



**ISLIP
RESOURCE
RECOVERY
AGENCY**

**Blydenburgh Road Landfill Complex
Town of Islip, New York**

**Post Closure Groundwater
Monitoring Program**

2019 Annual Report

January 2020

Prepared by:





**D&B ENGINEERS
AND
ARCHITECTS, P.C.**

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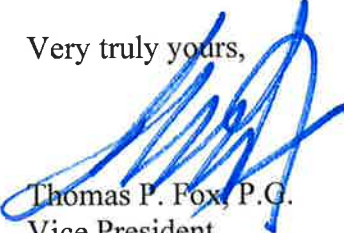
Re: Blydenburgh Road Landfill Complex
Post-Closure Groundwater Monitoring Program
2019 Annual Report
D&B No. 3763-21

Dear Mr. Varrichio:

Enclosed please find six copies of the final 2019 Annual Post-Closure Groundwater Monitoring Program Report for the Blydenburgh Road Landfill Complex. In addition, this report is provided in electronic format on the enclosed compact disc.

If you have any questions or require additional information, please call me at (516) 364-9890, Ext. 3068.

Very truly yours,



Thomas P. Fox, P.E.
Vice President

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**POST CLOSURE GROUNDWATER MONITORING PROGRAM
2019 ANNUAL REPORT**

**BLYDENBURGH ROAD LANDFILL COMPLEX
TOWN OF ISLIP, NEW YORK**

Prepared for:



**ISLIP RESOURCE RECOVERY AGENCY
TOWN OF ISLIP, NEW YORK**

Prepared by:



**D&B ENGINEERS
AND
ARCHITECTS, P.C.**

**D&B ENGINEERS AND ARCHITECTS, P.C.
WOODBURY, NEW YORK**

JANUARY 2020

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
2019 ANNUAL REPORT**

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1.0 INTRODUCTION

This Annual Report presents the analytical results obtained in support of the Post Closure Groundwater Monitoring Program conducted on behalf of the Islip Resource Recovery Agency (IRRA) during the 2019 semiannual sampling events for the Blydenburgh Road Landfill Complex. The Landfill Complex is located in Hauppauge, Town of Islip, New York (see **Figure 1-1**). The semiannual sampling events for 2019 were conducted in February (first quarter) and August (third quarter).

The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater flow direction and quality subsequent to the capping and closure of the Municipal Solid Waste (MSW) Landfill and Ash Monofill, and operation of the groundwater remediation system. Consistent with the Record of Decision (ROD) issued by the U.S. Environmental Protection Agency (USEPA) – Region 2 for the Blydenburgh Road Landfill Complex, the groundwater remediation program was designed to reduce total volatile organic compounds (TVOCs) in groundwater to 50 micrograms per liter (ug/l).

The monitoring program was conducted in conformance with the Sampling and Analysis Plan (SAP) and the Corrective Measures Work Plan (CMWP) approved by the New York State Department of Environmental Conservation (NYSDEC) and the USEPA – Region 2.

This Post Closure Groundwater Monitoring Program Annual Report includes a discussion of the sample locations, sampling procedures, laboratory analyses, field and analytical results, data validation, groundwater level measurements and flow direction. The report also includes a comparison of the analytical results to applicable New York State groundwater quality standards and guidelines, the results obtained during previous sampling events (if applicable), and the remediation criterion of 50 ug/l for TVOCs prescribed in the ROD issued by the USEPA-Region 2. In addition, the report includes recommendations for future monitoring and operation of the groundwater remediation system.



**BLYDENBURGH
ROAD LANDFILL
COMPLEX**



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ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

LOCATION MAP

Source: Googleearth.com
Scale: Not to Scale

FIGURE 1-1

2.0 SAMPLING LOCATIONS

For the first quarter sampling event (February 2019), 25 groundwater monitoring wells, four extraction wells and temporary extraction well (GM-1D) were sampled. It should be noted, at the request of the NYSDEC, groundwater monitoring well GM-1D was converted to a temporary extraction well in October 2013. In addition, at the time of the First Quarter 2019 sampling event, extraction wells EW-5 and EW-6 were not in service and therefore, groundwater samples from these locations were not obtained.

For the third quarter sampling event (August 2019), 36 groundwater monitoring wells, five extraction wells and temporary extraction well (GM-1D) were sampled. It should be noted, at the time of the Third Quarter 2019 sampling event, extraction well EW-5 was not in service and therefore, a groundwater sample was not obtained.

Figure 2-1 illustrates the groundwater monitoring well and extraction well locations. Each monitoring well site shown on **Figure 2-1** includes 1 to 4 individual monitoring wells with screened intervals at varying depths. Well construction information for the groundwater monitoring wells sampled as part of this program, as well as the extraction wells, is summarized in **Tables 2-1** and **2-2**. In addition, well construction information for the six recharge wells used as part of the water level monitoring network is summarized in **Table 2-3**. The locations of the recharge wells are also illustrated on **Figure 2-1**.

