pumped only  5 1
- pumped slowly  5 0
- Other \_\_\_\_\_

3. Time spent developing well 90 min.

4. Depth of well (from top of well casings) 33.15 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 15.2 gal.

7. Volume of water removed from well 21.0 gal.

8. Volume of water added (if any) None gal.

9. Source of water added None

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

17. Additional comments on development: purged well dry 3 times

1st = 10.0 gals.

2nd = 7.0 gals.

3rd = 4.0 gals

Name and Address of Facility Contact/Owner/Responsible Party

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: \_\_\_\_\_

Street: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Before Development After Development

11. Depth to Water  
(from top of well casing)  
a. 25.10 ft. 32.40 ft.

Date b. 09/29/2015 09/29/2015  
m m d d y y y y

Time c. 11:30  a.m. 1:00  p.m.

12. Sediment in well bottom 2.0 inches 0.0 inches

13. Water clarity Clear  1 0 Clear  2 0  
Turbid  1 5 Turbid  2 5

(Describe) slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended ----- mg/l ----- mg/l  
solids

15. COD ----- mg/l ----- mg/l

16. Well developed by: Name (first, last) and Firm

First Name: David Last Name: Dailey

Firm: The Sigma Group

Project #	#14411		Date	9.29.15	9.30.15																					
Project Name:	GOOD HOPE ROAD LANDFILL SITE																									
Project Location:	5201 West Good Hope Road	Milwaukee, WI																								
Weather:	rain in the AM		Field Service Personnel:	Dave Dailey																						
Analytes:	VOC			Mike Murray																						
Purging Device / Sampling Device																										
Type of Device:			Disposable Bailer / Peristaltic Pump	<input checked="" type="checkbox"/>																						
How was Device Decontaminated:			Sigma's Standard Operating Procedures	<input checked="" type="checkbox"/>																						
How was the Line Decontaminated:			New Line / New Tubing	<input checked="" type="checkbox"/>																						
Well Volume	Monitoring Well IDs																									
	MW-C	PZ-C	MW-D	PZ-D	MW-ZZ	MW-E	W-MW-10	W-MW-11	MW-4	W-MW-5S																
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"																
Stickup/Flushmount	STICKUP	STICK UP	STICKUP	STICKUP	STICKUP	STICK UP	STICKUP	STICKUP	STICKUP	STICKUP																
Depth to Bottom (ft)	16.75'	26.10	19.45'	31.80'	28.40'	19.25'	30.50'	27.85'	20.60'	17.55'																
Depth to Water (ft)	DRY	18.71'	18.65'	27.60'	27.88'	DRY	27.06'	23.68'	16.75'	15.28'																
Length of Water (ft)	-	7.39	0.80	4.20	0.52	-	3.44	4.17	3.85	2.27																
Volume (gal)	-	1.20	0.13	0.68	0.08	-	0.56	0.68	0.63	0.37																
x4	-	4.82	0.52	2.74	0.34	-	2.24	2.72	2.51	1.48																
Time Purged	-					-																				
Time Sampled	-					-																				
In-Situ Testing																										
D.O. (mg/l)	-	2.5	1.0	2.4	3.0	-	2.3	3.0	2.2	2.4																
Redox (mV)	-	-68	-25	+45	-51	-	+12	+42	+39	+33																
pH (S.U.)	-	8.0	7.5	7.0	7.8	-	7.9	7.8	8.0	8.1																
Conductivity (mS/cm)	-	1.81	2.10	2.54	3.28	-	3.21	2.65	2.35	2.29																
Ferrous Fe (mg/L)	-	4.0	NO	4.2	2.6	-	1.0	0.0	0.0	0.0																
Temperature (°C)	-	8.4°	9.8°	9.2	9.6°	-	9.1°	8.7°	9.7°	10.9°																
Turbidity (C/T/O)	-	C	T	C	C	-	C	C	S.T.	C																
Odor (Y or N)	-	NO	-	N	NO	-	NO	NO	NO	NO																
Volume ( Gallons )	-	4.5	1/2 Liter	2.75	No purge	-	2.5	2.5	2.5	1.5																
Well Recovery	-	good	Dry	good	No purge	-	good	good	good	good																
Note: Above is for one well volume.																										
<table border="1"> <thead> <tr> <th>Well Size</th> <th colspan="3">Gallons/Linear Foot</th> </tr> </thead> <tbody> <tr> <td>2 inch</td> <td>x</td> <td>0.16</td> <td></td> </tr> <tr> <td>4 inch</td> <td>x</td> <td>0.65</td> <td></td> </tr> <tr> <td>6 inch</td> <td>x</td> <td>1.47</td> <td></td> </tr> </tbody> </table>											Well Size	Gallons/Linear Foot			2 inch	x	0.16		4 inch	x	0.65		6 inch	x	1.47	
Well Size	Gallons/Linear Foot																									
2 inch	x	0.16																								
4 inch	x	0.65																								
6 inch	x	1.47																								
Notes																										

Project #	14411		Date	9-29-15 / 9-30-15							
Project Name:	Goodhope Landfill Site		Field Service Personnel:	DD/ MM							
Project Location:											
Weather:											
Analytes:	VOC										
Purging Device / Sampling Device											
Type of Device:	Disposable Bailer / Peristaltic Pump										
How was Device Decontaminated:	Sigma's Standard Operating Procedures										
How was the Line Decontaminated:	New Line / New Tubing										
Well Volume	Monitoring Well IDs										
	MW-25	MW-26	MPS-P-1R	MPS-P-2	MPS-P-3	MPS-P-4	MPS-P-5	MPS-P-6	MPS-P-7	MW-11	
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"		
Stickup/Flushmount	STICKUP	STICKUP	Flush	STICKUP	STICKUP	FLUSH	FLUSH	FLUSH	FLUSH		
Depth to Bottom (ft)	21.80'	24.05'	33.15'	33.10'	31.90'	32.45'	76.00'	19.78'	41.68'	18.00'	
Depth to Water (ft)	14.16'	20.92'	25.10'	22.51	15.47	22.03	22.69	12.56'	12.71'	10.78'	
Length of Water (ft)	7.64	3.13	8.05'	10.59	16.43	10.42	53.31	7.19	28.94	7.22	
Volume (gal)	1.25	0.51	1.28	1.69	2.62	1.67	8.53	1.17	4.72	1.18	
x4	4.98	2.04	5.15	6.77	10.5	6.67	34.12	4.69	18.87	4.71	
Time Purged											
Time Sampled											
In-Situ Testing											
D.O. (mg/l)	4.4	3.0	4.0	3.4	4.6	5.2	2.8	2.0	2.0	3.4	
Redox (mV)	-12	-10	-32	-78	+85	+162	+192	+261	+110	+280	
pH (S.U.)	7.8	7.9	7.4	7.9	7.1	7.1	7.3	7.4	7.4	7.3	
Conductivity (mS/cm)	1.79	2.81	2.90	2.52	2.20	2.67	1.86	0.888	2.11	2.33	
Ferrous Fe (mg/L)	0.0	0.0	4.0	4.0	0.0	3.6	3.0	0.0	0.0	0.0	
Temperature (°C)	9.3°	9.6°	8.7°	9.4	9.6	8.8	9.0	9.3	9.1	9.4	
Turbidity (C/T/O)	S.T.	C	C	C	C	C	C	C	C	S.T.	
Odor (Y or N)	NO	NO	NO	Decay	NO	NO	NO	NO	NO	NO	
Volume (Gallons)	5.0	2.0	5.0	6.5	10.0	6.5	30.0	5.0	5.5	4.5	
Well Recovery	good	good	good	good	good	good	good	good	going dry	good	
Note: Above is for one well volume.											
	Well Size	Gallons/Linear Foot									
	2 inch	x	0.16								
	4 inch	x	0.65								
	6 inch	x	1.47								
Notes	* Dup. #1 at MPS-P-3 * MPS-MW-2 Dry at 17.10 * MPS-MW-3 Dry * MPS-P-2 and MPS-MW-2 both missing steel lids for stick-ups and missing well caps "plugs" Put plug on P-2										
	* Dup. #2 at MPS-P-4										
	* Dup. #3 at MPS-P-5										
	* Dup. #4 at MPS-P-6										
	* Dup. #5 at MPS-P-7										
	* Dup. #6 at MW-11										

Project #	14411	Date	9-29-15 / 9-30-15						
Project Name:	Goodhope Landfill site								
Project Location:									
Weather:									
Analytics:									
Purging Device / Sampling Device									
Type of Device:	Disposable Bailer / Peristaltic Pump								
How was Device Decontaminated:	Sigma's Standard Operating Procedures								
How was the Line Decontaminated:	New Line / New Tubing								
Well Volume	Monitoring Well IDs								
	PZ11								
Well Diameter	2"								
Stickup/Flushmount	FLUSH								
Depth to Bottom (ft)	48.60'								
Depth to Water (ft)	10.53'								
Length of Water (ft)	38.07								
Volume (gal)	6.21								
x4	24.82								
Time Purged									
Time Sampled									
In-Situ Testing									
D.O. (mg/l)	5.7								
Redox (mV)	+2760								
pH (S.U.)	7.0								
Conductivity (mS/cm)	2.44								
Ferrous Fe (mg/L)	0.2								
Temperature (°C)	9.1								
Turbidity (C/T/O)	C								
Odor (Y or N)	NO								
Volume ( Gallons )	25.0								
Well Recovery	good								
Note: Above is for one well volume.				Well Size	Gallons/Linear Foot				
				2 inch	x	0.16			
				4 inch	x	0.65			
				6 inch	x	1.47			
Notes									

SUMMARY SHEET FOR GROUNDWATER SERVICES

Project #	14411										Date	9-29-15 / 9-30-15
Project Name:	Goodhope Landfill site											
Project Location:												
Weather:											Field Service Personnel:	
Analytes:												
Purging Device / Sampling Device												
Type of Device:	Disposable Bailer / Peristaltic Pump											
How was Device Decontaminated:	Sigma's Standard Operating Procedures											
How was the Line Decontaminated:	New Line / New Tubing											
Well Volume	Monitoring Well IDs											
	MW-A	PZ-A	W-MW-4S	W-MW-4D	MW-6	MW-18	MW-8	PZ-8	MW-9	PZ-9		
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"		
Stickup/Flushmount	STICKUP	STICKUP	STICKUP	STICKUP	STICKUP	STICKUP	FLUSH	FLUSH	FLUSH	FLUSH		
Depth to Bottom (ft)	11.85'	19.95'	17.75'	22.35'	22.25'	27.10'	19.90'	66.70'	19.85'	60.20'		
Depth to Water (ft)	DRY	15.42'	14.51'	15.42'	21.24'	21.88'	14.59'	14.81'	10.43'	15.18'		
Length of Water (ft)												
Volume (gal)												
x4												
Time Purged												
Time Sampled												
In-Situ Testing												
D.O. (mg/l)												
Redox (mV)												
pH (S.U.)												
Conductivity (mS/cm)												
Ferrous Fe (mg/L)												
Temperature (°C)												
Turbidity (C/T/O)												
Odor (Y or N)												
Volume ( Gallons )												
Well Recovery												
Note: Above is for one well volume.												
	Well Size	Gallons/Linear Foot										
	2 inch	0.16										
	4 inch	0.65										
	6 inch	1.47										
Notes												

SUMMARY SHEET FOR GROUNDWATER SERVICES

Project #	14411		Date	9-29-15 / 9-30-15	
Project Name:	Goodhope Landfill site				
Project Location:					
Weather:					
Analytes:					
<b>Purging Device / Sampling Device</b>					
Type of Device:	Disposable Bailer / Peristaltic Pump				
How was Device Decontaminated:	Sigma's Standard Operating Procedures				
How was the Line Decontaminated:	New Line / New Tubing				
Well Volume	Monitoring Well IDs				
	MW-10	PZ-10			
Well Diameter	2"	2"			
Stickup/Flushmount	FLUSH	FLUSH			
Depth to Bottom (ft)	19.80'	42.90'			
Depth to Water (ft)	12.93'	11.14'			
Length of Water (ft)					
Volume (gal)					
x4					
Time Purged					
Time Sampled					
In-Situ Testing					
D.O. (mg/l)					
Redox (mV)					
pH (S.U.)					
Conductivity (mS/cm)					
Ferrous Fe (mg/L)					
Temperature (°C)					
Turbidity (C/T/O)					
Odor (Y or N)					
Volume ( Gallons )					
Well Recovery					
Note: Above is for one well volume.		Well Size	Gallons/Linear Foot		
		2 inch	x	0.16	
		4 inch	x	0.65	
		6 inch	x	1.47	
Notes					

## CHAIN OF CUSTODY RECORD

**Synergy**

Chain # 29178

Page 2 of 3

Lab I.D. #		
Account No. :	Quote No.:	
Project #:	14411	
Sampler: (signature)	David Dailey	

***Environmental Lab, Inc.***1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

Project (Name / Location): Goodhope Rd. Landfill site

Reports To: Modizul Islam  
 Company Sigma  
 Address 1200 W. Canal St  
 City State Zip Milw. WI 53233  
 Phone 414-643-4200  
 FAX

Invoice To:

Company:

Address:

City State Zip:

Phone:

FAX:

## Analysis Requested

## Other Analysis

PID/  
FID

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	
	MPS-P-1R	9-30-15	10:20	G	VO	3	GW	HCL																
	MPS-P-2		9:40																					
	MPS-P-3		10:15																					
	MPS-P-4		11:35																					
	MPS-P-5		11:45																					
	MPS-P-6		12:40																					
	MPS-P-7		12:45																					
	MW-11		1:50																					
	PZ-11		1:55																					
	Dup#1		-																					

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment:

Temp. of Temp. Blank °C On Ice:

Cooler seal intact upon receipt: Yes No

Relinquished By: (sign)

David Dailey 4:00 9-30-15

Received in Laboratory By:

Time:

Date:

## **CHAIN OF CUSTODY RECORD**

# Synergy

Chain # 112 29179

Page 3 of 3

Lab I.D. #	
Account No. :	Quote No.:
Project #:	14411
Sampler: (signature)	Darlene Dailey

## ***Environmental Lab, Inc.***

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

<b>Sample Handling Request</b>
<input type="checkbox"/> Rush Analysis Date Required (Rushes accepted only with prior authorization)
<input type="checkbox"/> Normal Turn Around

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.		Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Method of Shipment:		<u>David Dailey</u>					
Temp. of Temp. Blank ____ °C On Ice:							
Cooler seal intact upon receipt: _____ Yes _____ No _____							
Received in Laboratory By:		Time:		Date:			

## CHAIN OF CUSTODY RECORD

**Synergy**

Chain # 29180

Page 1 of 3

Lab I.D. #	
Account No. :	Quote No.:
Project #: 14411	
Sampler: (signature) David Dailey	

*Environmental Lab, Inc.*1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

Project (Name / Location): Goodhope Rd. Landfill site									Analysis Requested				Other Analysis											
Reports To: Mafizul Islam		Invoice To:							DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 5422)	VOC (EPA 8260)	8-RCR METALS	RID/FID	
Company Sigma		Company																						
Address 1300 W. Canal St.		Address																						
City State Zip Milw. WI 53233		City State Zip																						
Phone 414-643-4200		Phone																						
FAX		FAX																						
Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 5422)	VOC (EPA 8260)	8-RCR METALS	RID/FID
W-MW-55	9-29-15	10:30		G	NO		3	GW	HCL												X			
MW-4		11:15																			X			
W-MW-10		11:40																			X			
PZ-C		12:40																			X			
W-MW-11		12:50																			X			
MW-24		2:00																			X			
MW-25		3:00																			X			
MW-D	9-30-15	8:30					1														X			
PZ-D		8:40																			X			
MW-22		8:38																			X			