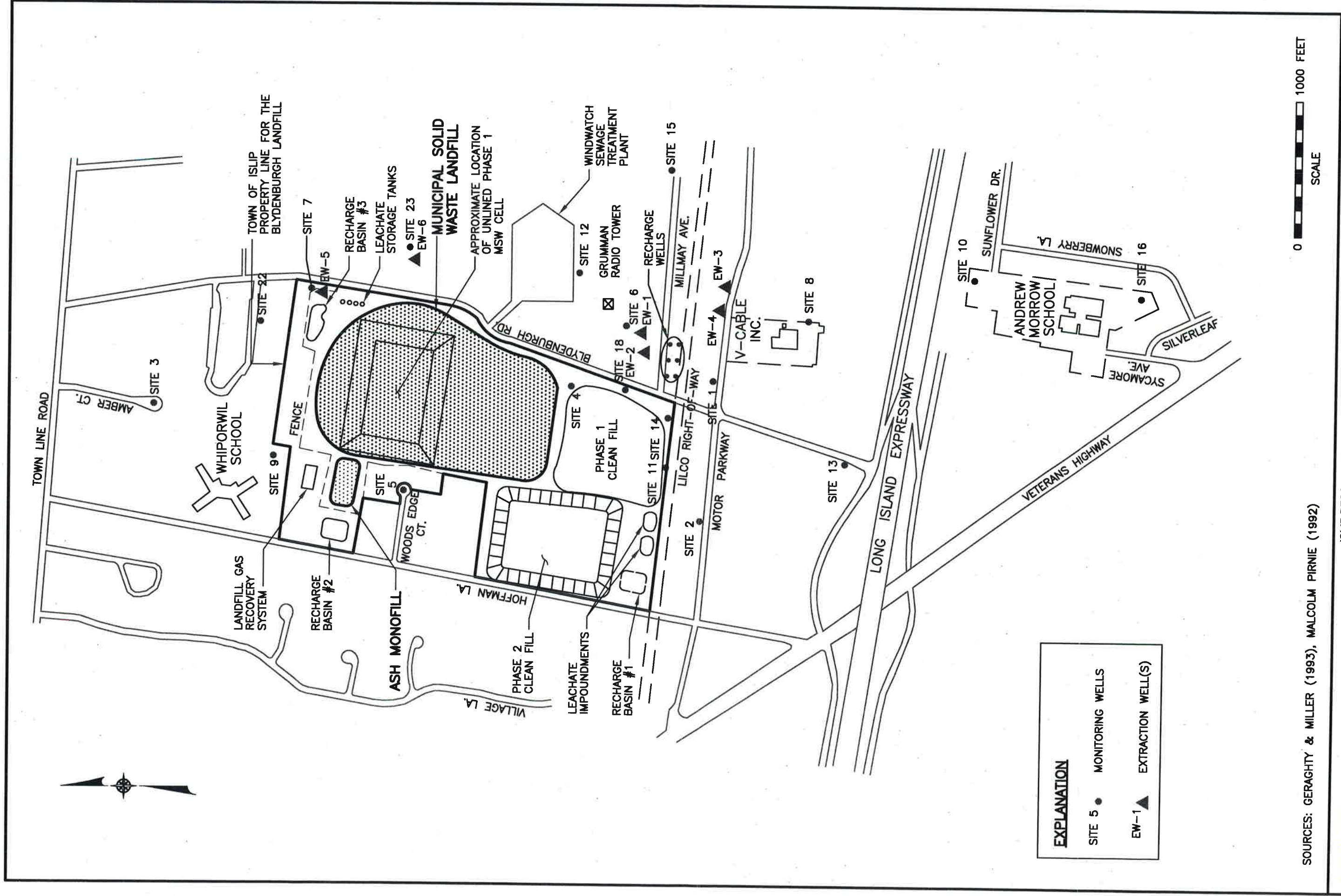


Table 2-1

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS**

Well Designation	Well Diameter (inches)	Date Completed	Screen Type	Total Depth (feet below land surface)	Screen Setting			Gravel Pack (feet below land surface)	Fine-Grained Sand Seal (feet below land surface)	Bentonite Slurry or Grout Seal (feet below land surface)	Height of Measuring Point (feet relative to land surface)	Elevation of Measuring Point (feet above mean sea level)
					(feet below land surface)	(elevation relative to mean sea level)	(feet below land surface)					
GM-1S	4	8/21/86	SS	135	125 - 135	29 - 19	123 - 138	121 - 123 (a)	110 - 121		-1.33	151.17
GM-1I	4	8/14/86	SS	285 (1)	280 - 290	(-128) - (-138)	270 - 298	268 - 270 (a)	0 - 268		-1.11	151.19
GM-1D (4)	4	8/14/86	SS	399	389 - 399	(-237) - (-247)	387 - 402	385 - 387 (a)	300 - 385		-1.01	151.19
GM-2S	4	9/25/86	SS	149	139 - 149	22 - 12	136 - 152	134 - 136 (a)	74 - 134		-1.32	160.08
GM-2I	4	9/17/86	SS	298	290 - 298	(-129) - (-136)	285 - 300	283 - 285 (a)	100 - 283		-0.65	160.65
GM-2D	4	9/17/86	SS	398 (2)	400 - 409	(-239) - (-248)	395 - 409	393 - 395 (a)	302 - 393		-0.59	160.71
4G-1	4	4/21/89	PVC	164	154 - 164	12 - 2	140 - 170	135 - 140	0 - 135		1.27	168.47
4G-2	4	1/23/89	PVC	211	201 - 211	(-35) - (-45)	194 - 216	188 - 194 (a)	0 - 188		-0.31	170.03
4M-1	4	5/9/89	PVC	325	315 - 325	(-149) - (-159)	305 - 336 (b)	None Used	0 - 290		1.25	168.95
4M-2	4	8/9/89	SS	486	476 - 486	(-310) - (-320)	470 - 517	463 - 470	0 - 463		2.23	169.53
6G-1	4	6/5/89	SS	147	135 - 145	45 - 32	128 - 145	123 - 128	0 - 123		2.57	180.17
6G-2	4	5/16/89	PVC	230	220 - 230	(-43) - (-53)	212 - 241	205 - 212	0 - 205		2.35	178.65
6G-3	4	3/28/90	SS	315	305 - 315	(-128) - (-138)	303 - 318	302 - 303 (c)	0 - 300		2.43	179.83
6M-1	4	4/27/89	PVC	545	535 - 545	(-358) - (-368)	525 - 548	523 - 525	0 - 523		1.40	178.40
7M-1	4	6/26/89	SS	214	204 - 214	(-142) - (-152)	195 - 230	190 - 195	0 - 190		-0.34	67.56
8G-1	4	8/11/89	SS	114	104 - 114	30 - 20	99 - 115	92 - 99	0 - 92		-0.23	133.97
8M-1	4	8/25/89	SS	270	260 - 270	(-124) - (-134)	260 - 288	245 - 250	0 - 245		-0.59	135.21
8M-2	4	7/5/89	PVC	383.5	373.5 - 383.5	(-238) - (-248)	366.5 - 383.5	363.5 - 366.5	0 - 363.5		-0.19	135.11
9G-1	4	8/2/89	SS	68	58 - 68	33 - 23	52.6 - 68	47 - 52.5	0 - 47		-0.47	90.83
10G-1	4	9/6/89	SS	69	59 - 69	30 - 20	54 - 69	51 - 54	0 - 51		-0.08	88.52
10M-1	4	9/6/89	SS	256	246 - 256	(-157) - (-167)	241 - 256	236 - 241	0 - 236		-0.16	88.84
11G-1	4	10/5/89	SS	145	135 - 145	32 - 22	130 - 160	125 - 130	0 - 125		0.90	168.90
11G-2	4	--	SS	220.5	--	(-31) - (-51)	--	--	--		2.51	169.31
11M-1	4	9/26/89	SS	320	310 - 320	(-144) - (-154)	305 - 327	300 - 305	0 - 300		1.02	168.32
12M-1	4	10/30/89	SS	338	328 - 338	(-153) - (-163)	323 - 362	318 - 323	0 - 318		2.86	177.66

Table 2-1 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below land surface)	Screen Setting			Fine-Grained Sand Seal (feet below surface)	Bentonite Slurry or Grout Seal (feet below land surface)	Height of Measuring Point (feet relative to land surface)	Elevation of Measuring Point (feet above mean sea level)
					(feet below land surface)	(elevation relative to mean sea level)	(feet below land surface)				
13G-1	12/1/89	4	SS	93	83 - 93	27 - 17	72 - 135	59 - 62	0 - 50	-0.47	110.49 ⁽³⁾
13M-1	12/13/89	4	SS	265	255 - 265	(-145) - (-155)	245 - 289	240 - 245	0 - 240	-0.50	109.92 ⁽³⁾
14G-1A	--	4	SS	220	--	(-38) - (-58)	--	--	--	-0.17	161.73
14G-2	2/2/90	4	SS	264	244 - 264	(-83) - (-103)	239 - 272	234 - 239	0 - 234	-0.14	162.36
14M-1	1/18/90	4	SS	355	335 - 355	(-174) - (-194)	330 - 395	325 - 330	0 - 325	-0.12	161.98
15G-1	3/1/90	4	SS	160	150 - 160	33 - 23	145 - 180	140 - 145	0 - 140	-0.15	183.05
16G-1	2/14/90	4	SS	57	47 - 57	30 - 20	42 - 57	37 - 42	0 - 37	-0.48	76.92
16M-1	3/24/90	4	SS	240	230 - 240	(-153) - (-163)	225 - 250	222 - 225	0 - 222	-0.30	76.90
18G-1	--	4	SS	157.5	--	31 - 11	--	--	--	2.32	168.62
18G-2	--	4	SS	197.5	--	(-9) - (-29)	--	--	--	2.18	168.78
22M-1	6/5/92	4	SS	222.5	215 - 225	(-154) - (-164)	211 - 225	209 - 211	0 - 209	-0.26	61.04
23M-1	6/1/92	4	SS	240.5	230.5 - 240.5	(-154) - (-164)	225.5 - 240.5	223.5 - 225.5	0 - 223.5	-0.19	76.81
PVC	Polyvinyl chloride				(a) Bentonite pellets used						
SS	Stainless steel				(b) Estimated						
--	Data not available				(c) Bentonite pellets used from 300 feet to 302 feet.						

(1) Well construction log GM-11 indicated a total depth of 290 feet. Total depth was measured in the field at 285 feet.

(2) Well construction log GM-2D indicated a total depth of 409 feet. Total depth was measured in the field at 398 feet.

(3) Wells 13G-1 and 13M-1 reference elevation adjusted to reflect well pipe extension due to new sidewalk. (October 2008).

(4) In October 2013, GM-1D was converted to a temporary extraction well.

(Source: G&M Draft Environmental Monitoring Plan, March 1993; ERM Sampling and Analysis Plan Phase 1 and 2 Clean Fill Landfills, November 1995).

Table 2-2

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF EXTRACTION WELL CONSTRUCTION DETAILS**

Well Designation	Date Completed	Aquifer (contact)	Well Diameter (inches)	Well Capacity (gallons per minute)	Screen Setting			Screen Length (feet)	Screen Setting (feet below land surface)	Elevation of Bottom of Screen (relative to mean sea level)	Ground Surface Elevation (feet above mean sea level)
					Screen Type	Screen Diameter (inches)	Total Depth (feet below land surface)				
EW-1	July 1996	M-UG	6	55	SS	6	225	60	165 - 225	-57	167.91
EW-2	July 1996	M-UG	6	45	SS	6	223	60	163 - 223	-53	170.42
EW-3	July 1996	D-UG/SM	8	90	SS	8	312	40	272 - 312	-129	182.47
EW-4	July 1996	D-UG/SM	6	55	SS	6	305	45	260 - 305	-138	167.48
EW-5	July 1996	D-UG/SM	6	65	SS	6	213	50	163 - 213	-141	72.40
EW-6	July 1996	D-UG/SM	6	40	SS	6	215	40	175 - 215	-137	77.70

SS Stainless steel
M-UG Mid-Upper Glacial
D-UG/SM Deep-Upper Glacial/Shallow Magothy

(Source: D&B IRRA Groundwater Treatment Facility Operation and Maintenance Manual, 1996).

Table 2-3

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF RECHARGE WELL CONSTRUCTION DETAILS**

Well Designation	Date Completed	Aquifer (contact)	Well Diameter (inches)	Screen Setting			Screen Length (feet)	Screen Setting (feet below land surface)	Elevation of Bottom of Screen (relative to mean sea level)	Ground Surface Elevation (feet above mean sea level)
				Screen Type	Screen Diameter (inches)	Total Depth (feet below land surface)				
RW-1	August 1996	M-UG	8	SS	8	220	70	133 - 203	-45	157.17
RW-2	August 1996	M-UG	8	SS	8	216	65	135 - 200	-46	153.45
RW-3	August 1996	M-UG	8	SS	8	215	60	139 - 199	-39	160.63
RW-4	August 1996	M-UG	8	SS	8	225	75	133 - 208	-53	155.54
RW-5	July 1996	M-UG	8	SS	8	227	70	141 - 211	-48	163.47
RW-6	August 1996	M-UG	8	SS	8	215	65	133 - 198	-38	159.95

SS Stainless steel
M-UG Mid-Upper Glacial

(Source: D&B IRRA Groundwater Treatment Facility Operation and Maintenance Manual, 1996).

3.0 SAMPLING PROCEDURES AND ANALYSES

Sampling procedures for collection of the groundwater samples were implemented in accordance with the protocol described in the Sampling and Analysis Plan (SAP). Both dedicated and disposable sampling equipment was used, where appropriate, in accordance with the SAP. Field decontamination was performed between sampling locations for non-disposable equipment. The following sections provide a brief discussion of the procedures used during groundwater level measurements, organic vapor and combustible gas monitoring, groundwater sampling and sample analysis.