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.	Relinquished By: (sign) <i>David Dailey</i>	Time 4:00	Date 9-30-15	Received By: (sign)	Time	Date
Method of Shipment:						
Temp. of Temp. Blank °C On Ice:						
Cooler seal intact upon receipt: Yes No						
Received in Laboratory By:				Time:		Date:

**APPENDIX B**

**LABORATORY ANALYTICAL REPORTS**

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

MAFIZUL ISLAM  
THE SIGMA GROUP, INC.  
1300 W. CANAL STREET  
MILWAUKEE, WI 53233

Report Date 08-Oct-15

Project Name GOODHOPE RD. LANDFILL SITE  
Project # 14411

Invoice # E29795

Lab Code 5029795A  
Sample ID W-MW-55  
Sample Matrix Water  
Sample Date 9/29/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	25.2	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795A  
**Sample ID** W-MW-55  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/6/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/6/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/6/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/6/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/6/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/6/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/6/2015	CJR	1
Tetrachloroethene	0.69 "J"	ug/l	0.49	1.5	1	8260B		10/6/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/6/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/6/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/6/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/6/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/6/2015	CJR	1
Trichloroethene (TCE)	8.4	ug/l	0.47	1.5	1	8260B		10/6/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/6/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/6/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/6/2015	CJR	1
Vinyl Chloride	52	ug/l	0.17	0.54	1	8260B		10/6/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/6/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/6/2015	CJR	1
SUR - Toluene-d8	107	REC %			1	8260B		10/6/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		10/6/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		10/6/2015	CJR	1
SUR - Dibromofluoromethane	105	REC %			1	8260B		10/6/2015	CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795B  
**Sample ID** MW-4  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Bromoform	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 10	ug/l	10	33	10	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B	10/6/2015	CJR	1	
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
Chloroform	< 4.3	ug/l	4.3	14	10	8260B	10/6/2015	CJR	1	
Chloromethane	< 19	ug/l	19	60	10	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	61	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B	10/6/2015	CJR	1	
Methylene chloride	< 13	ug/l	13	42	10	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B	10/6/2015	CJR	1	
Naphthalene	< 16	ug/l	16	52	10	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Tetrachloroethene	89	ug/l	4.9	15	10	8260B	10/6/2015	CJR	1	
Toluene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	54	ug/l	4.7	15	10	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B	10/6/2015	CJR	1	
Vinyl Chloride	27.7	ug/l	1.7	5.4	10	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 22	ug/l	22	69	10	8260B	10/6/2015	CJR	1	
o-Xylene	< 9	ug/l	9	29	10	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	98	REC %			10	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	114	REC %			10	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	105	REC %			10	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	109	REC %			10	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795C  
**Sample ID** W-MW-10  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Bromoform	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 10	ug/l	10	33	10	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B	10/6/2015	CJR	1	
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
Chloroform	< 4.3	ug/l	4.3	14	10	8260B	10/6/2015	CJR	1	
Chloromethane	< 19	ug/l	19	60	10	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	520	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	7 "J"	ug/l	5.4	17	10	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B	10/6/2015	CJR	1	
Methylene chloride	< 13	ug/l	13	42	10	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B	10/6/2015	CJR	1	
Naphthalene	< 16	ug/l	16	52	10	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Tetrachloroethene	8.8 "J"	ug/l	4.9	15	10	8260B	10/6/2015	CJR	1	
Toluene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	220	ug/l	4.7	15	10	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B	10/6/2015	CJR	1	
Vinyl Chloride	168	ug/l	1.7	5.4	10	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 22	ug/l	22	69	10	8260B	10/6/2015	CJR	1	
o-Xylene	< 9	ug/l	9	29	10	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	97	REC %				10 8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	116	REC %				10 8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	107	REC %				10 8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	105	REC %				10 8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795D  
**Sample ID** PZ-C  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	6.0	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	11.3	ug/l	0.17	0.54	1	8260B			CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	111	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B			CJR	1
SUR - Toluene-d8	105	REC %			1	8260B			CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795E  
**Sample ID** W-MW-11  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
Bromobenzene	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
Bromoform	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 220	ug/l	220	680	200	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 240	ug/l	240	760	200	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 200	ug/l	200	660	200	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 102	ug/l	102	320	200	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 92	ug/l	92	280	200	8260B	10/6/2015	CJR	1	
Chloroethane	< 130	ug/l	130	420	200	8260B	10/6/2015	CJR	1	
Chloroform	< 86	ug/l	86	280	200	8260B	10/6/2015	CJR	1	
Chloromethane	< 380	ug/l	380	1200	200	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 80	ug/l	80	260	200	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 126	ug/l	126	400	200	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 280	ug/l	280	900	200	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 90	ug/l	90	280	200	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 98	ug/l	98	320	200	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 104	ug/l	104	320	200	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 174	ug/l	174	560	200	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 220	ug/l	220	720	200	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 130	ug/l	130	420	200	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	4700	ug/l	90	280	200	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	< 108	ug/l	108	340	200	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 86	ug/l	86	274	200	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 620	ug/l	620	1960	200	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 84	ug/l	84	260	200	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 126	ug/l	126	400	200	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 142	ug/l	142	460	200	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 440	ug/l	440	1420	200	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 164	ug/l	164	520	200	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 220	ug/l	220	700	200	8260B	10/6/2015	CJR	1	
Methylene chloride	< 260	ug/l	260	840	200	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 220	ug/l	220	740	200	8260B	10/6/2015	CJR	1	
Naphthalene	< 320	ug/l	320	1040	200	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 154	ug/l	154	480	200	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 104	ug/l	104	340	200	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
Tetrachloroethene	< 98	ug/l	98	300	200	8260B	10/6/2015	CJR	1	
Toluene	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 340	ug/l	340	1120	200	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 540	ug/l	540	1720	200	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 168	ug/l	168	540	200	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 96	ug/l	96	304	200	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	< 94	ug/l	94	300	200	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 174	ug/l	174	560	200	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 320	ug/l	320	1000	200	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 300	ug/l	300	960	200	8260B	10/6/2015	CJR	1	
Vinyl Chloride	304	ug/l	34	108	200	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 440	ug/l	440	1380	200	8260B	10/6/2015	CJR	1	
o-Xylene	< 180	ug/l	180	580	200	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	120	REC %			200	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	106	REC %			200	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	108	REC %			200	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	97	REC %			200	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795F  
**Sample ID** MW-26  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	0.44 "J"	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	2.54 "J"	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	1.63 "J"	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	2040	ug/l	22.5	70	50	8260B			CJR	1
trans-1,2-Dichloroethene	35	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	1.01 "J"	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	10.4	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	440	ug/l	8.5	27	50	8260B			CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - Toluene-d8	107	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B			CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795G  
**Sample ID** MW-25  
**Sample Matrix** Water  
**Sample Date** 9/29/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
Bromobenzene	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
Bromodichloromethane	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
Bromoform	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B		10/6/2015	CJR	1
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B		10/6/2015	CJR	1
n-Butylbenzene	< 50	ug/l	50	165	50	8260B		10/6/2015	CJR	1
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B		10/6/2015	CJR	1
Chlorobenzene	< 23	ug/l	23	70	50	8260B		10/6/2015	CJR	1
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B		10/6/2015	CJR	1
Chloroform	< 21.5	ug/l	21.5	70	50	8260B		10/6/2015	CJR	1
Chloromethane	< 95	ug/l	95	300	50	8260B		10/6/2015	CJR	1
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B		10/6/2015	CJR	1
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B		10/6/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B		10/6/2015	CJR	1
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B		10/6/2015	CJR	1
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B		10/6/2015	CJR	1
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B		10/6/2015	CJR	1
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/6/2015	CJR	1
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B		10/6/2015	CJR	1
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B		10/6/2015	CJR	1
cis-1,2-Dichloroethene	600	ug/l	22.5	70	50	8260B		10/6/2015	CJR	1
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B		10/6/2015	CJR	1
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B		10/6/2015	CJR	1
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B		10/6/2015	CJR	1
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B		10/6/2015	CJR	1
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B		10/6/2015	CJR	1
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B		10/6/2015	CJR	1
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B		10/6/2015	CJR	1
Isopropylbenzene	< 41	ug/l	41	130	50	8260B		10/6/2015	CJR	1
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B		10/6/2015	CJR	1
Methylene chloride	< 65	ug/l	65	210	50	8260B		10/6/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B		10/6/2015	CJR	1
Naphthalene	< 80	ug/l	80	260	50	8260B		10/6/2015	CJR	1
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B		10/6/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B		10/6/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
Tetrachloroethene	< 24.5	ug/l	24.5	75	50	8260B		10/6/2015	CJR	1
Toluene	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B		10/6/2015	CJR	1
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B		10/6/2015	CJR	1
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B		10/6/2015	CJR	1
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B		10/6/2015	CJR	1
Trichloroethene (TCE)	< 23.5	ug/l	23.5	75	50	8260B		10/6/2015	CJR	1
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/6/2015	CJR	1
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B		10/6/2015	CJR	1
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B		10/6/2015	CJR	1
Vinyl Chloride	213	ug/l	8.5	27	50	8260B		10/6/2015	CJR	1
m&p-Xylene	< 110	ug/l	110	345	50	8260B		10/6/2015	CJR	1
o-Xylene	< 45	ug/l	45	145	50	8260B		10/6/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			50	8260B		10/6/2015	CJR	1
SUR - Toluene-d8	107	REC %			50	8260B		10/6/2015	CJR	1
SUR - 4-Bromofluorobenzene	116	REC %			50	8260B		10/6/2015	CJR	1
SUR - Dibromofluoromethane	105	REC %			50	8260B		10/6/2015	CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795H  
**Sample ID** MW-D  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
Bromobenzene	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
Bromoform	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 50	ug/l	50	165	50	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 23	ug/l	23	70	50	8260B	10/6/2015	CJR	1	
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B	10/6/2015	CJR	1	
Chloroform	< 21.5	ug/l	21.5	70	50	8260B	10/6/2015	CJR	1	
Chloromethane	< 95	ug/l	95	300	50	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	77 "J"	ug/l	55	180	50	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	66 "J"	ug/l	32.5	105	50	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	158000	ug/l	450	1400	1000	8260B	10/7/2015	CJR	1	
trans-1,2-Dichloroethene	1190	ug/l	27	85	50	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 41	ug/l	41	130	50	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B	10/6/2015	CJR	1	
Methylene chloride	< 65	ug/l	65	210	50	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B	10/6/2015	CJR	1	
Naphthalene	< 80	ug/l	80	260	50	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
Tetrachloroethene	920	ug/l	24.5	75	50	8260B	10/6/2015	CJR	1	
Toluene	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	580	ug/l	42	135	50	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	2550	ug/l	23.5	75	50	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B	10/6/2015	CJR	1	
Vinyl Chloride	206	ug/l	8.5	27	50	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 110	ug/l	110	345	50	8260B	10/6/2015	CJR	1	
o-Xylene	< 45	ug/l	45	145	50	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	102	REC %			50	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	108	REC %			50	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	120	REC %			50	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	98	REC %			50	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795I  
**Sample ID** PZ-D  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
Bromobenzene	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
Bromodichloromethane	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
Bromoform	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B		10/6/2015	CJR	1
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B		10/6/2015	CJR	1
n-Butylbenzene	< 50	ug/l	50	165	50	8260B		10/6/2015	CJR	1
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B		10/6/2015	CJR	1
Chlorobenzene	< 23	ug/l	23	70	50	8260B		10/6/2015	CJR	1
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B		10/6/2015	CJR	1
Chloroform	< 21.5	ug/l	21.5	70	50	8260B		10/6/2015	CJR	1
Chloromethane	< 95	ug/l	95	300	50	8260B		10/6/2015	CJR	1
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B		10/6/2015	CJR	1
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B		10/6/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B		10/6/2015	CJR	1
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B		10/6/2015	CJR	1
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B		10/6/2015	CJR	1
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B		10/6/2015	CJR	1
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B		10/6/2015	CJR	1
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/6/2015	CJR	1
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B		10/6/2015	CJR	1
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B		10/6/2015	CJR	1
cis-1,2-Dichloroethene	3150	ug/l	22.5	70	50	8260B		10/6/2015	CJR	1
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B		10/6/2015	CJR	1
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B		10/6/2015	CJR	1
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B		10/6/2015	CJR	1
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B		10/6/2015	CJR	1
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B		10/6/2015	CJR	1
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B		10/6/2015	CJR	1
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B		10/6/2015	CJR	1
Isopropylbenzene	< 41	ug/l	41	130	50	8260B		10/6/2015	CJR	1
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B		10/6/2015	CJR	1
Methylene chloride	< 65	ug/l	65	210	50	8260B		10/6/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B		10/6/2015	CJR	1
Naphthalene	< 80	ug/l	80	260	50	8260B		10/6/2015	CJR	1
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B		10/6/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B		10/6/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B		10/6/2015	CJR	1
Tetrachloroethene	< 24.5	ug/l	24.5	75	50	8260B		10/6/2015	CJR	1
Toluene	< 22	ug/l	22	70	50	8260B		10/6/2015	CJR	1
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B		10/6/2015	CJR	1
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B		10/6/2015	CJR	1
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B		10/6/2015	CJR	1
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B		10/6/2015	CJR	1
Trichloroethene (TCE)	< 23.5	ug/l	23.5	75	50	8260B		10/6/2015	CJR	1
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/6/2015	CJR	1
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B		10/6/2015	CJR	1
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B		10/6/2015	CJR	1
Vinyl Chloride	1140	ug/l	8.5	27	50	8260B		10/6/2015	CJR	1
m&p-Xylene	< 110	ug/l	110	345	50	8260B		10/6/2015	CJR	1
o-Xylene	< 45	ug/l	45	145	50	8260B		10/6/2015	CJR	1
SUR - Toluene-d8	109	REC %			50	8260B		10/6/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			50	8260B		10/6/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			50	8260B		10/6/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			50	8260B		10/6/2015	CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795J  
**Sample ID** MW-22  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
<b>VOC's</b>										
Benzene	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
Bromobenzene	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
Bromoform	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 220	ug/l	220	680	200	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 240	ug/l	240	760	200	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 200	ug/l	200	660	200	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 102	ug/l	102	320	200	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 92	ug/l	92	280	200	8260B	10/6/2015	CJR	1	
Chloroethane	< 130	ug/l	130	420	200	8260B	10/6/2015	CJR	1	
Chloroform	< 86	ug/l	86	280	200	8260B	10/6/2015	CJR	1	
Chloromethane	< 380	ug/l	380	1200	200	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 80	ug/l	80	260	200	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 126	ug/l	126	400	200	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 280	ug/l	280	900	200	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 90	ug/l	90	280	200	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 98	ug/l	98	320	200	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 104	ug/l	104	320	200	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 92	ug/l	92	300	200	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 174	ug/l	174	560	200	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 220	ug/l	220	720	200	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 130	ug/l	130	420	200	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	4200	ug/l	90	280	200	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	< 108	ug/l	108	340	200	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 86	ug/l	86	274	200	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 620	ug/l	620	1960	200	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 84	ug/l	84	260	200	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 126	ug/l	126	400	200	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 142	ug/l	142	460	200	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 440	ug/l	440	1420	200	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 164	ug/l	164	520	200	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 220	ug/l	220	700	200	8260B	10/6/2015	CJR	1	
Methylene chloride	< 260	ug/l	260	840	200	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 220	ug/l	220	740	200	8260B	10/6/2015	CJR	1	
Naphthalene	< 320	ug/l	320	1040	200	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 154	ug/l	154	480	200	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 104	ug/l	104	340	200	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 96	ug/l	96	300	200	8260B	10/6/2015	CJR	1	
Tetrachloroethene	< 98	ug/l	98	300	200	8260B	10/6/2015	CJR	1	
Toluene	< 88	ug/l	88	280	200	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 340	ug/l	340	1120	200	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 540	ug/l	540	1720	200	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 168	ug/l	168	540	200	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 96	ug/l	96	304	200	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	< 94	ug/l	94	300	200	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 174	ug/l	174	560	200	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 320	ug/l	320	1000	200	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 300	ug/l	300	960	200	8260B	10/6/2015	CJR	1	
Vinyl Chloride	920	ug/l	34	108	200	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 440	ug/l	440	1380	200	8260B	10/6/2015	CJR	1	
o-Xylene	< 180	ug/l	180	580	200	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	101	REC %			200	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	114	REC %			200	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	104	REC %			200	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	108	REC %			200	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795K  
**Sample ID** MPS-P-1R  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
Bromobenzene	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
Bromoform	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 50	ug/l	50	165	50	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 23	ug/l	23	70	50	8260B	10/6/2015	CJR	1	
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B	10/6/2015	CJR	1	
Chloroform	< 21.5	ug/l	21.5	70	50	8260B	10/6/2015	CJR	1	
Chloromethane	< 95	ug/l	95	300	50	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	1600	ug/l	22.5	70	50	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 41	ug/l	41	130	50	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B	10/6/2015	CJR	1	
Methylene chloride	< 65	ug/l	65	210	50	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B	10/6/2015	CJR	1	
Naphthalene	< 80	ug/l	80	260	50	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B	10/6/2015	CJR	1	
Tetrachloroethene	< 24.5	ug/l	24.5	75	50	8260B	10/6/2015	CJR	1	
Toluene	< 22	ug/l	22	70	50	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	< 23.5	ug/l	23.5	75	50	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B	10/6/2015	CJR	1	
Vinyl Chloride	780	ug/l	8.5	27	50	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 110	ug/l	110	345	50	8260B	10/6/2015	CJR	1	
o-Xylene	< 45	ug/l	45	145	50	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	96	REC %			50	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	115	REC %			50	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	103	REC %			50	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	104	REC %			50	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795L  
**Sample ID** MPS-P-2  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Bromoform	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B	10/6/2015	CJR	1	
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B	10/6/2015	CJR	1	
n-Butylbenzene	< 10	ug/l	10	33	10	8260B	10/6/2015	CJR	1	
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B	10/6/2015	CJR	1	
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B	10/6/2015	CJR	1	
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
Chloroform	< 4.3	ug/l	4.3	14	10	8260B	10/6/2015	CJR	1	
Chloromethane	< 19	ug/l	19	60	10	8260B	10/6/2015	CJR	1	
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B	10/6/2015	CJR	1	
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B	10/6/2015	CJR	1	
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B	10/6/2015	CJR	1	
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B	10/6/2015	CJR	1	
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B	10/6/2015	CJR	1	
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B	10/6/2015	CJR	1	
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B	10/6/2015	CJR	1	
cis-1,2-Dichloroethene	1290	ug/l	4.5	14	10	8260B	10/6/2015	CJR	1	
trans-1,2-Dichloroethene	6.6 "J"	ug/l	5.4	17	10	8260B	10/6/2015	CJR	1	
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B	10/6/2015	CJR	1	
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B	10/6/2015	CJR	1	
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B	10/6/2015	CJR	1	
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B	10/6/2015	CJR	1	
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B	10/6/2015	CJR	1	
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B	10/6/2015	CJR	1	
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B	10/6/2015	CJR	1	
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B	10/6/2015	CJR	1	
Methylene chloride	< 13	ug/l	13	42	10	8260B	10/6/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B	10/6/2015	CJR	1	
Naphthalene	< 16	ug/l	16	52	10	8260B	10/6/2015	CJR	1	
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B	10/6/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B	10/6/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/6/2015	CJR	1	
Tetrachloroethene	< 4.9	ug/l	4.9	15	10	8260B	10/6/2015	CJR	1	
Toluene	< 4.4	ug/l	4.4	14	10	8260B	10/6/2015	CJR	1	
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B	10/6/2015	CJR	1	
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B	10/6/2015	CJR	1	
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B	10/6/2015	CJR	1	
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B	10/6/2015	CJR	1	
Trichloroethene (TCE)	< 4.7	ug/l	4.7	15	10	8260B	10/6/2015	CJR	1	
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/6/2015	CJR	1	
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B	10/6/2015	CJR	1	
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B	10/6/2015	CJR	1	
Vinyl Chloride	800	ug/l	1.7	5.4	10	8260B	10/6/2015	CJR	1	
m&p-Xylene	< 22	ug/l	22	69	10	8260B	10/6/2015	CJR	1	
o-Xylene	< 9	ug/l	9	29	10	8260B	10/6/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	99	REC %			10	8260B	10/6/2015	CJR	1	
SUR - 4-Bromofluorobenzene	118	REC %			10	8260B	10/6/2015	CJR	1	
SUR - Dibromofluoromethane	102	REC %			10	8260B	10/6/2015	CJR	1	
SUR - Toluene-d8	106	REC %			10	8260B	10/6/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795M  
**Sample ID** MPS-P-3  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B	10/7/2015	CJR	1	
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B	10/7/2015	CJR	1	
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B	10/7/2015	CJR	1	
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B	10/7/2015	CJR	1	
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B	10/7/2015	CJR	1	
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B	10/7/2015	CJR	1	
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B	10/7/2015	CJR	1	
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B	10/7/2015	CJR	1	
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B	10/7/2015	CJR	1	