3.1 Groundwater Level Measurement Procedures

Prior to collecting groundwater samples, synoptic water level measurements were obtained from the monitoring wells to determine the volume of standing water in the well for purposes of purging, as well as for the determination of groundwater elevations and flow direction. Groundwater level measurements were obtained from a surveyed measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. A discussion regarding groundwater level measurement results and groundwater flow direction is provided in **Section 6.0**.

In addition to the monitoring wells, water level measurements were also obtained in the six recharge wells by means of the existing “bubbler systems” to determine the operating water levels in each of the recharge wells. Water levels were measured while the effluent lift station pump inside the treatment facility was in operation. During operation of the pump, treated groundwater is discharged from the treatment facility into the six recharge wells. The operation of the pump was determined by listening for water flowing into each recharge well.

Measurement of the operating water level in the recharge well casing was obtained using low flow compressed air to minimize errors associated with friction (back pressure) resulting from turbulent air flow in the bubbler components. After a steady state reading was observed on the bubbler pressure gauge, the air flow rate was temporarily increased to ensure that the bubbler

tube was fully evacuated. The air flow was then reduced to a slower rate to confirm the initial reading.

The gauge reading represents the back pressure on the bubbler tube or depth of submergence of the bubbler tube tip. The depth of submergence, measured in feet, is added to the bubbler tube tip elevation (reference elevation) to calculate the operating water level elevation within the well.

The difference between the operating water elevation within the well casing and the water table elevation of the aquifer surrounding the well represents the driving head or resistance of the well components and the aquifer to the recharge of water from the well casing to the aquifer. The magnitude of the driving head (or resistance) provides an indication of the hydraulic condition of each well. As an example, a partially clogged well (well screen, gravel pack, surrounding soil) would require a larger driving force at a given flow rate to realize the transfer of water from the well casing to the aquifer as compared to an unclogged well.

3.2 Sampling Procedures

Prior to collecting groundwater samples, the monitoring wells were purged to remove the standing water in the well. Well purging was accomplished by first measuring the static water level in the well and calculating the standing water volume. A decontaminated submersible pump was used to purge the water from the well.

During the purging process, groundwater was monitored and recorded for the following field parameters: pH, temperature, specific conductance, oxidation reduction potential (ORP), dissolved oxygen, and turbidity. When the values of the field parameters stabilized within 10% based on the last two readings, the turbidity of the groundwater was less than 50 Nephelometric Turbidity Units (NTUs) and at least three well volumes had been removed, well purging was considered complete.

Field parameter values measured in the groundwater monitoring wells, extraction wells and temporary extraction well GM-1D at the time of sample collection, as well as additional field data collected for the first quarter and third quarter sampling events in 2019 are presented in **Appendix A**.

Decontamination of the submersible pump used for well purging was performed in accordance with the procedures described in the SAP.

In accordance with the SAP, groundwater samples were collected using new, dedicated, disposable polyethylene bailers and polypropylene rope. Samples for Volatile Organic Compound (VOC) analysis were collected first, followed by inorganic parameters and leachate indicators. Each sample was stored in an ice-filled cooler with the chain of custody forms and delivered to the analytical laboratory.

Groundwater samples collected from the extraction wells, as well as temporary extraction well GM-1D, were collected from the sample port on each well. It should be noted, extraction wells EW-2 and EW-6 were shut down on May 15, 2006, at the request of the USEPA - Region 2. Prior to sampling, EW-2 and EW-6 were each purged using the dedicated pump installed in each of these extraction wells. After purging and sampling was completed, wells EW-2 and EW-6 were again shut down by IRRA personnel.

Appropriate quality assurance/quality control (QA/QC) samples, which included field blanks, matrix spike and matrix spike duplicate (MS/MSD) sets, blind duplicates and trip blanks, were collected in accordance with the SAP. Trip blank samples accompanied all laboratory sample coolers.

Analytical results for the samples collected from the groundwater monitoring wells, extraction wells and temporary extraction well GM-1D are provided in **Appendix B-1** through **B-3** and **Appendix D-1** through **D-3** and discussed in **Section 4.0**.

3.3 Organic Vapor and Combustible Gas Monitoring

Total organic vapor and combustible gas headspace measurements were collected in the groundwater monitoring wells that were sampled as part of the Post Closure Groundwater Monitoring Program. Organic vapors were measured using a photoionization detector (PID) and combustible gas was measured using a portable multi-gas meter. The organic vapor and combustible gas results represent headspace measurements collected during the semiannual synoptic groundwater level measurements and are provided in **Section 4.0**.

3.4 Sample Analyses

Groundwater samples collected from the groundwater monitoring wells, extraction wells and temporary extraction well (GM-1D) during the 2019 sampling events were analyzed for New York Codes and Regulations (NYCRR) Part 360 Baseline Parameters (VOCs, inorganic parameters and leachate indicators). At the request of the NYSDEC, commencing with the First Quarter 2015 sampling event, Freon 21 and Freon 22 were added for analysis to the Part 360 VOC list.

During the 2019 sampling events, other parameters (pH, temperature, specific conductance, ORP, dissolved oxygen and turbidity) were measured in the field for groundwater samples collected from each of the groundwater monitoring wells, extraction wells and temporary extraction well (GM-1D).

4.0 ANALYTICAL RESULTS

The 2019 semiannual analytical results and historical Total VOC (TVOC) trends from the Post Closure Groundwater Monitoring period from July 1997 to the present, where applicable, are discussed below.

4.1 Field Parameters

As described in **Section 3.0**, field parameters monitored during purging of the monitoring wells included pH, temperature, specific conductance, ORP, dissolved oxygen and turbidity. Final field parameter values and additional field data measured in the groundwater monitoring wells, extraction wells and temporary extraction well (GM-1D); during the 2019 sampling events are contained in **Appendix A**.

4.2 Monitoring Wells

To evaluate groundwater quality, the Baseline Groundwater Remediation Monitoring Program Report (Dvirka and Bartilucci, August 1996) defined three hydrogeologic zones (refer to **Table 4-1**). Zone 1 is defined as within approximately 40 feet of the water table (2 to 45 feet relative to mean sea level [msl]), Zone 2 is the bottom of the Deep Upper Glacial/Shallow Magothy aquifer contact (-124 to -167 feet msl) and Zone 3 is deeper in the Magothy aquifer (-237 to -368 feet msl).

Seven of the monitoring wells (4G-2, 6G-2, 11G-2, 14G-1A, 14G-2, 14M-1 and 18G-2) sampled do not fall within any of the three zones described above. Five of these wells (4G-2, 6G-2, 11G-2, 14G-1A and 18G-2) are screened in the Upper Glacial aquifer just above the Smithtown Clay Unit, which is at a depth of approximately -35 to -75 feet msl. Although these well screens do not straddle the water table, the results of the analyses for these wells are included in the discussion for the shallow Upper Glacial aquifer (Zone 1). It should be noted; well 14G-2 is screened just below the Smithtown Clay Unit and is included in the discussion for the Deep Upper Glacial/Shallow Magothy wells (Zone 2). Well 14M-1 is screened below Zone 2 and is included in the discussion for Zone 2.

Table 4-1

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
DESIGNATIONS OF HYDROGEOLOGIC ZONES
FOR MONITORING WELLS AND EXTRACTION WELLS**

Shallow Upper Glacial Wells - Zone 1 (screened near or at the water table from 2 to 45 feet msl)		
GM-1S	8G-1	13G-1
GM-2S	9G-1	15G-1
4G-1	10G-1	16G-1
6G-1	11G-1	18G-1
Mid Upper Glacial Wells (above Smithtown Clay) (- 35 to - 75 feet msl)		
4G-2	14G-1A	EW-2
6G-2	18G-2*	
11G-2	EW-1	
Deep Upper Glacial/Shallow Magothy Wells - Zone 2 (- 124 to - 167 feet msl)		
GM-1I	11M-1	23M-1
GM-2I	12M-1	EW-3
4M-1	13M-1	EW-4
6G-3	14G-2**	EW-5
7M-1	14M-1***	EW-6
8M-1	16M-1	
10M-1	22M-1	
Deep Magothy Well - Zone 3 (- 237 to - 368 feet msl)		
GM-1D****	4M-2	8M-2
GM-2D	6M-1	

Msl - mean sea level.

*Well 18G-2 screened - 9 to - 29 feet msl.

**Well 14G-2 screened - 83 to - 103 feet msl.

***Well 14M-1 screened - 174 to - 194 feet msl.

**** Well GM-1D was converted into a temporary extraction well in October 2013.

Source: Baseline Groundwater Remediation Monitoring Program Report, Dvirka and Bartilucci Consulting Engineers, August 1996.

4.2.1 Volatile Organic Compounds

The following discussion presents the 2019 sample results, as well as historical trends for TVOCs in each of the hydrogeologic zones (refer to **Table 4-2**). It should be noted, for the purpose of discussion, TVOC results for GM-1D (temporary extraction well) are included and discussed as part of the Deep Magothy Aquifer (Zone 3). The results of the individual VOC analyses for the monitoring wells, as well as temporary extraction well (GM-1D) are presented in **Appendix B-1**. Graphs illustrating historical TVOC concentrations for the groundwater monitoring wells are presented in **Appendix C-1**.