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B	10/7/2015	CJR	1	
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B	10/7/2015	CJR	1	
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
cis-1,2-Dichloroethene	89	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B	10/7/2015	CJR	1	
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B	10/7/2015	CJR	1	
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B	10/7/2015	CJR	1	
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B	10/7/2015	CJR	1	
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B	10/7/2015	CJR	1	
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B	10/7/2015	CJR	1	
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B	10/7/2015	CJR	1	
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B	10/7/2015	CJR	1	
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B	10/7/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B	10/7/2015	CJR	1	
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B	10/7/2015	CJR	1	
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B	10/7/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B	10/7/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B	10/7/2015	CJR	1	
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B	10/7/2015	CJR	1	
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B	10/7/2015	CJR	1	
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B	10/7/2015	CJR	1	
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B	10/7/2015	CJR	1	
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B	10/7/2015	CJR	1	
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B	10/7/2015	CJR	1	
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B	10/7/2015	CJR	1	
Vinyl Chloride	83	ug/l	0.17	0.54	1	8260B	10/7/2015	CJR	1	
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B	10/7/2015	CJR	1	
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B	10/7/2015	CJR	1	
SUR - Toluene-d8	92	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Dibromofluoromethane	106	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B	10/7/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795N  
**Sample ID** MPS-P-4  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 8.8	ug/l	8.8	28	20	8260B			CJR	1
Bromobenzene	< 9.6	ug/l	9.6	30	20	8260B			CJR	1
Bromodichloromethane	< 9.2	ug/l	9.2	30	20	8260B			CJR	1
Bromoform	< 9.2	ug/l	9.2	30	20	8260B			CJR	1
tert-Butylbenzene	< 22	ug/l	22	68	20	8260B			CJR	1
sec-Butylbenzene	< 24	ug/l	24	76	20	8260B			CJR	1
n-Butylbenzene	< 20	ug/l	20	66	20	8260B			CJR	1
Carbon Tetrachloride	< 10.2	ug/l	10.2	32	20	8260B			CJR	1
Chlorobenzene	< 9.2	ug/l	9.2	28	20	8260B			CJR	1
Chloroethane	< 13	ug/l	13	42	20	8260B			CJR	1
Chloroform	< 8.6	ug/l	8.6	28	20	8260B			CJR	1
Chloromethane	< 38	ug/l	38	120	20	8260B			CJR	1
2-Chlorotoluene	< 8	ug/l	8	26	20	8260B			CJR	1
4-Chlorotoluene	< 12.6	ug/l	12.6	40	20	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 28	ug/l	28	90	20	8260B			CJR	1
Dibromochloromethane	< 9	ug/l	9	28	20	8260B			CJR	1
1,4-Dichlorobenzene	< 9.8	ug/l	9.8	32	20	8260B			CJR	1
1,3-Dichlorobenzene	< 10.4	ug/l	10.4	32	20	8260B			CJR	1
1,2-Dichlorobenzene	< 9.2	ug/l	9.2	30	20	8260B			CJR	1
Dichlorodifluoromethane	< 17.4	ug/l	17.4	56	20	8260B			CJR	1
1,2-Dichloroethane	< 9.6	ug/l	9.6	30	20	8260B			CJR	1
1,1-Dichloroethane	< 22	ug/l	22	72	20	8260B			CJR	1
1,1-Dichloroethene	< 13	ug/l	13	42	20	8260B			CJR	1
cis-1,2-Dichloroethene	1500	ug/l	9	28	20	8260B			CJR	1
trans-1,2-Dichloroethene	< 10.8	ug/l	10.8	34	20	8260B			CJR	1
1,2-Dichloropropane	< 8.6	ug/l	8.6	27.4	20	8260B			CJR	1
2,2-Dichloropropane	< 62	ug/l	62	196	20	8260B			CJR	1
1,3-Dichloropropane	< 8.4	ug/l	8.4	26	20	8260B			CJR	1
Di-isopropyl ether	< 8.8	ug/l	8.8	28	20	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 12.6	ug/l	12.6	40	20	8260B			CJR	1
Ethylbenzene	< 14.2	ug/l	14.2	46	20	8260B			CJR	1
Hexachlorobutadiene	< 44	ug/l	44	142	20	8260B			CJR	1
Isopropylbenzene	< 16.4	ug/l	16.4	52	20	8260B			CJR	1
p-Isopropyltoluene	< 22	ug/l	22	70	20	8260B			CJR	1
Methylene chloride	< 26	ug/l	26	84	20	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 22	ug/l	22	74	20	8260B			CJR	1
Naphthalene	< 32	ug/l	32	104	20	8260B			CJR	1
n-Propylbenzene	< 15.4	ug/l	15.4	48	20	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 10.4	ug/l	10.4	34	20	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 9.6	ug/l	9.6	30	20	8260B			CJR	1
Tetrachloroethene	< 9.8	ug/l	9.8	30	20	8260B			CJR	1
Toluene	< 8.8	ug/l	8.8	28	20	8260B			CJR	1
1,2,4-Trichlorobenzene	< 34	ug/l	34	112	20	8260B			CJR	1
1,2,3-Trichlorobenzene	< 54	ug/l	54	172	20	8260B			CJR	1
1,1,1-Trichloroethane	< 16.8	ug/l	16.8	54	20	8260B			CJR	1
1,1,2-Trichloroethane	< 9.6	ug/l	9.6	30.4	20	8260B			CJR	1
Trichloroethene (TCE)	< 9.4	ug/l	9.4	30	20	8260B			CJR	1
Trichlorofluoromethane	< 17.4	ug/l	17.4	56	20	8260B			CJR	1
1,2,4-Trimethylbenzene	< 32	ug/l	32	100	20	8260B			CJR	1
1,3,5-Trimethylbenzene	< 30	ug/l	30	96	20	8260B			CJR	1
Vinyl Chloride	460	ug/l	3.4	10.8	20	8260B			CJR	1
m&p-Xylene	< 44	ug/l	44	138	20	8260B			CJR	1
o-Xylene	< 18	ug/l	18	58	20	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	112	REC %			20	8260B			CJR	1
SUR - Toluene-d8	85	REC %			20	8260B			CJR	1
SUR - Dibromofluoromethane	112	REC %			20	8260B			CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			20	8260B			CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795O  
**Sample ID** MPS-P-5  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
Bromoform	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B	10/8/2015	CJR	1	
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B	10/8/2015	CJR	1	
n-Butylbenzene	< 10	ug/l	10	33	10	8260B	10/8/2015	CJR	1	
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B	10/8/2015	CJR	1	
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B	10/8/2015	CJR	1	
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B	10/8/2015	CJR	1	
Chloroform	< 4.3	ug/l	4.3	14	10	8260B	10/8/2015	CJR	1	
Chloromethane	< 19	ug/l	19	60	10	8260B	10/8/2015	CJR	1	
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B	10/8/2015	CJR	1	
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B	10/8/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B	10/8/2015	CJR	1	
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B	10/8/2015	CJR	1	
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B	10/8/2015	CJR	1	
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B	10/8/2015	CJR	1	
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/8/2015	CJR	1	
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B	10/8/2015	CJR	1	
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B	10/8/2015	CJR	1	
cis-1,2-Dichloroethene	82	ug/l	4.5	14	10	8260B	10/8/2015	CJR	1	
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B	10/8/2015	CJR	1	
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B	10/8/2015	CJR	1	
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B	10/8/2015	CJR	1	
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B	10/8/2015	CJR	1	
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B	10/8/2015	CJR	1	
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B	10/8/2015	CJR	1	
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B	10/8/2015	CJR	1	
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B	10/8/2015	CJR	1	
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B	10/8/2015	CJR	1	
Methylene chloride	< 13	ug/l	13	42	10	8260B	10/8/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B	10/8/2015	CJR	1	
Naphthalene	< 16	ug/l	16	52	10	8260B	10/8/2015	CJR	1	
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B	10/8/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B	10/8/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
Tetrachloroethene	< 4.9	ug/l	4.9	15	10	8260B	10/8/2015	CJR	1	
Toluene	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B	10/8/2015	CJR	1	
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B	10/8/2015	CJR	1	
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B	10/8/2015	CJR	1	
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B	10/8/2015	CJR	1	
Trichloroethene (TCE)	< 4.7	ug/l	4.7	15	10	8260B	10/8/2015	CJR	1	
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/8/2015	CJR	1	
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B	10/8/2015	CJR	1	
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B	10/8/2015	CJR	1	
Vinyl Chloride	88	ug/l	1.7	5.4	10	8260B	10/8/2015	CJR	1	
m&p-Xylene	< 22	ug/l	22	69	10	8260B	10/8/2015	CJR	1	
o-Xylene	< 9	ug/l	9	29	10	8260B	10/8/2015	CJR	1	
SUR - 4-Bromofluorobenzene	102	REC %			10	8260B	10/8/2015	CJR	1	
SUR - Dibromofluoromethane	107	REC %			10	8260B	10/8/2015	CJR	1	
SUR - Toluene-d8	90	REC %			10	8260B	10/8/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	108	REC %			10	8260B	10/8/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795P  
**Sample ID** MPS-P-6  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 4.4	ug/l	4.4	14	10	8260B		10/8/2015	CJR	1
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B		10/8/2015	CJR	1
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B		10/8/2015	CJR	1
Bromoform	< 4.6	ug/l	4.6	15	10	8260B		10/8/2015	CJR	1
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B		10/8/2015	CJR	1
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B		10/8/2015	CJR	1
n-Butylbenzene	< 10	ug/l	10	33	10	8260B		10/8/2015	CJR	1
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B		10/8/2015	CJR	1
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B		10/8/2015	CJR	1
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B		10/8/2015	CJR	1
Chloroform	< 4.3	ug/l	4.3	14	10	8260B		10/8/2015	CJR	1
Chloromethane	< 19	ug/l	19	60	10	8260B		10/8/2015	CJR	1
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B		10/8/2015	CJR	1
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B		10/8/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B		10/8/2015	CJR	1
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B		10/8/2015	CJR	1
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B		10/8/2015	CJR	1
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B		10/8/2015	CJR	1
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B		10/8/2015	CJR	1
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B		10/8/2015	CJR	1
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B		10/8/2015	CJR	1
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B		10/8/2015	CJR	1
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B		10/8/2015	CJR	1
cis-1,2-Dichloroethene	640	ug/l	4.5	14	10	8260B		10/8/2015	CJR	1
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B		10/8/2015	CJR	1
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B		10/8/2015	CJR	1
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B		10/8/2015	CJR	1
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B		10/8/2015	CJR	1
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B		10/8/2015	CJR	1
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B		10/8/2015	CJR	1
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B		10/8/2015	CJR	1
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B		10/8/2015	CJR	1
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B		10/8/2015	CJR	1
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B		10/8/2015	CJR	1
Methylene chloride	< 13	ug/l	13	42	10	8260B		10/8/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B		10/8/2015	CJR	1
Naphthalene	< 16	ug/l	16	52	10	8260B		10/8/2015	CJR	1
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B		10/8/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B		10/8/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B		10/8/2015	CJR	1
Tetrachloroethene	< 4.9	ug/l	4.9	15	10	8260B		10/8/2015	CJR	1
Toluene	< 4.4	ug/l	4.4	14	10	8260B		10/8/2015	CJR	1
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B		10/8/2015	CJR	1
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B		10/8/2015	CJR	1
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B		10/8/2015	CJR	1
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B		10/8/2015	CJR	1
Trichloroethene (TCE)	< 4.7	ug/l	4.7	15	10	8260B		10/8/2015	CJR	1
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B		10/8/2015	CJR	1
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B		10/8/2015	CJR	1
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B		10/8/2015	CJR	1
Vinyl Chloride	410	ug/l	1.7	5.4	10	8260B		10/8/2015	CJR	1
m&p-Xylene	< 22	ug/l	22	69	10	8260B		10/8/2015	CJR	1
o-Xylene	< 9	ug/l	9	29	10	8260B		10/8/2015	CJR	1
SUR - Dibromofluoromethane	107	REC %			10	8260B		10/8/2015	CJR	1
SUR - Toluene-d8	90	REC %			10	8260B		10/8/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	112	REC %			10	8260B		10/8/2015	CJR	1
SUR - 4-Bromofluorobenzene	97	REC %			10	8260B		10/8/2015	CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795Q  
**Sample ID** MPS-P-7  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
Bromoform	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B	10/8/2015	CJR	1	
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B	10/8/2015	CJR	1	
n-Butylbenzene	< 10	ug/l	10	33	10	8260B	10/8/2015	CJR	1	
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B	10/8/2015	CJR	1	
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B	10/8/2015	CJR	1	
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B	10/8/2015	CJR	1	
Chloroform	< 4.3	ug/l	4.3	14	10	8260B	10/8/2015	CJR	1	
Chloromethane	< 19	ug/l	19	60	10	8260B	10/8/2015	CJR	1	
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B	10/8/2015	CJR	1	
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B	10/8/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B	10/8/2015	CJR	1	
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B	10/8/2015	CJR	1	
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B	10/8/2015	CJR	1	
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B	10/8/2015	CJR	1	
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B	10/8/2015	CJR	1	
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/8/2015	CJR	1	
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B	10/8/2015	CJR	1	
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B	10/8/2015	CJR	1	
cis-1,2-Dichloroethene	24.8	ug/l	4.5	14	10	8260B	10/8/2015	CJR	1	
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B	10/8/2015	CJR	1	
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B	10/8/2015	CJR	1	
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B	10/8/2015	CJR	1	
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B	10/8/2015	CJR	1	
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B	10/8/2015	CJR	1	
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B	10/8/2015	CJR	1	
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B	10/8/2015	CJR	1	
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B	10/8/2015	CJR	1	
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B	10/8/2015	CJR	1	
Methylene chloride	< 13	ug/l	13	42	10	8260B	10/8/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B	10/8/2015	CJR	1	
Naphthalene	< 16	ug/l	16	52	10	8260B	10/8/2015	CJR	1	
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B	10/8/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B	10/8/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B	10/8/2015	CJR	1	
Tetrachloroethene	< 4.9	ug/l	4.9	15	10	8260B	10/8/2015	CJR	1	
Toluene	< 4.4	ug/l	4.4	14	10	8260B	10/8/2015	CJR	1	
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B	10/8/2015	CJR	1	
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B	10/8/2015	CJR	1	
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B	10/8/2015	CJR	1	
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B	10/8/2015	CJR	1	
Trichloroethene (TCE)	< 4.7	ug/l	4.7	15	10	8260B	10/8/2015	CJR	1	
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B	10/8/2015	CJR	1	
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B	10/8/2015	CJR	1	
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B	10/8/2015	CJR	1	
Vinyl Chloride	380	ug/l	1.7	5.4	10	8260B	10/8/2015	CJR	1	
m&p-Xylene	< 22	ug/l	22	69	10	8260B	10/8/2015	CJR	1	
o-Xylene	< 9	ug/l	9	29	10	8260B	10/8/2015	CJR	1	
SUR - Toluene-d8	88	REC %			10	8260B	10/8/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	111	REC %			10	8260B	10/8/2015	CJR	1	
SUR - 4-Bromofluorobenzene	97	REC %			10	8260B	10/8/2015	CJR	1	
SUR - Dibromofluoromethane	107	REC %			10	8260B	10/8/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795R  
**Sample ID** MW-11  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B	10/7/2015	CJR	1	
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B	10/7/2015	CJR	1	
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B	10/7/2015	CJR	1	
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B	10/7/2015	CJR	1	
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B	10/7/2015	CJR	1	
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B	10/7/2015	CJR	1	
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B	10/7/2015	CJR	1	
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B	10/7/2015	CJR	1	
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B	10/7/2015	CJR	1	
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B	10/7/2015	CJR	1	
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B	10/7/2015	CJR	1	
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B	10/7/2015	CJR	1	
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B	10/7/2015	CJR	1	
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B	10/7/2015	CJR	1	
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B	10/7/2015	CJR	1	
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B	10/7/2015	CJR	1	
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B	10/7/2015	CJR	1	
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B	10/7/2015	CJR	1	
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B	10/7/2015	CJR	1	
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B	10/7/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B	10/7/2015	CJR	1	
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B	10/7/2015	CJR	1	
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B	10/7/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B	10/7/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B	10/7/2015	CJR	1	
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B	10/7/2015	CJR	1	
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B	10/7/2015	CJR	1	
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B	10/7/2015	CJR	1	
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B	10/7/2015	CJR	1	
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B	10/7/2015	CJR	1	
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B	10/7/2015	CJR	1	
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B	10/7/2015	CJR	1	
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B	10/7/2015	CJR	1	
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B	10/7/2015	CJR	1	
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B	10/7/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Dibromofluoromethane	108	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Toluene-d8	87	REC %			1	8260B	10/7/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795S  
**Sample ID** PZ-11  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B	10/7/2015	CJR	1	
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B	10/7/2015	CJR	1	
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B	10/7/2015	CJR	1	
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B	10/7/2015	CJR	1	
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B	10/7/2015	CJR	1	
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B	10/7/2015	CJR	1	
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B	10/7/2015	CJR	1	
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B	10/7/2015	CJR	1	
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B	10/7/2015	CJR	1	
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B	10/7/2015	CJR	1	
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B	10/7/2015	CJR	1	
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B	10/7/2015	CJR	1	
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B	10/7/2015	CJR	1	
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B	10/7/2015	CJR	1	
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B	10/7/2015	CJR	1	
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B	10/7/2015	CJR	1	
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B	10/7/2015	CJR	1	
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B	10/7/2015	CJR	1	
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B	10/7/2015	CJR	1	
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B	10/7/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B	10/7/2015	CJR	1	
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B	10/7/2015	CJR	1	
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B	10/7/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B	10/7/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B	10/7/2015	CJR	1	
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B	10/7/2015	CJR	1	
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B	10/7/2015	CJR	1	
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B	10/7/2015	CJR	1	
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B	10/7/2015	CJR	1	
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B	10/7/2015	CJR	1	
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B	10/7/2015	CJR	1	
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B	10/7/2015	CJR	1	
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B	10/7/2015	CJR	1	
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B	10/7/2015	CJR	1	
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B	10/7/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	113	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Dibromofluoromethane	108	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Toluene-d8	92	REC %			1	8260B	10/7/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795T  
**Sample ID** DUP #1  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B		10/8/2015	CJR	1
Bromobenzene	< 24	ug/l	24	75	50	8260B		10/8/2015	CJR	1
Bromodichloromethane	< 23	ug/l	23	75	50	8260B		10/8/2015	CJR	1
Bromoform	< 23	ug/l	23	75	50	8260B		10/8/2015	CJR	1
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B		10/8/2015	CJR	1
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B		10/8/2015	CJR	1
n-Butylbenzene	< 50	ug/l	50	165	50	8260B		10/8/2015	CJR	1
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B		10/8/2015	CJR	1
Chlorobenzene	< 23	ug/l	23	70	50	8260B		10/8/2015	CJR	1
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B		10/8/2015	CJR	1
Chloroform	< 21.5	ug/l	21.5	70	50	8260B		10/8/2015	CJR	1
Chloromethane	< 95	ug/l	95	300	50	8260B		10/8/2015	CJR	1
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B		10/8/2015	CJR	1
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B		10/8/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B		10/8/2015	CJR	1
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B		10/8/2015	CJR	1
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B		10/8/2015	CJR	1
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B		10/8/2015	CJR	1
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B		10/8/2015	CJR	1
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/8/2015	CJR	1
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B		10/8/2015	CJR	1
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B		10/8/2015	CJR	1
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B		10/8/2015	CJR	1
cis-1,2-Dichloroethene	84	ug/l	22.5	70	50	8260B		10/8/2015	CJR	1
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B		10/8/2015	CJR	1
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B		10/8/2015	CJR	1
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B		10/8/2015	CJR	1
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B		10/8/2015	CJR	1
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B		10/8/2015	CJR	1
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B		10/8/2015	CJR	1
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B		10/8/2015	CJR	1
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B		10/8/2015	CJR	1
Isopropylbenzene	< 41	ug/l	41	130	50	8260B		10/8/2015	CJR	1
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B		10/8/2015	CJR	1
Methylene chloride	< 65	ug/l	65	210	50	8260B		10/8/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B		10/8/2015	CJR	1
Naphthalene	< 80	ug/l	80	260	50	8260B		10/8/2015	CJR	1
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B		10/8/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B		10/8/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B		10/8/2015	CJR	1
Tetrachloroethene	< 24.5	ug/l	24.5	75	50	8260B		10/8/2015	CJR	1
Toluene	< 22	ug/l	22	70	50	8260B		10/8/2015	CJR	1
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B		10/8/2015	CJR	1
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B		10/8/2015	CJR	1
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B		10/8/2015	CJR	1
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B		10/8/2015	CJR	1
Trichloroethene (TCE)	< 23.5	ug/l	23.5	75	50	8260B		10/8/2015	CJR	1
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B		10/8/2015	CJR	1
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B		10/8/2015	CJR	1
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B		10/8/2015	CJR	1
Vinyl Chloride	100	ug/l	8.5	27	50	8260B		10/8/2015	CJR	1
m&p-Xylene	< 110	ug/l	110	345	50	8260B		10/8/2015	CJR	1
o-Xylene	< 45	ug/l	45	145	50	8260B		10/8/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			50	8260B		10/8/2015	CJR	1
SUR - 4-Bromofluorobenzene	115	REC %			50	8260B		10/8/2015	CJR	1
SUR - Dibromofluoromethane	103	REC %			50	8260B		10/8/2015	CJR	1
SUR - Toluene-d8	110	REC %			50	8260B		10/8/2015	CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795U  
**Sample ID** DUP #2  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B			CJR	1
Bromobenzene	< 24	ug/l	24	75	50	8260B			CJR	1
Bromodichloromethane	< 23	ug/l	23	75	50	8260B			CJR	1
Bromoform	< 23	ug/l	23	75	50	8260B			CJR	1
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B			CJR	1
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B			CJR	1
n-Butylbenzene	< 50	ug/l	50	165	50	8260B			CJR	1
Carbon Tetrachloride	< 25.5	ug/l	25.5	80	50	8260B			CJR	1
Chlorobenzene	< 23	ug/l	23	70	50	8260B			CJR	1
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B			CJR	1
Chloroform	< 21.5	ug/l	21.5	70	50	8260B			CJR	1
Chloromethane	< 95	ug/l	95	300	50	8260B			CJR	1
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B			CJR	1
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B			CJR	1
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B			CJR	1
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B			CJR	1
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B			CJR	1
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B			CJR	1
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B			CJR	1
1,2-Dichloroethane	< 24	ug/l	24	75	50	8260B			CJR	1
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B			CJR	1
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B			CJR	1
cis-1,2-Dichloroethene	1590	ug/l	22.5	70	50	8260B			CJR	1
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B			CJR	1
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B			CJR	1
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B			CJR	1
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B			CJR	1
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B			CJR	1
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B			CJR	1
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B			CJR	1
Isopropylbenzene	< 41	ug/l	41	130	50	8260B			CJR	1
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B			CJR	1
Methylene chloride	< 65	ug/l	65	210	50	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B			CJR	1
Naphthalene	< 80	ug/l	80	260	50	8260B			CJR	1
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B			CJR	1
Tetrachloroethene	< 24.5	ug/l	24.5	75	50	8260B			CJR	1
Toluene	< 22	ug/l	22	70	50	8260B			CJR	1
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B			CJR	1
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B			CJR	1
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B			CJR	1
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B			CJR	1
Trichloroethene (TCE)	< 23.5	ug/l	23.5	75	50	8260B			CJR	1
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B			CJR	1
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B			CJR	1
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B			CJR	1
Vinyl Chloride	740	ug/l	8.5	27	50	8260B			CJR	1
m&p-Xylene	< 110	ug/l	110	345	50	8260B			CJR	1
o-Xylene	< 45	ug/l	45	145	50	8260B			CJR	1
SUR - Toluene-d8	106	REC %			50	8260B			CJR	1
SUR - Dibromofluoromethane	106	REC %			50	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			50	8260B			CJR	1
SUR - 4-Bromofluorobenzene	116	REC %			50	8260B			CJR	1

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411  
**Lab Code** 5029795V  
**Sample ID** TRIP BLANK  
**Sample Matrix** Water  
**Sample Date** 9/30/2015

**Invoice #** E29795

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B	10/7/2015	CJR	1	
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B	10/7/2015	CJR	1	
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B	10/7/2015	CJR	1	
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B	10/7/2015	CJR	1	
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B	10/7/2015	CJR	1	
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B	10/7/2015	CJR	1	
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B	10/7/2015	CJR	1	
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B	10/7/2015	CJR	1	
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B	10/7/2015	CJR	1	
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B	10/7/2015	CJR	1	
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B	10/7/2015	CJR	1	
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B	10/7/2015	CJR	1	
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B	10/7/2015	CJR	1	
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B	10/7/2015	CJR	1	
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B	10/7/2015	CJR	1	
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B	10/7/2015	CJR	1	
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B	10/7/2015	CJR	1	
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B	10/7/2015	CJR	1	
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B	10/7/2015	CJR	1	
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B	10/7/2015	CJR	1	
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B	10/7/2015	CJR	1	
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B	10/7/2015	CJR	1	
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B	10/7/2015	CJR	1	
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B	10/7/2015	CJR	1	
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B	10/7/2015	CJR	1	
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B	10/7/2015	CJR	1	
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B	10/7/2015	CJR	1	
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B	10/7/2015	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B	10/7/2015	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B	10/7/2015	CJR	1	
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B	10/7/2015	CJR	1	
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B	10/7/2015	CJR	1	
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B	10/7/2015	CJR	1	
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B	10/7/2015	CJR	1	
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B	10/7/2015	CJR	1	
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B	10/7/2015	CJR	1	
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B	10/7/2015	CJR	1	
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B	10/7/2015	CJR	1	
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B	10/7/2015	CJR	1	
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B	10/7/2015	CJR	1	
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B	10/7/2015	CJR	1	
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B	10/7/2015	CJR	1	
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B	10/7/2015	CJR	1	
SUR - Toluene-d8	90	REC %			1	8260B	10/7/2015	CJR	1	
SUR - Dibromofluoromethane	105	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B	10/7/2015	CJR	1	
SUR - 1,2-Dichloroethane-d4	107	REC %			1	8260B	10/7/2015	CJR	1	

**Project Name** GOODHOPE RD. LANDFILL SITE  
**Project #** 14411

**Invoice #** E29795

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code**      **Comment**

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

**Authorized Signature**



Lab I.D. #	
Account No. :	Quote No.:
Project #: 14411	
Sampler: (signature) David Dailey	

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920-830-2455 • FAX 920-733-0631

Chain # N2 291

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## Sample Handling Request

Rush Analysis Date Required \_\_\_\_\_

(Rushes accepted only with prior authorization)

 Normal Turn Around

Project (Name / Location): Goodhope Rd. Landfill Site

Reports To: Mafizul Islam

Invoice To:

Company Sigma

Company

Address 1300 W. Canal St.