Shallow Upper Glacial Aquifer (Zone 1)

A comparison of the semiannual sample results for 2019 indicate that none of the twelve wells screened in the Shallow Upper Glacial Aquifer detected TVOC concentrations in exceedance of the remediation criteria of 50 ug/l. The shallow wells exhibited TVOC concentrations during 2019 ranging from nondetect to 8 ug/l. For shallow wells sampled on an semiannual basis during 2019, TVOC concentrations for five wells (6G-1, 8G-1, 11G-1, 13G-1 and 18G-1) remained consistent (variation of 10 ug/l or less). Seven shallow wells (GM-1S, GM-2S, 4G-1, 9G-1, 10G-1, 15G-1 and 16G-1) were sampled on an annual basis (third quarter 2019). For comparison purposes, TVOC concentrations for these wells, with the exception of 4G-1 and 9G-1 were compared to the most recent sample results (third quarter 2107), for the respective well. For wells 4G-1 and 9G-1, TVOC concentrations were compared to the third quarter 2018 sample results. TVOC concentrations in the seven wells mentioned above remained consistent.

TVOC concentrations in wells screened in the Shallow Upper Glacial, with the exception of well 11G-1 remained consistent in comparison to historical results. Sample results are considered consistent when there is variability in concentration of 10 ug/l or less, with no apparent historical trend. In general, since February 2006, well 11G-1 exhibited a decreasing trend in TVOC concentrations.

Table 4-2

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
COMPARISON OF MONITORING WELL SAMPLE RESULTS
TOTAL VOLATILE ORGANIC COMPOUNDS**

Well No.	1st Quarter (February 2019)	3rd Quarter (August 2019)	2019 Comparison	Historical Trend
Zone 1 (Shallow Upper Glacial Wells)				
GM-1S	ND*	ND	Consistent*	Consistent
GM-2S	2.5*	2.6	Consistent*	Consistent
4G-1	3.3**	4.2	Consistent**	Consistent
6G-1	ND	ND	Consistent	Consistent
8G-1	ND	ND	Consistent	Consistent
9G-1	ND**	ND	Consistent**	Consistent
10G-1	ND*	ND	Consistent*	Consistent
11G-1	8	4.9	Consistent	Decrease since February 2006
13G-1	ND	ND	Consistent	Consistent
15G-1	ND*	ND	Consistent*	Consistent
16G-1	ND*	ND	Consistent*	Consistent
18G-1	1.4	ND	Consistent	Consistent
Zone 1 (Mid Upper Glacial Wells)				
4G-2	ND	ND	Consistent	Consistent since February 2002
6G-2	ND	ND	Consistent	Consistent since February 2007
11G-2	66	56.8	Consistent	Increase since February 2008
14G-1A	ND	ND	Consistent	Consistent
18G-2	1.1	1	Consistent	Consistent since August 2004
Zone 2 (Deep Upper Glacial/Shallow Magothy Wells)				
GM-1I	ND	ND	Consistent	Consistent
GM-2I	7.8*	13.1	Consistent*	Consistent
4M-1	32.7	34.7	Consistent	Decrease since February 2004
6G-3	5.5	5.1	Consistent	Decrease
7M-1	ND	ND	Consistent	Decrease
8M-1	ND	ND	Consistent	Consistent since May 2001
10M-1	6.5	4.8	Consistent	Slight Increase

Table 4-2 (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
COMPARISON OF MONITORING WELL SAMPLE RESULTS
TOTAL VOLATILE ORGANIC COMPOUNDS**

Well No.	1st Quarter (February 2019)	3rd Quarter (August 2019)	2019 Comparison	Historical Trend
11M-1	4.9*	21.5	Increase*	Consistent
12M-1	21	19.3	Consistent	Decrease
13M-1	37.7	33.2	Consistent	Increase
14G-2	ND	ND	Consistent	Consistent since May 2001
14M-1	50	44.9	Consistent	Slight Decrease
16M-1	2.6	2	Consistent	Decrease since 2004
22M-1	ND	ND	Consistent	Consistent since November 2005
23M-1	ND	ND	Consistent	Consistent since February 2007
Zone 3 (Deep Magothy Well)				
GM-1D***	59	47.8	Consistent	Increase
GM-2D	ND*	ND	Consistent*	Consistent
4M-2	12.6	17.1	Consistent	Consistent
6M-1	ND*	ND	Consistent*	Consistent
8M-2	ND	ND	Consistent	Consistent

Notes:

All results reported in ug/l.

ND - Not detected.

* Total VOC results for wells GM-1S, GM-2S, GM-2I, GM-2D, 6M-1, 10G-1, 11M-1, 15G-1 and 16G-1 are compared to third quarter 2017 sample results.

** Total VOC results for wells 4G-1 and 9G-1 are compared to the third quarter 2018 sample result.

*** GM-1D was converted into a temporary extraction well in October 2013.

Historical VOC graphs are presented in Appendix C-1.

Mid Upper Glacial Aquifer (Zone 1)

A comparison of the semiannual sample results for 2019 indicate that one well (11G-2), out of the five wells screened in the Mid Upper Glacial Aquifer detected TVOC concentrations in exceedance of the remediation criterion of 50 ug/l. TVOC concentrations in well 11G-2 during the first and the third quarters of 2019, were 66 ug/l and 56.8 ug/l, respectively. TVOC concentrations in the remaining four wells (4G-2, 6G-2, 14G-1A and 18G-2) ranged from nondetect to 1.1 ug/l.

TVOC concentrations in four wells (4G-2, 6G-2, 14G-1A and 18G-2) remained consistent during 2019. In general, TVOC concentrations remained consistent in comparison to historical results in wells 4G-2 (since February 2002), 6G-2 (since February 2007), 14G-1A (since 1997) and 18G-2 (since August 2004). In general, since February 2008 well 11G-2 showed an increasing trend in TVOCs in comparison to historical results.

Deep Upper Glacial/Shallow Magothy (Zone 2)

A comparison of the semiannual sample results for 2019 indicate that one out of the fifteen wells screened in the Deep Upper Glacial/Shallow Magothy detected TVOC concentrations equal to the remediation criteria of 50 ug/l. TVOC concentrations in well 14M-1 were reported at 50 ug/l during the first quarter of 2019 and during the third quarter of 2019 were reported at 44.9 ug/l. TVOC concentrations in the remaining wells screened in Zone 2, ranged from nondetect in wells GM-1I, 7M-1, 8M-1, 14G-2, 22M-1 and 23M-1 to a maximum concentration of 37.7 ug/l in well 13M-1.

As previously mentioned, at the request of the NYSDEC, the analysis of Freon 21 and Freon 22 was added to the Part 360 Baseline VOC list. As indicated on the data tables (**Appendix B-1**), five wells (4M-2, 11G-2, 11M-1, 13M-1 and 14M-1) exceeded the groundwater standard (5 ug/l) for Freon 21. The maximum concentration for Freon 21 was reported in monitoring well 11G-2 at 10.3 ug/l. There is no groundwater standard for Freon 22.

TVOC concentrations in the Deep Upper Glacial/Shallow Magothy wells remained consistent during 2019. It should be noted, wells GM-2I and 11M-1 were not sampled in 2018, however, for comparison purposes TVOCs for each well were compared to the third quarter 2017 results. For well GM-2I which was sampled on an annual basis during the August 2019 sampling event, TVOCs have remained consistent in comparison to the previous sample result. For well 11M-1 which was sampled on an annual basis during the August 2019 sampling event, TVOCs exhibited an increase in TVOCs greater than 10 ug/l in comparison to the previous sample result.

With regard to historical trends, TVOC concentrations in wells GM-1I, GM-2I, 8M-1 (since May 2001), 11M-1, 14G-2 (since May 2001), 22M-1 (since November 2005) and 23M-1 (since February 2007) remained consistent in comparison to historical results. TVOC concentrations in wells 4M-1 (since 2004), 6G-3, 7M-1, 12M-1, 14M-1 and 16M-1 (since 2004), exhibited a slight decreasing to decreasing trend in comparison to historical results. TVOC concentrations in wells 10M-1 and 13M-1 showed a slight increasing to increasing trend in comparison to historical results.

Deep Magothy Aquifer (Zone 3)

TVOC concentrations in the deep Magothy wells (GM-2D, 6M-1 and 8M-2), were nondetect during the 2019 sampling period. TVOC concentrations in well 4M-2 during the first and third quarters of 2019 were 12.6 ug/l and 17.1 ug/l, respectively. TVOC results in temporary extraction well (GM-1D) was reported at 59 ug/l (first quarter) and 47.8 ug/l (third quarter) during the 2019 sampling events.

In addition, as stipulated in the Corrective Measures Work Plan (CMWP), temporary extraction well GM-1D is to be sampled every two months during the calendar year. Temporary extraction well GM-1D was sampled during the months of February, August, October and December of 2019. TVOCs for GM-1D during these months ranged between 47.8 ug/l to 59 ug/l. It should be noted, GM-1D was not in service during the months of May, June and July of 2019 and therefore, a groundwater sample could not be obtained during any of these months.

As indicated on the data table for GM-1D (**Appendix B-1**), both Freon 21 and Freon 22 were detected in the samples at maximum concentrations of 14.6 ug/l and 9.4 ug/l, respectively. For each sampling event, Freon 21 exceeded the groundwater standard of 5 ug/l. There is no groundwater standard for Freon 22.

In comparison to historical results, TVOC concentrations in temporary extraction well GM-1D exhibits an increasing trend. TVOC concentrations in wells 4M-2 and 8M-2 remained consistent during 2019, as well as in comparison to historical results. TVOC concentrations in wells GM-2D and 6M-1, which are sampled on an annual basis (August 2019), remained consistent both in comparison to the third quarter 2017 sampling results and historical results. It should be noted, wells GM-2D and 6M-1 were not sampled in 2018.

4.2.2 Inorganic Parameters

Tabulated analytical results for inorganic parameters for the groundwater monitoring wells, as well as temporary extraction well (GM-1D) are provided in **Appendix B-2**. Graphs illustrating historical inorganic parameters from selected monitoring wells, which exceeded NYSDEC Class GA groundwater standards or guidance values are presented in **Appendix C-2**. Discussion of the individual inorganic parameters that were detected at concentrations exceeding NYSDEC Class GA groundwater standards and guidance values in 2019 are discussed below. The highest concentration detected for the inorganic parameters with exceedances were selected and presented in **Table 4-3**.

- Arsenic was detected above the groundwater standard (25 ug/l) in well 12M-1 (21.2 ug/l).
- Boron was detected above the groundwater standard (1,000 ug/l) in wells 4M-1 (1,650 ug/l), 11G-2 (1,490 ug/l) and 14M-1 (1,160 ug/l).
- Iron was detected above the groundwater standard (300 ug/l) in 7 wells (4G-1, 4M-1, 4M-2, 11G-1, 11G-2, 12M-1 and 14M-1) Iron concentrations which exceeded the groundwater standard ranged from 462 ug/l in well 11G-1 to 7,170 ug/l in well 4G-1.

TABLE 4-3
BLYDENBURGH ROAD LANDFILL COMPLEX
SUMMARY OF INORGANIC PARAMETER EXCEEDANCES IN MONITORING WELLS
2019 ANNUAL REPORT

WELL ID	Inorganic Parameter	Arsenic	Boron	Iron	Manganese	Magnesium	Nickel	Sodium	Thallium
	Groundwater Standard/ Guidance Value	25	1,000	300	300	35,000	100	20,000	0.5
Shallow Upper Glacial Wells (screened near or at water table)									
GM-1S		--	--	--	--	--	--	66,200	--
GM-2S		--	--	--	--	--	--	--	--
4G-1		--	--	7,170	5,280	--	--	121,000	--
6G-1		--	--	--	--	--	--	27,500	--
8G-1		--	--	--	48,500	--	--	342,000	--
9G-1		--	--	--	--	--	--	--	--
10G-1		--	--	--	--	--	--	76,700	--
11G-1		--	--	462	1,520	--	102	249,000	--
13G-1		--	--	--	--	--	--	--	--
15G-1		--	--	--	--	--	--	--	--
16G-1		--	--	--	--	--	--	--	--
18G-1		--	--	--	12,000	--	--	111,000	12.7
Mid-Upper Glacial Wells (screened above Smithtown Clay (- 35 to - 75 feet msl)									
4G-2		--	--	--	4,420	--	--	98,600	6
6G-2		--	--	--	--	--	--	93,300	--
11G-2		--	1,490	1,290	3,640	--	175	375,000	6
14G-1A		--	--	--	--	--	--	71,800	--
18G-2*		--	--	--	7,030	--	--	95,600	6
Deep Upper Glacial/Shallow Magothy Wells (screened - 124 to - 167 feet msl)									
GM-1I		--	--	--	--	--	--	51,000	--
GM-2I		--	--	--	--	--	--	--	--
4M-1		--	1,650	1,060	1,670	48,000	177	406,000	--
6G-3		--	--	--	3,760	--	--	46,400	6.4
7M-1		--	--	--	--	--	--	--	--
8M-1		--	--	--	--	--	--	53,700	--
10M-1		--	--	--	--	47,500	--	65,500	--
11M-1		--	--	--	--	--	--	41,800	--
12M-1		21.2	--	1,430	1,390	41,300	--	71,400	--
13M-1		--	--	--	--	65,600	--	61,700	--
14G-2**		--	--	--	--	--	--	53,800	--
14M-1***		--	1,160	689	5,380	55,600	124	307,000	--
16M-1		--	--	--	--	--	--	47,100	--
22M-1		--	--	--	--	--	--	--	--
23M-1		--	--	--	--	--	--	29,400	--
Deep Magothy Wells (screened - 237 to - 368 feet msl)									
GM-1D		--	--	--	--	66,200	--	180,000	--
GM-2D		--	--	--	--	--	--	--	--
4M-2		--	--	1,580	--	36,300	--	189,000	--
6M-1		--	--	--	--	--	--	--	--
8M-2		--	--	--	1,900	--	--	85,100	--

Notes:

All values reported in micrograms per liter (ug/l)

GM-1D was converted into a temporary extraction well in October 2013

*: Well 18G-2 screened - 9 to - 29 feet msl.

**Well 14G-2 screened - 83 to - 103 msl.

***: Well 14M-1 screened - 174 to - 194 feet msl.

---: No exceedances

Exceeds the groundwater standard/guidance value

- Manganese was detected above the groundwater standard (300 ug/l) in twelve monitoring wells (4G-1, 4G-2, 4M-1, 6G-3, 8G-1, 8M-2, 11G-1, 11G-2, 12M-1, 14M-1, 18G-1 and 18G-2). Manganese concentrations which exceeded the groundwater standard ranged from 1,390 ug/l in well 12M-1 to 48,600 ug/l in well 8G-1.
- Magnesium was detected above the groundwater guidance value (35,000 ug/l) in six monitoring wells (4M-1, 4M-2, 10M-1, 12M-1, 13M-1 and 14M-1), as well as in temporary extraction well (GM-1D). Magnesium concentrations which exceeded the guidance value ranged from 36,900 ug/l in well 4M-2 to 65,600 ug/l in well 13M-1.
- Nickel was detected above the groundwater standard (100 ug/l) in wells 4M-1 (177 ug/l), 11G-1 (102 ug/l), 11G-2 (175 ug/l) and 14M-1 (124 ug/l).
- Sodium was detected above the groundwater standard (20,000 ug/l) in most monitoring wells (26 out of 36), as well as in temporary extraction well (GM-1D). Sodium concentrations which exceeded the groundwater standard ranged from 27,500 ug/l in well 6G-1 to 406,000 ug/l in well 4M-1.
- Thallium was detected above the groundwater guidance value (0.5 ug/l) in wells 4G-2 (6 ug/l), 6G-3 (6.4 ug/l), 11G-2 (6 ug/l), 18G-1 (12.7 ug/l) and 18G-2 (6 ug/l).

4.2.3 Leachate Indicators

Tabulated analytical results for leachate indicators for the groundwater monitoring wells, as well as temporary extraction well (GM-1D) are provided in **Appendix B-3**. Graphs illustrating historical leachate indicators from selected monitoring wells, which exceeded NYSDEC Class GA groundwater standards or guidance values are presented in **Appendix C-3**. Discussion of the individual leachate indicators that were detected at concentrations exceeding NYSDEC Class GA groundwater standards and guidance values in 2019 are discussed below. The highest concentration detected for the leachate indicators with exceedances were selected and presented in **Table 4-4**.

- Ammonia nitrogen was detected above the groundwater standard (2 mg/l) in ten monitoring wells (4G-1, 4M-1, 4M-2, 6G-3, 8M-1, 11G-1, 11G-2, 14M-1, 18G-1 and 18G-2), as well as in temporary extraction well (GM-1D). Ammonia concentrations which exceeded the groundwater standard ranged from 4.9 mg/l in wells GM-1D and 8M-1 to 179 mg/l in well 4M-1.

TABLE 4-4
BLYDENBURGH ROAD LANDFILL COMPLEX
SUMMARY OF LEACHATE INDICATOR EXCEEDANCES IN MONITORING WELLS
2019 ANNUAL REPORT

WELL ID	Leachate Indicator	Ammonia	Bromide	Chloride	Phenols
	Groundwater Standard/ Guidance Value	2	2	250	0.001
Shallow Upper Glacial Wells (screened near or at water table)					
GM-1S	---	---	---	---	---
GM-2S	---	---	---	---	---
4G-1	28.5	---	---	---	---
6G-1	---	---	---	---	---
8G-1	---	---	---	1,120	---
9G-1	---	---	---	---	---
10G-1	---	---	---	---	---
11G-1	127	---	---	277	---
13G-1	---	---	---	---	0.44
15G-1	---	---	---	---	---
16G-1	---	---	---	---	---
18G-1	26.1	---	---	---	---
Mid-Upper Glacial Wells (screened above Smithtown Clay (- 35 to - 75 feet msl)					
4G-2	---	---	---	---	---
6G-2	---	---	---	---	---
11G-2	153	4	385	---	---
14G-1A	---	---	---	---	---
18G-2*	3.1	---	---	---	---
Deep Upper Glacial/Shallow Magothy Wells (screened - 124 to - 167 feet msl)					
GM-1I	---	---	---	---	---
GM-2I	---	---	---	---	---
4M-1	179	4.9	687	---	---
6G-3	7.7	---	---	---	---
7M-1	---	---	---	---	---
8M-1	4.9	---	---	---	---
10M-1	---	---	---	---	---
11M-1	---	---	---	---	---
12M-1	---	---	---	---	---
13M-1	---	---	---	---	---
14G-2**	---	---	---	---	---
14M-1***	64.6	4	441	---	---
16M-1	---	---	---	---	---
22M-1	---	---	---	---	---
23M-1	---	---	---	---	---
Deep Magothy Wells (screened - 237 to - 368 feet msl)					
GM-1D	4.9	---	---	---	---
GM-2D	---	---	---	---	---
4M-2	5.5	2.8	397	---	---
6M-1	---	---	---	---	---
8M-2	---	---	---	---	---

Notes:

All values reported in milligrams per liter (mg/l)

GM-1D was converted into a temporary extraction well in October 2013.