Address

City State Zip Milw. WI 53233

City State Zip

Phone 414-643-4200

Phone

FAX

FAX

## Analysis Requested

## Other Analysis

PID/  
FID

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	
S029795A	W-MW-55	9-29-15	10:50	G	NO	3	GW	HCL																
B	MW-4		11:15																					
C	W-MW-10		11:48																					
D	PZ-C		12:00																					
E	W-MW-11		12:30																					
F	MW-20		2:00																					
G	MW-25		3:00																					
H	MW-D	9-30-15	8:30				3	1																
I	PZ-D		8:00																					
J	MW-22		8:38																					

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: *Delivery*Temp. of Temp. Blank °C On Ice Cooler seal intact upon receipt:  Yes  No

Relinquished By: (sign)

*David Dailey*

Time

Date

Received By: (sign)

Time

Date

Received in Laboratory By: *Christy J. N.*

Time: 8:00

Date: 10/2/15

Lab I.D. #	
Account No. :	Quote No.:
Project #:	<u>14411</u>
Sampler: (signature) <u>Daniel Dailey</u>	

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<b>Sample Handling Request</b>	
Rush Analysis Date Required	<input type="checkbox"/>
(Rushes accepted only with prior authorization)	
<input checked="" type="checkbox"/> Normal Turn Around	

Project (Name / Location): Goodhope Rd. Landfill site

**Analysis Requested**
**Other Analysis**

Reports To: Mofizul Islam Invoice To:  
Company Sigma  
Address 1300 W. Canal St  
City State Zip Milw - WI 53233  
Phone 414-643-4200  
FAX

DRO (Mod DRO Sep 95)  
GRO (Mod GRO Sep 95)  
LEAD  
NITRATE/NITRITE  
OIL & GREASE  
PAH (EPA 8270)  
PCB  
PVOC (EPA 8021)  
PVOC + NAPHTHALENE  
SULFATE  
TOTAL SUSPENDED SOLIDS  
VOC DW (EPA 542.2)  
VOC (EPA 8260)  
8-RCRA METALS

 PID/  
FID

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
S023775k	MPS-P-1R	9-30-15	10:30	G	NO	3	GW	HCL	
L	MPS-P-2		9:40						
m	MPS-P-3		10:15						
N	MPS-P-4		11:35						
O	MPS-P-5		11:45						
P	MPS-P-6		12:40						
Q	MPS-P-7		12:45						
R	MW-11		1:50						
S	PZ-11		1:55						
T	Dup#1		-						

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Refrigerated

Temp. of Temp. Blank   °C On Ice

Cooler seal intact upon receipt: X Yes    No

Relinquished By: (sign)

Daniel Dailey 4:00 9-30-15

Time

Date

Received By: (sign)

Time

Date

Received in Laboratory By:

Chunlin

Time: 8:00

Date: 10/2/15

# Synergy

Chain # N<sup>2</sup> 291

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Lab I.D. #	
Account No. :	Quote No.:
Project #: <b>14411</b>	
Sampler: (signature) <i>Raj Palter</i>	

***Environmental Lab, Inc.***

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

**Sample Handling Request**

Rush Analysis Date Required  
*(Rushes accepted only with prior authorization)*

Normal Turn Around

Project (Name / Location): Goodhope Landfill site

Reports To: Mafizal Islam Invoice To:

Company Sigma Company

Address 1300 W. Canal St. Address

**City State Zip** Milwaukee, WI 53233 **City State Zip**

Phone 414-643-4200 Phone

FAX

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.		Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Method of Shipment:		<i>Dair Dailey</i>					
Temp. of Temp. Blank _____ °C On Ice: <input checked="" type="checkbox"/>							
Cooler seal intact upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Received in Laboratory By:		<i>David Mox</i>					
		Time: <i>8:00</i>					
		Date: <i>6/2/15</i>					

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

MAFIZUL ISLAM  
THE SIGMA GROUP, INC.  
1300 W. CANAL STREET  
MILWAUKEE, WI 53233

Report Date 22-Dec-15

Project Name GOOD HOPE LANDFILL  
Project # 14411

Invoice # E30245

Lab Code 5030245A  
Sample ID MW-D  
Sample Matrix Water  
Sample Date 12/17/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 440	ug/l	440	1400	1000	8260B	12/21/2015	CJR	1	
Bromobenzene	< 480	ug/l	480	1500	1000	8260B	12/21/2015	CJR	1	
Bromodichloromethane	< 460	ug/l	460	1500	1000	8260B	12/21/2015	CJR	1	
Bromoform	< 460	ug/l	460	1500	1000	8260B	12/21/2015	CJR	1	
tert-Butylbenzene	< 1100	ug/l	1100	3400	1000	8260B	12/21/2015	CJR	1	
sec-Butylbenzene	< 1200	ug/l	1200	3800	1000	8260B	12/21/2015	CJR	1	
n-Butylbenzene	< 1000	ug/l	1000	3300	1000	8260B	12/21/2015	CJR	1	
Carbon Tetrachloride	< 510	ug/l	510	1600	1000	8260B	12/21/2015	CJR	1	
Chlorobenzene	< 460	ug/l	460	1400	1000	8260B	12/21/2015	CJR	1	
Chloroethane	< 650	ug/l	650	2100	1000	8260B	12/21/2015	CJR	1	
Chloroform	< 430	ug/l	430	1400	1000	8260B	12/21/2015	CJR	1	
Chloromethane	< 1900	ug/l	1900	6000	1000	8260B	12/21/2015	CJR	1	
2-Chlorotoluene	< 400	ug/l	400	1300	1000	8260B	12/21/2015	CJR	1	
4-Chlorotoluene	< 630	ug/l	630	2000	1000	8260B	12/21/2015	CJR	1	
1,2-Dibromo-3-chloropropane	< 1400	ug/l	1400	4500	1000	8260B	12/21/2015	CJR	1	
Dibromochloromethane	< 450	ug/l	450	1400	1000	8260B	12/21/2015	CJR	1	
1,4-Dichlorobenzene	< 490	ug/l	490	1600	1000	8260B	12/21/2015	CJR	1	
1,3-Dichlorobenzene	< 520	ug/l	520	1600	1000	8260B	12/21/2015	CJR	1	
1,2-Dichlorobenzene	< 460	ug/l	460	1500	1000	8260B	12/21/2015	CJR	1	
Dichlorodifluoromethane	< 870	ug/l	870	2800	1000	8260B	12/21/2015	CJR	1	
1,2-Dichloroethane	< 480	ug/l	480	1500	1000	8260B	12/21/2015	CJR	1	
1,1-Dichloroethane	< 1100	ug/l	1100	3600	1000	8260B	12/21/2015	CJR	1	
1,1-Dichloroethene	< 650	ug/l	650	2100	1000	8260B	12/21/2015	CJR	1	
cis-1,2-Dichloroethene	28900	ug/l	450	1400	1000	8260B	12/21/2015	CJR	1	
trans-1,2-Dichloroethene	< 540	ug/l	540	1700	1000	8260B	12/21/2015	CJR	1	
1,2-Dichloropropane	< 430	ug/l	430	1370	1000	8260B	12/21/2015	CJR	1	
2,2-Dichloropropane	< 3100	ug/l	3100	9800	1000	8260B	12/21/2015	CJR	1	
1,3-Dichloropropane	< 420	ug/l	420	1300	1000	8260B	12/21/2015	CJR	1	
Di-isopropyl ether	< 440	ug/l	440	1400	1000	8260B	12/21/2015	CJR	1	
EDB (1,2-Dibromoethane)	< 630	ug/l	630	2000	1000	8260B	12/21/2015	CJR	1	
Ethylbenzene	< 710	ug/l	710	2300	1000	8260B	12/21/2015	CJR	1	
Hexachlorobutadiene	< 2200	ug/l	2200	7100	1000	8260B	12/21/2015	CJR	1	
Isopropylbenzene	< 820	ug/l	820	2600	1000	8260B	12/21/2015	CJR	1	

**Project Name** GOOD HOPE LANDFILL  
**Project #** 14411  
**Lab Code** 5030245A  
**Sample ID** MW-D  
**Sample Matrix** Water  
**Sample Date** 12/17/2015

**Invoice #** E30245

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
p-Isopropyltoluene	< 1100	ug/l	1100	3500	1000	8260B		12/21/2015	CJR	1
Methylene chloride	< 1300	ug/l	1300	4200	1000	8260B		12/21/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1100	ug/l	1100	3700	1000	8260B		12/21/2015	CJR	1
Naphthalene	< 1600	ug/l	1600	5200	1000	8260B		12/21/2015	CJR	1
n-Propylbenzene	< 770	ug/l	770	2400	1000	8260B		12/21/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 520	ug/l	520	1700	1000	8260B		12/21/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 480	ug/l	480	1500	1000	8260B		12/21/2015	CJR	1
Tetrachloroethene	1330 "J"	ug/l	490	1500	1000	8260B		12/21/2015	CJR	1
Toluene	< 440	ug/l	440	1400	1000	8260B		12/21/2015	CJR	1
1,2,4-Trichlorobenzene	< 1700	ug/l	1700	5600	1000	8260B		12/21/2015	CJR	1
1,2,3-Trichlorobenzene	< 2700	ug/l	2700	8600	1000	8260B		12/21/2015	CJR	1
1,1,1-Trichloroethane	< 840	ug/l	840	2700	1000	8260B		12/21/2015	CJR	1
1,1,2-Trichloroethane	< 480	ug/l	480	1520	1000	8260B		12/21/2015	CJR	1
Trichloroethene (TCE)	1640	ug/l	470	1500	1000	8260B		12/21/2015	CJR	1
Trichlorofluoromethane	< 870	ug/l	870	2800	1000	8260B		12/21/2015	CJR	1
1,2,4-Trimethylbenzene	< 1600	ug/l	1600	5000	1000	8260B		12/21/2015	CJR	1
1,3,5-Trimethylbenzene	< 1500	ug/l	1500	4800	1000	8260B		12/21/2015	CJR	1
Vinyl Chloride	< 170	ug/l	170	540	1000	8260B		12/21/2015	CJR	1
m&p-Xylene	< 2200	ug/l	2200	6900	1000	8260B		12/21/2015	CJR	1
o-Xylene	< 900	ug/l	900	2900	1000	8260B		12/21/2015	CJR	1
SUR - Toluene-d8	101	REC %			1000	8260B		12/21/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1000	8260B		12/21/2015	CJR	1
SUR - 4-Bromofluorobenzene	117	REC %			1000	8260B		12/21/2015	CJR	1
SUR - Dibromofluoromethane	96	REC %			1000	8260B		12/21/2015	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code**      **Comment**

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



## **CHAIN OF CUSTODY RECORD**

# Synergy

Chain # No 2812

Page 1 of 1

Lab I.D. #	
Account No.:	Quote No.:
Project #: 14411 Sampler: (signature) <i>Chu McCoys</i>	
Project (Name / Location): Good Hope Landfill	
Reports To: MARIZUL ISLAM	Invoice To:
Company: The Sigma Group	Company:
Address: 1300 West Canal Street	Address:
City State Zip: Milwaukee, WI 53233	City State Zip:
Phone: 414-643-4125	Phone:
FAX: 414-643-4210	FAX:

## ***Environmental Lab, Inc.***

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

**Sample Handling Request**

Rush Analysis Date Required \_\_\_\_\_  
(Rushes accepted only with prior authorization)

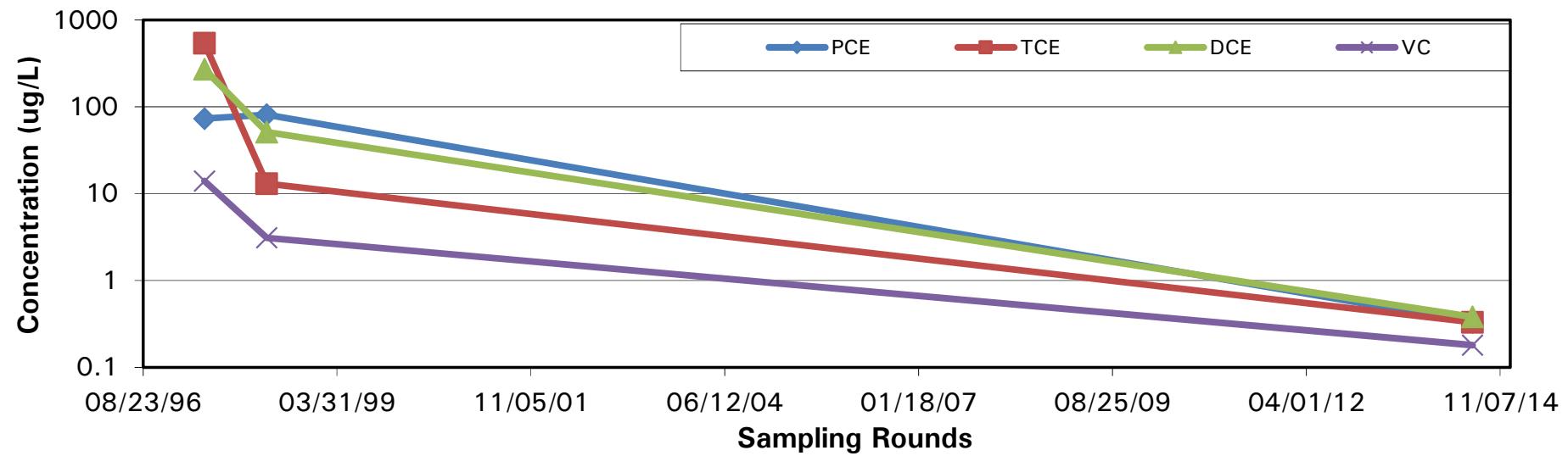
Normal Turn Around

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

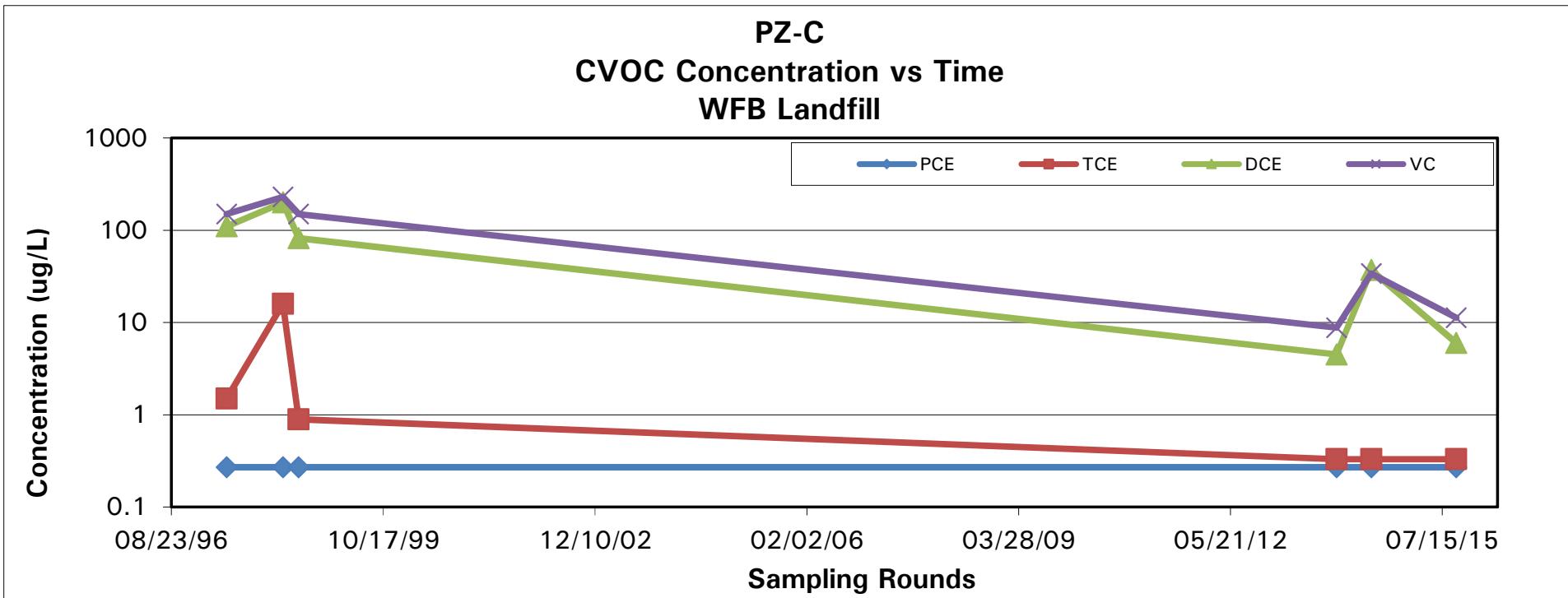
Sample Integrity - To be completed by receiving lab.	Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date	
Method of Shipment:	<i>On Ice</i>	<i>8:50</i>	<i>12/17/15</i>				
Temp. of Temp. Blank _____ °C On Ice: <input checked="" type="checkbox"/>							
Cooler seal intact upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Received in Laboratory By:	<i>Chad Dorn</i>					Time: <i>8:00</i>	Date: <i>12/18/15</i>

**APPENDIX C**  
**CONCENTRATION-TIME SERIES PLOTS**  
**AND**  
**GROUNDWATER PLUME DISTRIBUTION PLOTS**

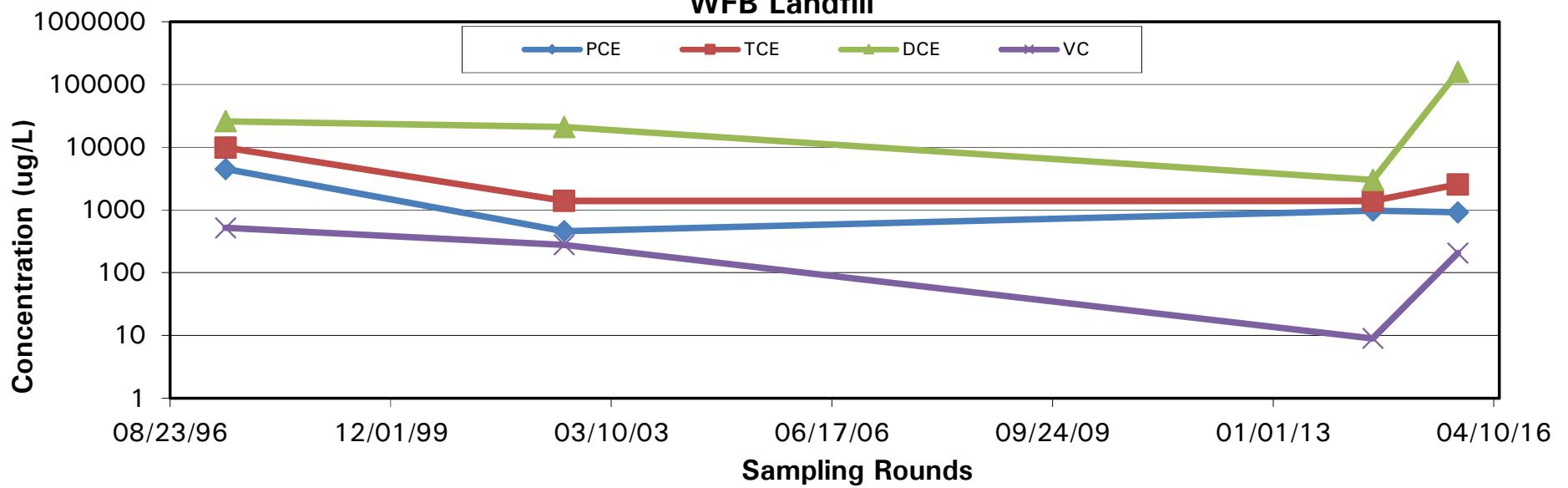
**MW-C**  
**CVOC Concentration vs Time**  
**WFB Landfill**



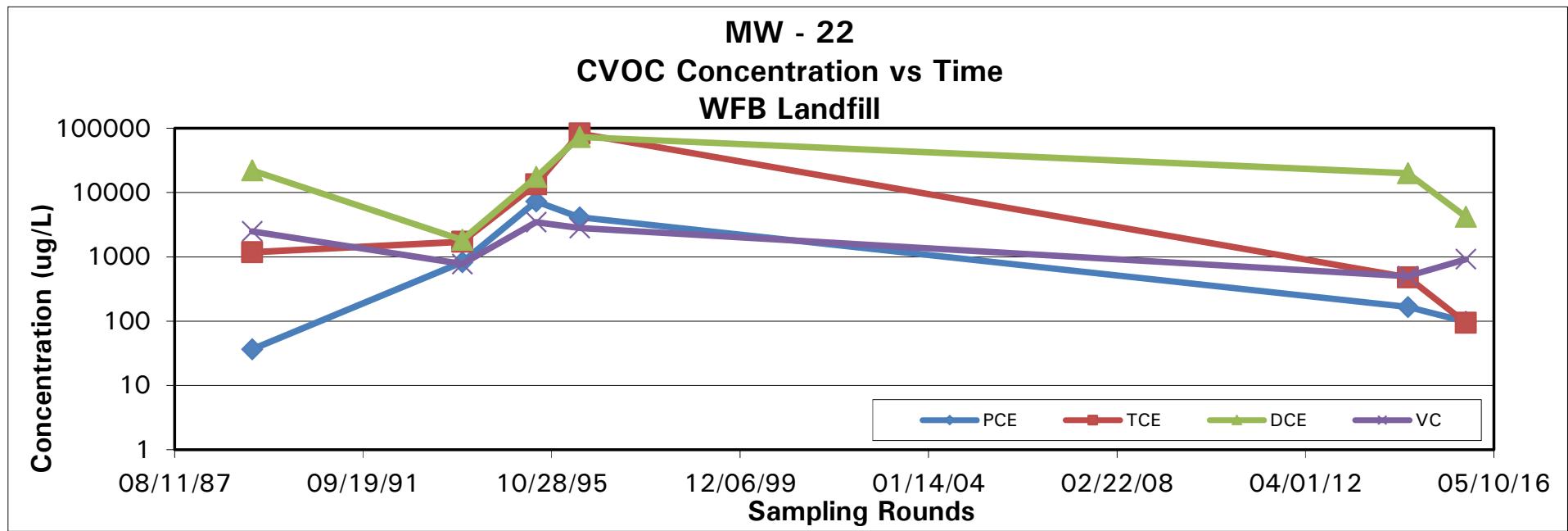
**PZ-C**  
**CVOC Concentration vs Time**  
**WFB Landfill**



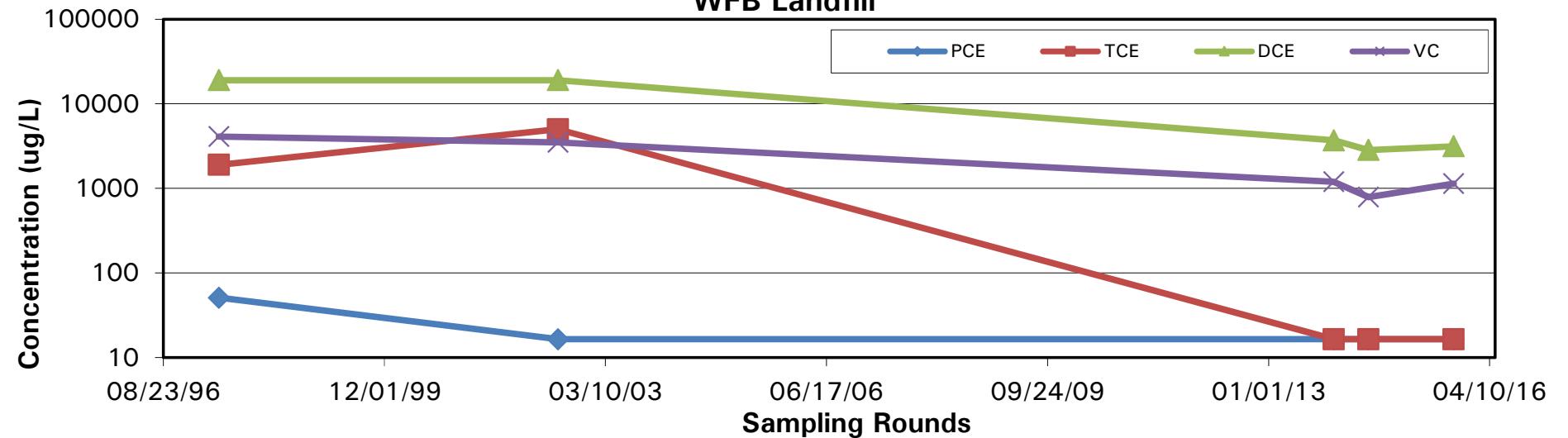
**MW-D**  
**CVOC Concentration vs Time**  
**WFB Landfill**



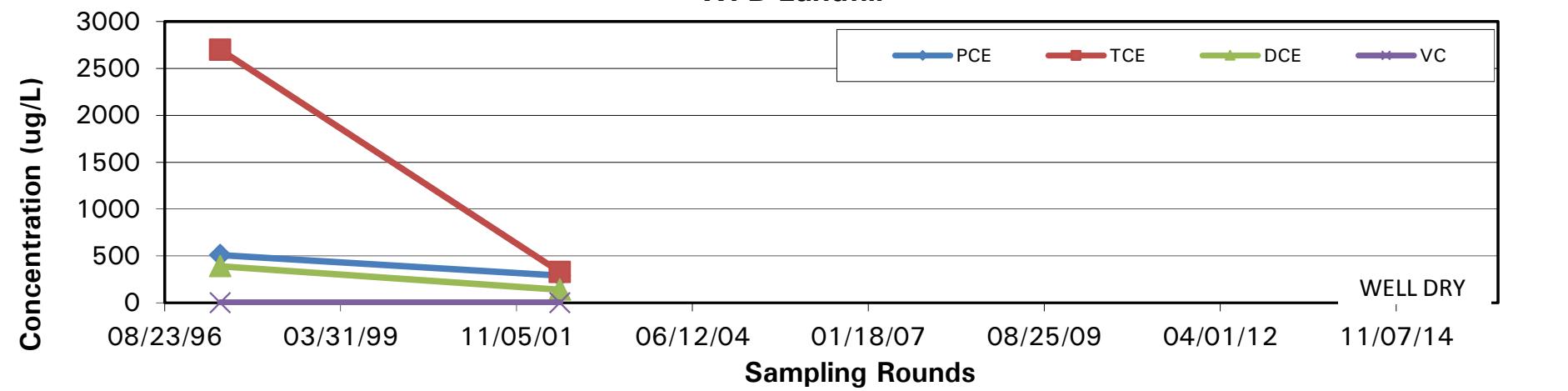
**MW - 22**  
**CVOC Concentration vs Time**  
**WFB Landfill**



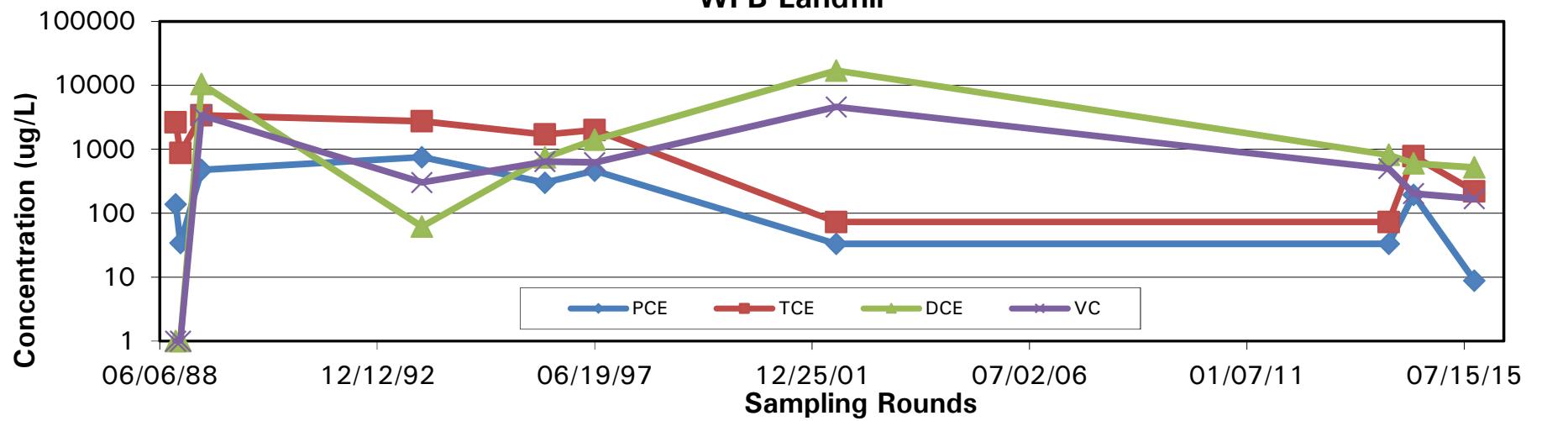
**PZ-D**  
**CVOC Concentration vs Time**  
**WFB Landfill**