*: Well 18G-2 screened - 9 to - 29 feet msl.

**Well 14G-2 screened - 83 to - 103 msl.

***: Well 14M-1 screened - 174 to -194 feet msl.

---: No exceedances

Exceeds the groundwater standard/guidance value

- Bromide was detected above the groundwater guidance value (2 mg/l) in wells 4M-1 (4.9 mg/l), 4M-2 (2.8 mg/l), 11G-2 (4 mg/l) and 14M-1 (4 mg/l).
- Chloride was detected above the groundwater standard (250 mg/l) in wells 4M-1 (687 mg/l), 4M-2 (397 mg/l), 8G-1 (1,120 mg/l), 11G-1 (277 mg/l), 11G-2 (385 mg/l) and 14M-1 (441 mg/l).
- Phenols were detected above the groundwater standard (0.001 mg/l) in well 13G-1 at a maximum concentration of 0.44 mg/l.

4.3 Extraction Wells

4.3.1 Volatile Organic Compounds

Table 4-5 presents a comparison of the 2019 TVOC concentrations for the extraction wells, as well as historical trends. The 2019 VOC results for the extraction wells are presented in **Appendix D-1**. Graphs illustrating historical TVOC concentrations for the extraction wells are presented in **Appendix E-1**.

A comparison of the 2019 results, showed concentrations of TVOCs in the extraction wells to have remained consistent (10 ug/l or less variability). VOCs were not detected in EW-1, EW-2 EW-3, EW-4 and EW-6. As previously mentioned, EW-5 was not in-service during calendar year 2019.

4.3.2 Inorganic Parameters

Tabulated analytical results for inorganic parameters for the extraction wells are provided in **Appendix D-2**. Graphs illustrating historical inorganic parameters from selected extraction wells, which exceeded NYSDEC Class GA groundwater standards or guidance values are presented in **Appendix E-2**. Discussion of the individual inorganic parameters for the extraction wells that were detected at concentrations exceeding NYSDEC Class GA groundwater standards and guidance values in 2019 are discussed below.

Table 4-5

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
COMPARISON OF EXTRACTION WELL SAMPLE RESULTS
TOTAL VOLATILE ORGANIC COMPOUNDS**

Well No.	First Quarter (February 2019)	Third Quarter (August 2019)	2019 Comparison	Historical Trend
EW-1	ND	ND	Consistent	Consistent since February 2002
EW-2	ND*	ND*	Consistent	Consistent since February 2002, with an increase noted in 2015
EW-3	ND	ND	Consistent	Decrease
EW-4	ND	ND	Consistent	Consistent since November 2002
EW-5	NS	NS	No comparison	Consistent since 1997
EW-6	ND*	ND*	Consistent	Consistent since 1997

Notes:

All results reported in ug/l.

Historical VOC graphs are presented in Appendix E-1.

ND - Not detected.

NS- Not sampled, since extraction well was not in service.

*Extraction well sampled during well shut down.

- Iron was detected above the groundwater standard (300 ug/l) in EW-2 at 11,000 ug/l (first quarter) and 5,860 ug/l (third quarter).
- Manganese was detected above the groundwater standard (300 ug/l) in EW-1, EW-3 and EW-4 for both the first and third quarter sampling events. Manganese concentrations in these wells ranged from 341 ug/l in EW-4 to 515 ug/l in EW-3.
- Sodium was detected above the groundwater standard (20,000 ug/l) in wells EW-1, EW-2, EW-3 and EW-4 for both the first and third quarter sampling events. Sodium concentrations in these wells ranged from 58,300 ug/l in EW-3 to 86,900 ug/l in EW-2.

4.3.3 Leachate Indicators

Tabulated analytical results for leachate indicators for the extraction wells are provided in **Appendix D-3**. Graphs illustrating historical leachate indicators from selected extraction wells, which exceeded NYSDEC Class GA groundwater standards or guidance values are presented in **Appendix E-3**. Discussion of the individual leachate indicators that were detected at concentrations exceeding NYSDEC Class GA groundwater standards in 2019 are discussed below:

- Ammonia concentrations exceeded the groundwater standard (2 mg/l) in EW-3 and EW-4 for both the first and third quarter sampling events. Ammonia concentrations in these extraction wells ranged from 2.1 mg/l in EW-3 to 11.1 mg/l in EW-4.

No other leachate parameters were detected in the extraction wells above the Class GA groundwater standards and guidance values.

4.4 **Organic Vapor and Combustible Gas Monitoring**

For the groundwater monitoring wells sampled during 2019, the results of the organic vapor and combustible gas monitoring in the headspace of the monitoring wells exhibited no detectable readings for VOC vapors and combustible gas.

5.0 DATA VALIDATION

Thirty groundwater samples (25 monitoring wells, 4 extraction wells and temporary extraction well (GM-1D), two blind duplicates, two matrix spike/matrix spike duplicate (MS/MSD) sets, two field blanks and five trip blanks were collected as part of the first quarter sampling event (February 2019). Forty-two groundwater samples (36 monitoring wells, 5 extraction wells and temporary extraction well (GM-1D), two blind duplicates, two matrix spike/matrix duplicate sets, two field blanks and seven trip blanks were collected as part of the third quarter sampling event (August 2019). Samples in the first quarter and third quarter sampling events in 2019 were analyzed for 6 NYCRR Part 360 Baseline Parameters VOCs, including Freon 21 and Freon 22, inorganic parameters and leachate indicators. Sample analyses were performed in accordance with SW-846 methods, as specified in the Part 360 regulations. The laboratory is approved under the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for the analyses performed.

The data packages submitted by the analytical laboratory (Pace Analytical Laboratory, Inc., Melville, NY), were validated in accordance with NYSDEC quality assurance/quality control (QA/QC) requirements. In accordance with the contract requirements and the Sampling and Analysis Plan (SAP), 20 percent of the environmental samples and all the QA/QC samples (calibrations, blanks, spikes, etc.) were reviewed, yielding a “20% validation.” The validation forms for the two semiannual sampling events of 2019 are included in **Appendix F**.

February 2019 (First Quarter)

The two data packages (7079120 and 7079760) submitted by the analytical laboratory, Pace Analytical, Inc., Melville. While all the samples were reviewed for transcription errors, calculations were verified for six environmental samples (6G-3, 8G-1, EW-4, 14G-1A, 7M-1 and 13G-1).

Two duplicates were collected. Blind Duplicate - 1 was a duplicate of sample 7M-1 and Blind Duplicate-2 was a duplicate of sample 8M-2. Matrix spike and matrix spike duplicate sets were collected at wells EW-1 and EW-3.

The following requirements were outside limits:

- Cis-1,2-dichloroethene percent recovery (%R) was above the QC limit in the laboratory control sample (LCS) and was detected above the reporting limit in sample 12M-1 and GM-1D, therefore it was qualified as estimated (J).
- The following metals were detected in the initial blank, preparation blank and/or field blank and were qualified as non-detect (UB): aluminum in all samples in data package 7079760; boron in samples 8M-2, BLIND DUPLICATE-2, 6G-1 and 8G-1; and cadmium in all samples except 8M-2 in data package 7079760, cadmium, vanadium and zinc in all samples in data package 7079120; manganese in samples 4M-2, 10M-1, 13G-1, 14G-1A, 14G-2, 16M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1.
- Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results cadmium was qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.
- The following were analyzed outside of holding times: hexavalent chromium associated with samples 12M-1, FIELD BLANK, GM-1D, GM-1I, 6G-1, 6G-2, 6G-3, 11G-2, 11G-1, 18G-2, 18G-1, 13M-1, FIED BLANK-1, EW-3, 13G-1, 10M-1, 16M-1 and 23M-1. Hexavalent chromium was qualified as an estimated (J/UJ) in associated samples.
- The following general chemistry parameters were detected in the FIELD BLANK and/or method blank and qualified as non-detect (UB): nitrate in sample 11G-1, 13M-1 and 11G-2; TKN in samples 14G-2, 14G-1A, 16M-1, 23M-1, 7M-1 and BLIND DUPLICATE-1; bromide in samples 6G-2, 6G-1, BLIND DUPLICATE-2, EW-1 and EW-2; TKN in samples BLIND DUPLICATE-2, 8M-2, 6G-2 and EW-2; and phenolics in all samples.
- The following general chemistry parameters percent recoveries (%Rs) were above the QC limits in the MS and detected above the reporting limit, therefore they were qualified as estimated (J): chloride in samples 6G-3, 6G-2, 6G-1, 12M-1, GM-1I, BLIND DUPLICATE-2 and EW-1; TKN in samples 10M-1, 11G-1, 11G-2, 13M-1, 14M-1, 18G-1, 18G-2, 22M-1, 4G-2, 4M-1, 4M-2, EW-3, 12M-1, 8M-1, GM-1D, 6G-3 and EW-4; nitrate in samples 14G-2 and 14G-1A; sulfate all samples except 11G-2 and Field Blank in data package 7079120; nitrite and TOC in sample EW-4.