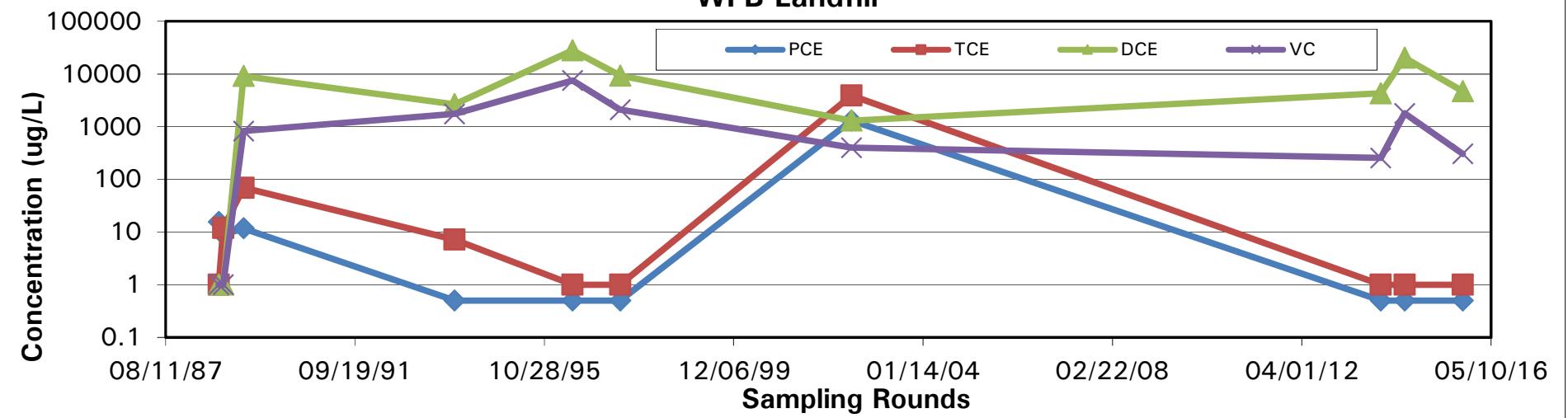
**MW- E**  
**CVOC Concentration vs Time**  
**WFB Landfill**



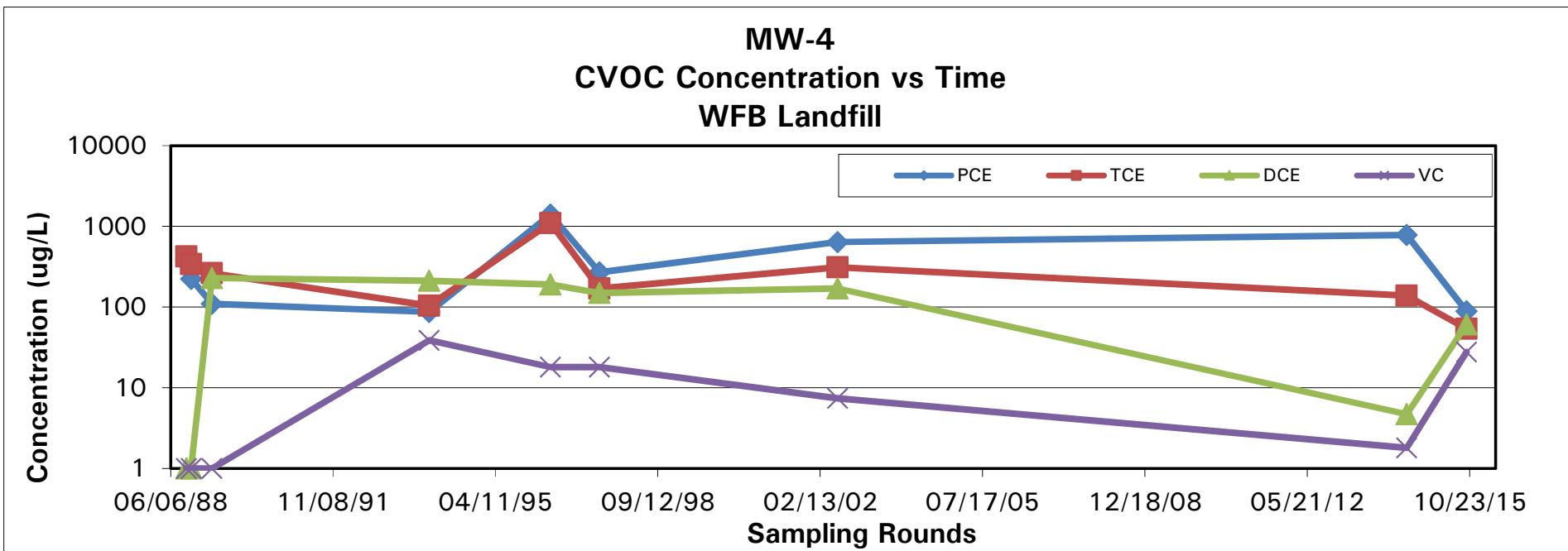
**W - MW - 10**  
**CVOC Concentration vs Time**  
**WFB Landfill**



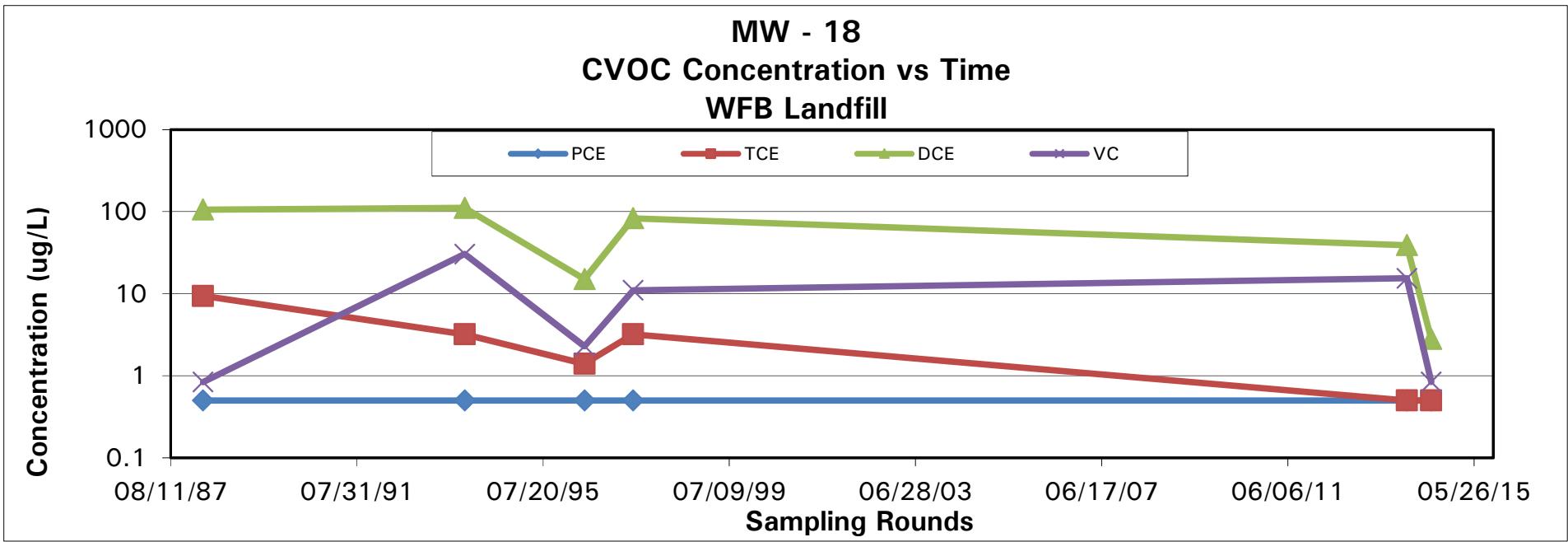
**W - MW - 11**  
**CVOC Concentration vs Time**  
**WFB Landfill**



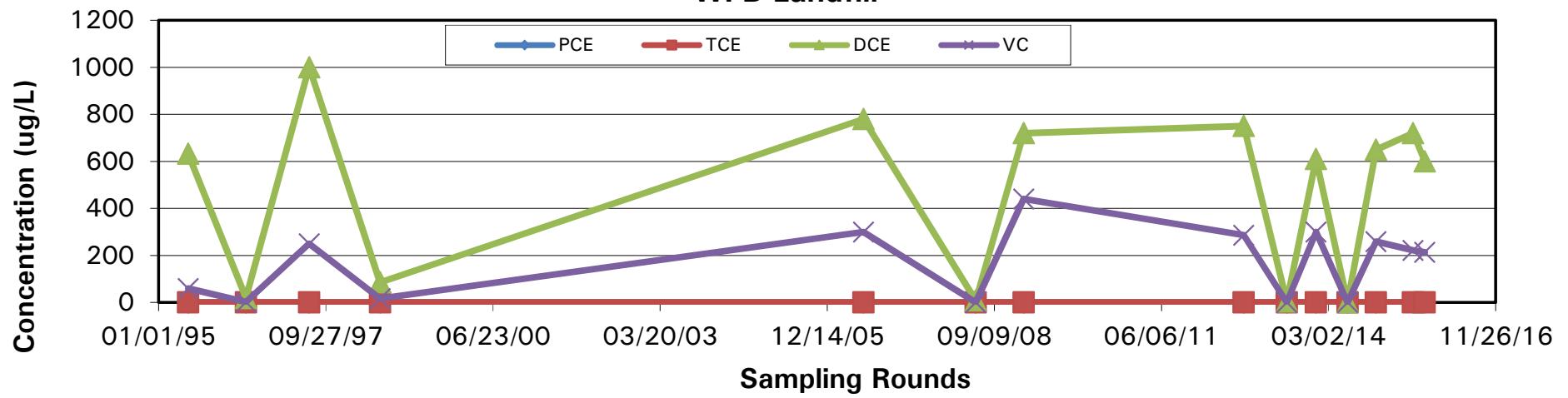
**MW-4**  
**CVOC Concentration vs Time**  
**WFB Landfill**



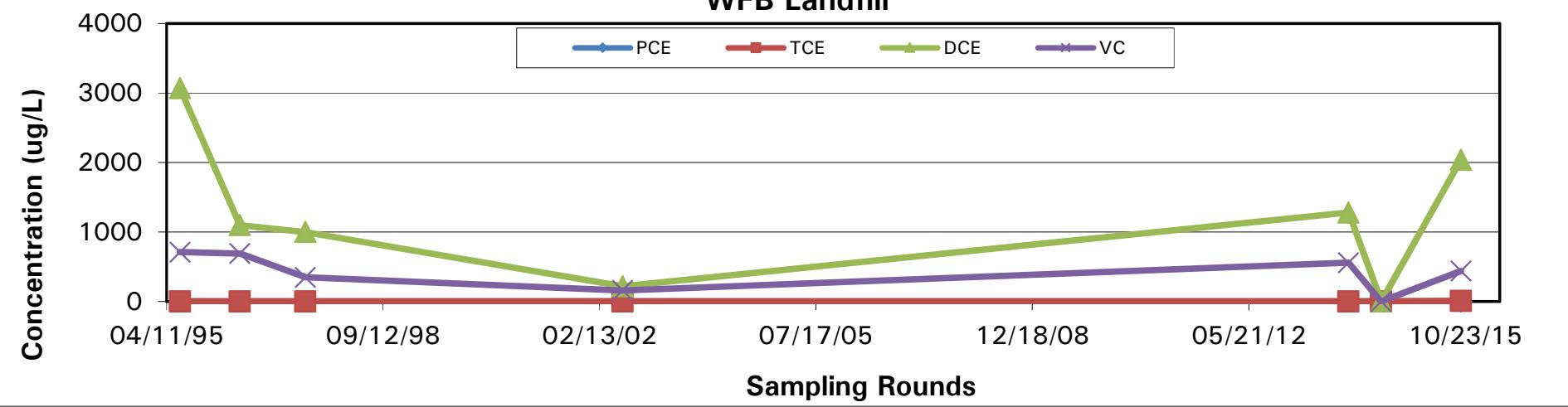
**MW - 18**  
**CVOC Concentration vs Time**  
**WFB Landfill**



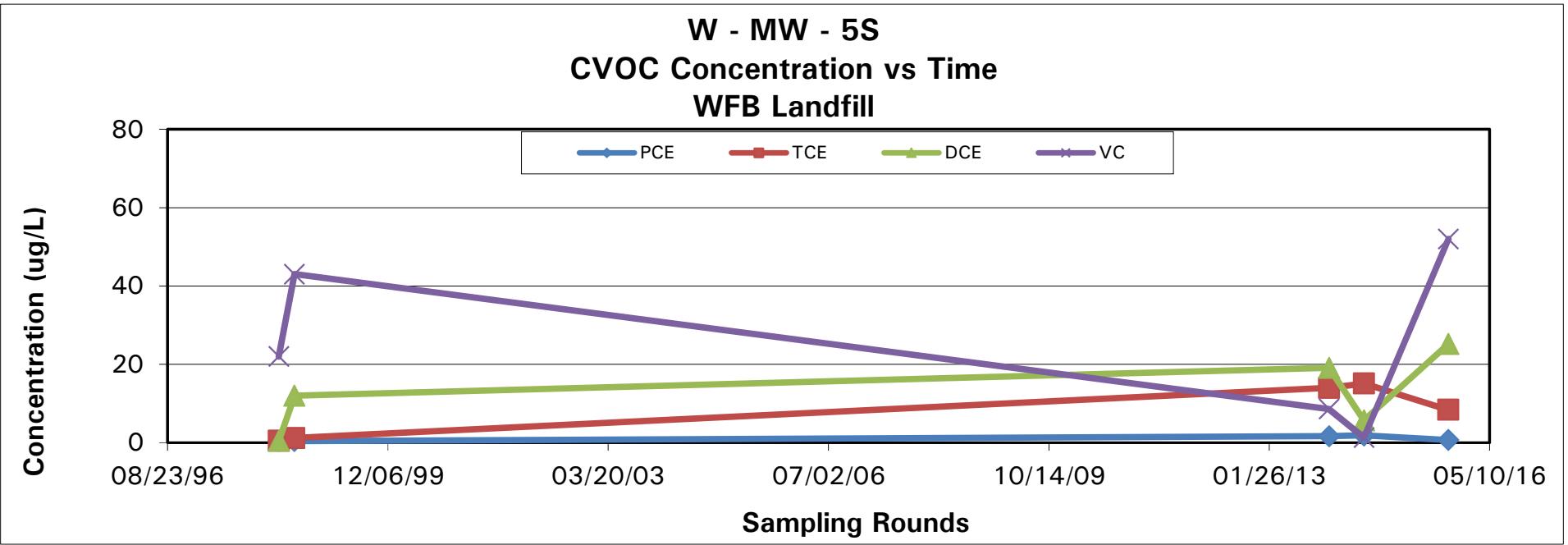
**MW - 25**  
**CVOC Concentration vs Time**  
**WFB Landfill**



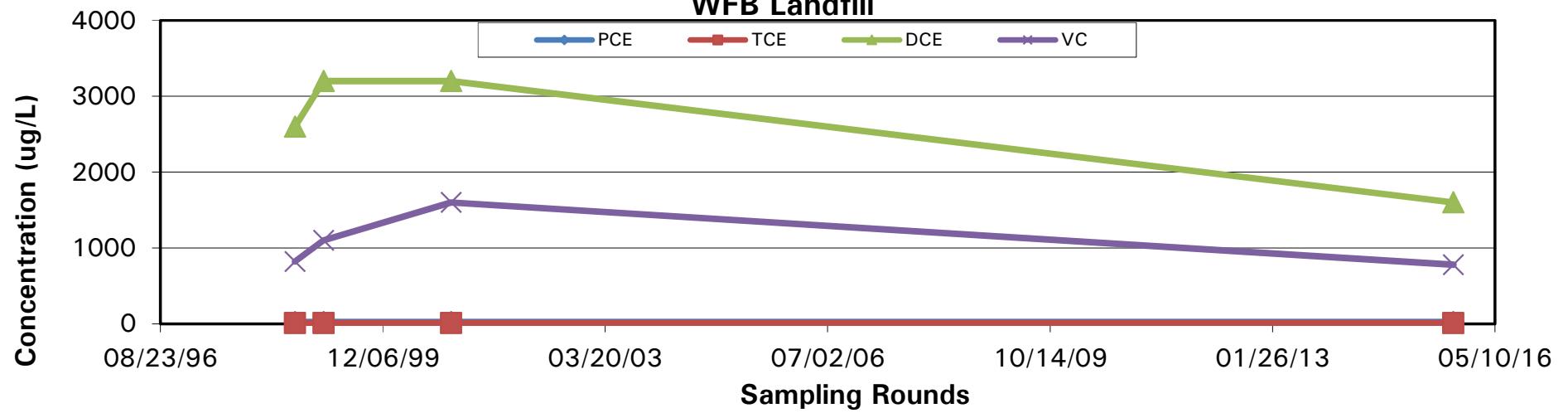
**MW - 26**  
**CVOC Concentration vs Time**  
**WFB Landfill**



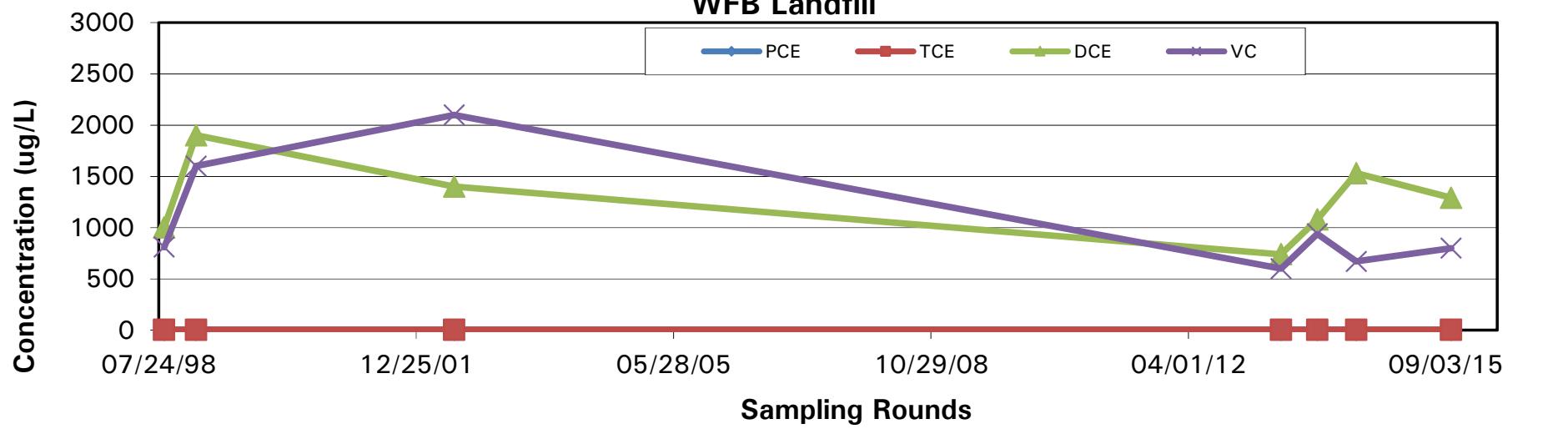
**W - MW - 5S**  
**CVOC Concentration vs Time**  
**WFB Landfill**



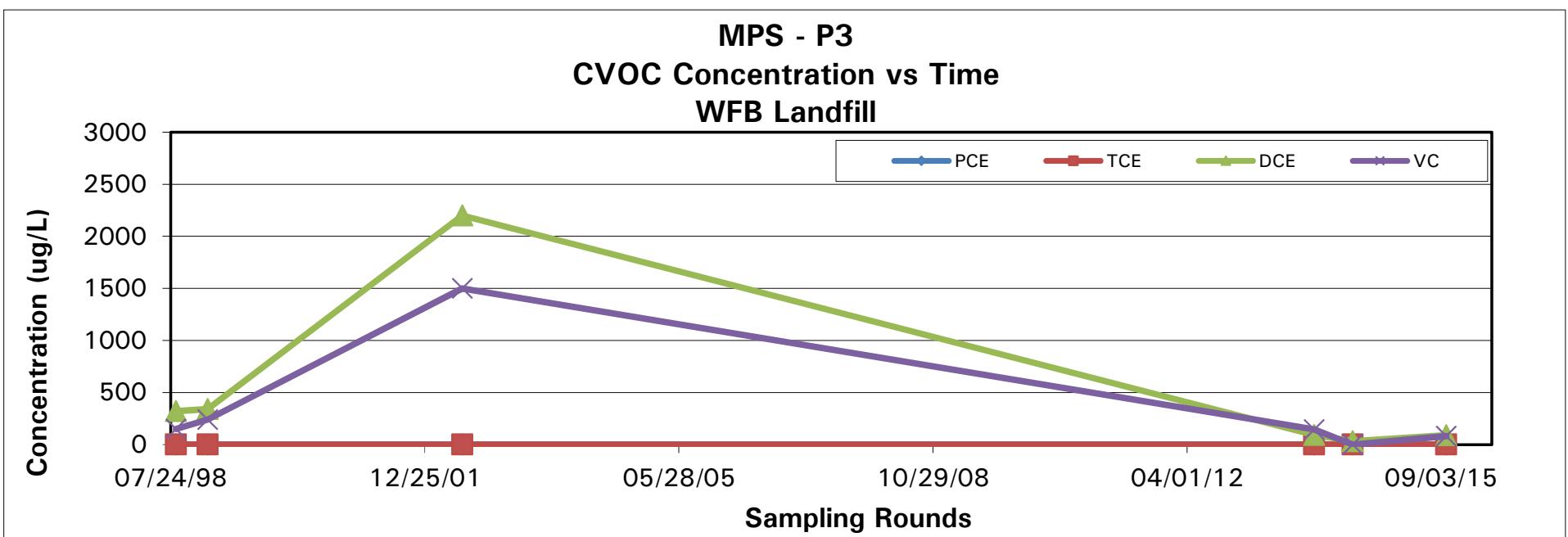
**MPS - P1/P1R**  
**CVOC Concentration vs Time**  
**WFB Landfill**



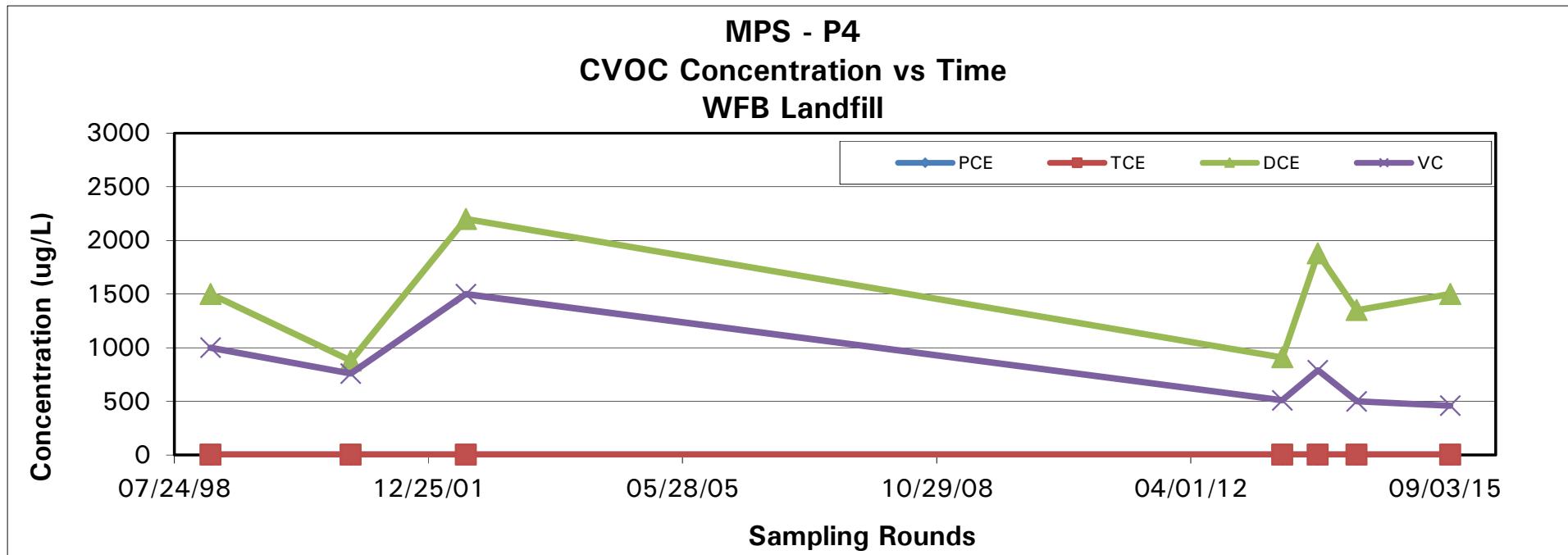
**MPS - P2**  
**CVOC Concentration vs Time**  
**WFB Landfill**



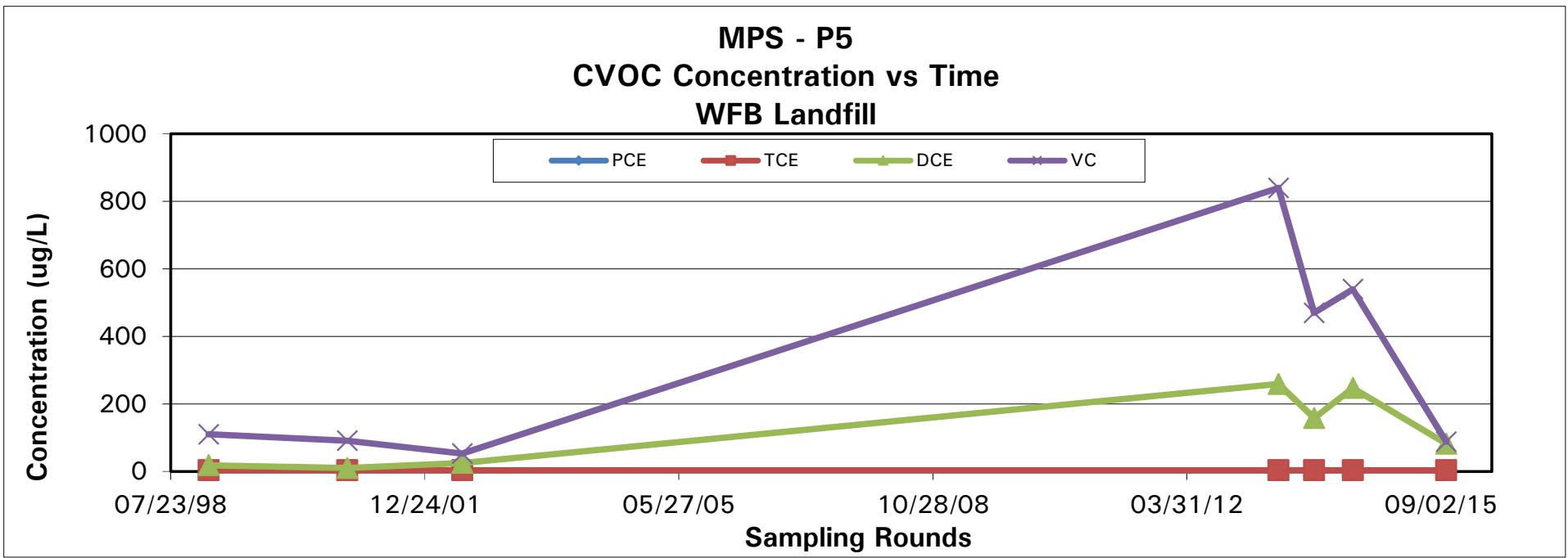
**MPS - P3**  
**CVOC Concentration vs Time**  
**WFB Landfill**



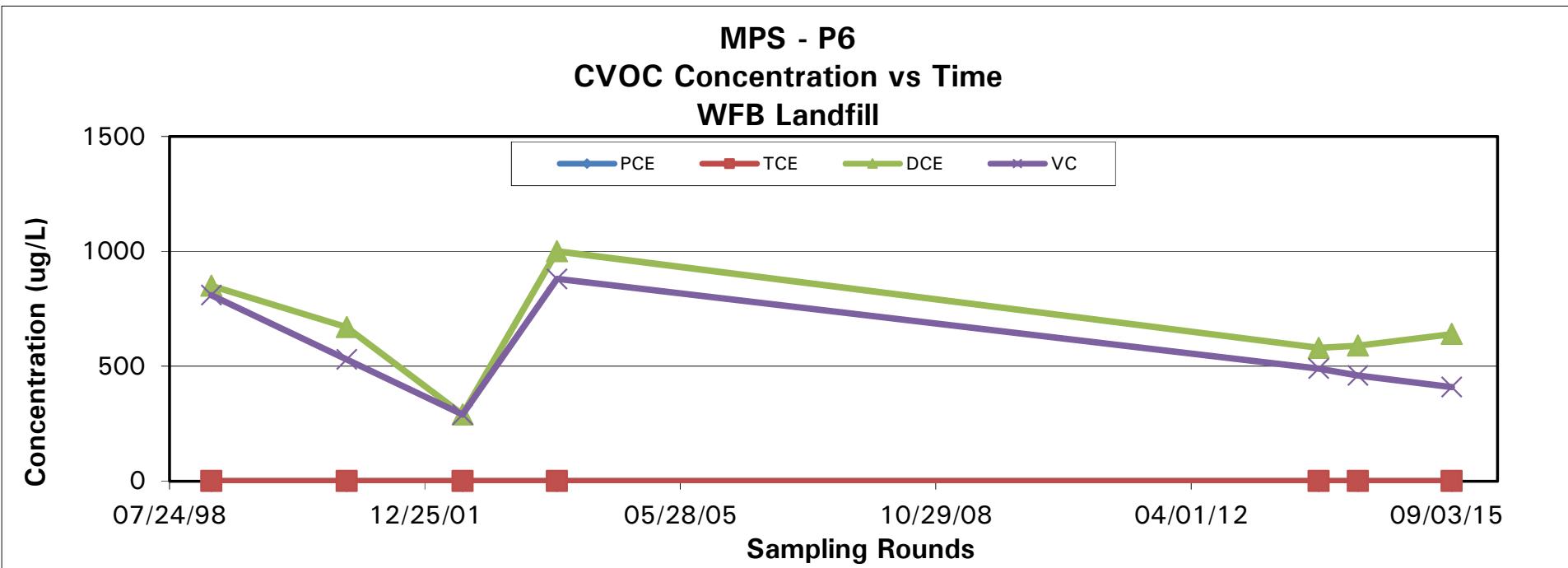
**MPS - P4**  
**CVOC Concentration vs Time**  
**WFB Landfill**



**MPS - P5**  
**CVOC Concentration vs Time**  
**WFB Landfill**



**MPS - P6**  
**CVOC Concentration vs Time**  
**WFB Landfill**



**MPS - P7**  
**CVOC Concentration vs Time**  
**WFB Landfill**