- The %Rs were below the QC limit in the matrix spike (MS) and qualified as estimated (J/UJ) in the following general chemistry parameters: TKN in samples 6G-2, 6G-1, 12M-1, GM-1I, FIELD BLANK, 8M-2, 8M-1, 6G-3 and GM-1D; nitrate in samples 10M-1, 16M-1, 23M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1 and all samples in data package 7079760; cyanide in samples EW-3, 13G-1, 6G-3 and 6G-2; alkalinity in samples 4M-2 and 4G-2; hexavalent chromium in samples 14M-1, 14G-2, 14G-1A, 4M-1, 4M-2 and 4G-2.
- The RPDs were above the QC limits in the duplicate for chemical oxygen demand associated with all samples in package 7079760; TKN associated with samples 11G-1, 11G-2, 13G-1, 13M-1, 14M-1, 18G-1, 18G-2, 4M-1, 4M-2, BLIND DUPLICATE-1, EW-3 and FIED BLANK-1; and total dissolved solids associated with samples 10M-1, 16M-1, 23M-1, 22M-1, 7M-1, BLIND DUPLICATE-1, 11G-2, 11G-1, 18G-2, 18G-1, 13M-1, FIED BLANK, EW-3 and 13G-1; and were qualified as estimated (J/UJ) in associated samples.
- Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results chloride was qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.

August 2019 (Third Quarter)

The two data packages (70101295 and 70101745) submitted by the analytical laboratory, Pace Analytical, Inc., Melville, NY. While all the samples were reviewed for transcription errors, calculations were verified for six environmental samples (18G-2, 23M-1, 4G-1, 6G-3, EW-2 and 10G-1).

Two duplicates were collected. Blind Duplicate -1 was a duplicate of sample EW-4 and Blind Duplicate-2 was a duplicate of sample 8M-2. Matrix spike and matrix spike duplicate sets were collected at wells GM-2D and EW-3.

The following requirements were outside limits:

- The percent recoveries (%Rs) were below the QC limit in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE-1, FIELD BLANK-1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1; and 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I,

GM-1S and GM-1D. The above compounds were qualified as an estimated (UJ) in the associated samples.

- The %R was below the QC limit in the LCS for iodomethene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE -1, FIELD BLANK-1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and was qualified as an estimated detection limit (UJ).
- The following metals were detected in the initial blank, preparation blank and/or field blank and were qualified as non-detect (UB): nickel in samples 13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1 and EW-3; arsenic in samples 12M-1 and 4M-1; boron all samples except 8M-2 and 4M-1; silver in samples 8M-1 and 7M-1; and potassium in samples 12M-1, 15G-1, 22M-1, 10G-1, 16M-1 and 16G-1.
- The percent difference was above the QC limit in the serial dilution for magnesium associated with sample 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2. Magnesium was qualified as estimated (J/UJ) in the associated samples.
- Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results boron, calcium, iron, magnesium, manganese, potassium and sodium were qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.
- The following were analyzed outside of holding times: hexavalent chromium associated with 12M-1, 15G-1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D and all sample in data package 70101295. It was qualified as an estimated detection limit (UJ) in associated samples.
- The following general chemistry parameters were detected in the FIELD BLANK and/or method blank and qualified as non-detect (UB): ammonia in samples 14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2, 11M-1, GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G-1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2; BOD in samples 14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK-1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1 and all sample in data package 70101745; bromide in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3, 6M-1, GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1; TKN in samples 11M-1, 6M-1, 13M-1, 23M-1, GM-2S, 9G-1, 10G-1, 16G-1, 15G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1; and phenolics in all samples except 13G-1.

- The following general chemistry parameters percent recoveries (%Rs) were above the QC limits in the MS and detected above the reporting limit, therefore they were qualified as estimated (J): nitrate in samples 12M-1, 15G-1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1, 16G-1, EW-1, EW-6, 13G-1, 6G-2 and 6G-1; chloride in sample 6G-1; phenolics in sample 13G-1; and nitrite in samples EW-4 and BLIND DUPLICATE-1.
- The %Rs were below the QC limit in the matrix spike (MS) and qualified as estimated (J/UJ) in the following general chemistry parameters: TKN in all samples except 6G-2, 6G-1, 12M-1, 15G-1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2I; phenolics in all samples in data package 70101745 and sample 6G-1; and TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, 12M-1 and 15G-1.
- The RPDs were above the QC limits in the duplicate for TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, 12M-1 and 15G-1; TDS in samples 6M-1 and 6G-3; COD in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; TKN in samples 6G-2 and 6G-1; and BOD associated with samples GM-2D, GM-2I, GM-2S and 9G-1 and were qualified as estimated (J/UJ) in associated samples.

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

D&B collected groundwater level measurements from 51 monitoring wells on February 11, 2019 and August 13, 2019. In addition, 17 water level measurements were collected by Cashin Associates, P.C. on these dates as part of the Cleanfill Landfill Groundwater Monitoring Program. It should be noted, due to access constraints, ground water level measurements were recorded from Site 8 on February 15, 2019 and on August 19, 2019. The groundwater elevation measurements from 2019 are presented in **Appendix G**.

6.1 Water Table Contours

The water table elevation contour maps were generated using data from wells screened at or near the water table in the Upper Glacial aquifer. Water table elevation contour maps for February 11, 2019 and August 13, 2019 are presented in **Appendix H**.

In general, the two-water table elevation contour maps prepared using 2019 data are fairly consistent with each other and illustrate that the groundwater flow direction in the Upper Glacial aquifer is predominately toward the south to southeast, which is consistent with previous maps prepared for the site. In general, the water table contours both upgradient and downgradient from the site, depict a more regional groundwater flow pattern. A localized mounding of the water table in the area of monitoring well 7G-1 is likely caused by recharge from the northeast storm water recharge basin. Mounding of the water table is also occurring in the area of the six recharge wells. The extent of the mounding and effects on the monitoring wells in the vicinity of the recharge wells are not well defined (water level readings in the active recharge wells are not representative of the water table elevation) and therefore, is not depicted on the contour maps.

Lower groundwater elevations were noted downgradient of the Phase 2 Cleanfill Landfill in wells MW-D12, 19GR-1, 26G-1 and 27G-1, as well as in the vicinity of the Windwatch Sewage Treatment Plant in well 12G-1. The low groundwater elevations noted downgradient of the Phase 2 Cleanfill Landfill may be attributed to the low rate of recharge to the water table upgradient of these well locations. The reduction in groundwater recharge is primarily due to the

landfill liners (primary and secondary liners) and leachate collection and storage (impoundment) systems associated with Cleanfill Landfill Phases 1 and 2. Water levels from the above wells were not used in the preparation of the water table elevation contour maps.

6.2 Potentiometric Surface Contours

Potentiometric surface elevation contour maps for the zone from 83 to 167 feet below mean sea level (msl) were generated using data from wells screened near the Upper Glacial/Magothy contact. Potentiometric surface elevation contour maps for February 11, 2019 and August 13, 2019 are presented in **Appendix H**.

In general, the two potentiometric surface elevation contour maps prepared using 2019 data are consistent with each other and illustrate that the direction of groundwater flow across the site is predominately toward the southeast and downgradient of the site, groundwater flow is predominately toward the south. The 2019 potentiometric surface elevation contour maps are consistent with previous maps prepared for the site.

6.3 Recharge Well Water Levels

Historical water level elevation measurements from the recharge wells are presented in **Appendix I**. Water level elevation data collected from the six recharge wells during 2019 ranged from 48.39 feet above msl at RW-3 (third quarter 2019) to 147.88 feet above msl at RW-2 (third quarter 2019). The water level readings in the recharge wells, less the water table elevation, represents the driving head required for the flow rate to that recharge well to pass from the well casing, through the well screen and gravel pack, and into the aquifer. The recharge wells are not pressurized and operate by gravity under atmospheric conditions. It should be noted that the water level elevation readings are, for all practical purposes, instantaneous readings which must be viewed in terms of the status of the pumping cycle at the time of the reading, as well as the manual throttling of wellhead valves and the actual distribution of flow to each of the six recharge wells.

7.0 FINDINGS AND RECOMMENDATIONS

7.1 Findings

Groundwater Measurements and Flow Direction

Based on groundwater level measurements collected during the February and August 2019 sampling events, and the water table and potentiometric surface elevation contour maps prepared for the shallow and deep zones at the site, groundwater flow is predominantly in a south to southeast direction. This groundwater flow direction is consistent with previous elevation measurements obtained and maps prepared for the site.

Groundwater Treatment Facility Recharge Well Water Levels

Based on water level measurements collected during the February and August 2019 sampling events for recharge wells RW-1, RW-3, RW-4 and RW-5, the data suggest that these wells remain effective and are not in need of rehabilitation or redevelopment. However, water level measurements in recharge wells RW-2 and RW-6 appear to indicate some loss of efficiency. Redevelopment of the recharge wells is not necessary at this time but may be required in the future.

Groundwater Quality

Based on a comparison of the Third Quarter 2017 and or the Third Quarter 2018 results to the Third Quarter 2019 results for monitoring wells sampled on an annual basis, as well as the First Quarter 2019 results to the Third Quarter 2019 results for wells sampled on a semi-annual basis, groundwater quality downgradient and in the vicinity of the Blydenburgh Road Landfill Complex remained consistent (10 ug/l or less change in total VOCs) in all the wells except for 11M-1. Monitoring well 11M-1 exhibited an increase in TVOCs of more than 10 ug/l.

For the February 2019 first quarter sampling event, 19 of the 25 groundwater monitoring wells sampled exhibited TVOCs at 10 ug/l or less. For the August 2019 third quarter sampling event, 28 of the 36 groundwater monitoring wells sampled exhibited TVOCs at 10 ug/l or less. During the first and third quarters of 2019, well 11G-2 exceeded the groundwater remediation criterion of 50 ug/l established by the ROD for TVOCs. The maximum TVOCs in 2019 for well 11G-2 were reported at 66 ug/l. During 2019, TVOCs for temporary extraction well (GM-1D) ranged between 47.6 ug/l to 59 ug/l.

Twenty-six of the 36 monitoring wells for which historical trends could be established exhibit consistent trends for TVOCs. Seven wells (4M-1 since February 2004, 6G-3, 7M-1, 11G-1 since February 2006, 12M-1, 14M-1 and 16M-1 since 2004) exhibited decreasing historical trends for TVOCs. Three wells (10M-1, 11G-2, and 13M-1) and temporary extraction well (GM-1D) exhibited an increasing historical trend for TVOCs.

The majority of the monitoring wells sampled (26 out of 36), as well as temporary extraction well (GM-1D), exhibited one or more of the following inorganic parameters: arsenic, boron, iron, manganese, magnesium, nickel, sodium and thallium at concentrations exceeding their respective groundwater standards or guidance values.

Twelve of the 36 monitoring wells sampled, as well as temporary extraction well (GM-1D), exhibited one or more of the following leachate parameters: ammonia, bromide, chloride and phenols at concentrations exceeding their respective groundwater standards or guidance values.

Extraction Wells

Groundwater quality for extraction wells (EW-1, EW-2, EW-3, EW-4 and EW-6), remained consistent throughout the 2019 monitoring period and TVOC concentrations for these extraction wells were all non-detect. Groundwater samples were not obtained from EW-5 in 2019, since this well is off-line and awaiting repair.

In general, historical TVOC trends remained consistent in EW-1 (since February 2002), EW-4 (since November 2002), EW-5 (since 1997) and EW-6 (since 1997). For EW-2, TVOCs in 2019 were comparable to historical results, exclusive of calendar year 2015 which showed a slight increase. Extraction well EW-3 exhibits a decreasing trend in comparison to historical TVOC results.

Extraction wells EW-1, EW-2, EW-3 and EW-4 exhibited one or more of the following inorganic parameters: iron, manganese and sodium at concentrations exceeding their respective groundwater standards or guidance value.

For leachate indicators, concentrations of ammonia exceeded the groundwater standard in EW-3 and EW-4.

Organic Vapor and Combustible Gas Monitoring

The results of the organic vapor and combustible gas monitoring conducted during the 2019 semiannual sampling events exhibited no measureable readings in the headspace of the groundwater monitoring wells.

7.2 RECOMMENDATIONS

Based on the findings of the 2019 Post Closure Groundwater Monitoring Program, the following recommendation is presented:

The monitoring frequency for the site should remain on a semiannual basis, and the selected set of monitoring wells, extraction wells, as well as temporary extraction well (GM-1D) should continue to be sampled in accordance with the Sampling and Analysis Plan (SAP) and the Corrective Measures Work Plan (CMWP).

APPENDIX A

SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

APPENDIX A
BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - FIRST QUARTER 2019
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Results of Total Organic Vapor Screening and Combustible Gas Reading		Purging Method	Groundwater Elevation (feet above msl)
							PID (ppm)	% LEL		
GM-1I	8.33	13.98	0.679	0	152	7.12	0	0	Submersible pump	41.98
4G-2	7.27	22.45	0.661	0	-47	0.17	0	0	Submersible pump	42.37
4M-1	7.73	19.55	3.10	0	-133	0.31	0	0	Submersible pump	42.09
4M-2	6.84	14.68	1.46	0	-27	0.23	0	0	Submersible pump	40.30
6G-1	7.36	18.31	0.231	0	151	6.26	0	0	Submersible pump	42.05
6G-2	7.19	19.39	0.593	0	73	0.62	0	0	Submersible pump	42.22
6G-3	7.59	17.51	0.647	0	-80	0.40	0	0	Submersible pump	42.34
7M-1	6.22	12.53	0.246	0	227	0.59	0	0	Submersible pump	42.86
8G-1	5.46	14.50	2.16	0	243	6.89	0	0	Submersible pump	41.62
8M-1	7.09	13.67	0.763	0	28	0.25	0	0	Submersible pump	41.61
8M-2	6.68	12.04	0.209	0	70	0.43	0	0	Submersible pump	41.46
10M-1	8.22	11.95	0.947	0	153	0.35	0	0	Submersible pump	40.89
11G-1	7.95	24.54	2.21	0	-136	0.56	0	0	Submersible pump	42.19
11G-2	7.68	21.86	3.17	0	-114	0.39	0	0	Submersible pump	42.20
12M-1	7.43	16.31	1.00	0	-49	1.20	0	0	Submersible pump	42.29
13G-1	6.08	12.27	0.270	0	225	10.93	0	0	Submersible pump	41.40
13M-1	7.70	11.09	1.16	0	-27	0.34	0	0	Submersible pump	41.40
14G-1A	7.92	15.75	0.755	0	11	2.02	0	0	Submersible pump	42.25
14G-2	7.99	15.28	0.668	0	62	4.52	0	0	Submersible pump	42.24
14M-1	7.51	14.49	2.49	0	-26	5.50	0	0	Submersible pump	41.93
16M-1	7.77	12.47	0.704	0	137	0.44	0	0	Submersible pump	40.04
18G-1	7.51	21.07	0.786	0	5	0.69	0	0	Submersible pump	42.41
18G-2	7.27	21.17	0.675	0	87	0.81	0	0	Submersible pump	42.44
22M-1	7.14	11.68	0.477	0	136	0.31	0	0	Submersible pump	42.84
23M-1	6.40	12.79	0.250	8	127	0.30	0	0	Submersible pump	42.60

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM GROUNDWATER SAMPLING - FIRST QUARTER 2019 SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	Initial Depth to Water (in feet)	Depth of Well (in feet)	Well Diameter (inches)	Volume of Water Purged (gallons)	Date of Sampling	Time of Sampling	Initials of Samplers	Weather Condition
GM-11	109.21	285	4	400	2/14/19	4:45 p.m.	KR	Partly cloudy
4G-2	127.66	211	4	225	2/11/19	3:30 p.m.	KR	Cold
4M-1	126.86	325	4	450	2/11/19	2:05 p.m.	KR	Cold
4M-2	129.23	486	4	700	2/11/19	2:30 p.m.	KR	Cold
6G-1	138.12	147	4	60	2/14/19	11:15 a.m.	KR	Partly cloudy
6G-2	136.43	230	4	250	2/14/19	10:35 a.m.	KR	Partly cloudy
6G-3	137.49	315	4	475	2/14/19	9:25 a.m.	KR	Partly cloudy
7M-1	24.70	214	4	400	2/12/19	3:40 p.m.	KR	Cold/breezy
8G-1	92.35	114	4	75	2/15/19	12:10 p.m.	KR	Partly cloudy
8M-1	93.60	269	4	500	2/15/19	11:15 a.m.	KR	Partly cloudy
8M-2	93.65	384	4	630	2/15/19	10:30 a.m.	KR	Partly cloudy
10M-1	47.95	256	4	425	2/12/19	8:00 a.m.	KR	Cold/breezy
11G-1	126.71	145	4	100	2/13/19	10:15 a.m.	KR	Partly sunny
11G-2	127.11	221	4	250	2/13/19	9:20 a.m.	KR	Partly sunny
12M-1	135.37	338	4	450	2/14/19	1:40 p.m.	KR	Partly cloudy
13G-1	69.09	93	4	100	2/13/19	3:50 p.m.	KR	Partly sunny
13M-1	68.52	265	4	450-	2/13/19	3:05 p.m.	KR	Partly sunny
14G-1A	119.48	220	4	200	2/11/19	11:10 a.m.	KR	Cold
14G-2	120.12	264	4	300	2/11/19	9:35 a.m.	KR	Cold
14M-1	120.05	357	4	500	2/11/19	9:15 a.m.	KR	Cold
16M-1	36.86	240	4	450	2/12/19	9:30 a.m.	KR	Cold/breezy
18G-1	126.21	157.5	4	125	2/13/19	1:00 p.m.	KR	Partly sunny
18G-2	126.34	197.5	4	200	2/13/19	12:15 p.m.	KR	Partly sunny
22M-1	34.21	222.5	4	450	2/12/19	11:30 a.m.	KR	Cold/breezy
23M-1	18.20	240	4	450	2/12/19	1:45 p.m.	KR	Cold/breezy

Note: Final field parameter readings were measured upon completion of sample collection.

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM GROUNDWATER SAMPLING - FIRST QUARTER 2019 SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Extraction Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Date of Sampling	Time of Sampling
EW-1	6.57	18.67	0.636	8.2	189	2.37	2/15/19	1:15 p.m.
EW-2	6.73	16.08	0.662	55	-94	2.59	2/15/19	2:30 p.m.
EW-3	7.77	13.81	0.766	12	150	6.67	2/13/19	4:30 p.m.
EW-4	7.26	15.13	0.879	0	28	5.06	2/15/19	3:00 p.m.
EW-5	NS	NS	NS	NS	NS	NS	NS	NS
EW-6	NS	NS	NS	NS	NS	NS	NS	NS
GM-1D*	7.26	13.01	1.44	0	-44	3.16	2/14/19	3:15 p.m.

Notes:

Final field parameter readings were measured upon completion of sample collection.

ppm: Parts Per Million
 % LEL: Lower Explosive Limit
 PID: Photoionization Detector
 mV: Millivolt
 mg/l: Milligrams Per Liter
 ORP: Oxidation Reduction Potential
 NS: Not Sampled
 °C: Degrees Celsius
 mS/cm: Millisiemens Per Centimeter
 NTU: Nephelometric Turbidity Unit
 DO: Dissolved Oxygen
 msl: Mean Sea Level
 * GM-1D was converted into a temporary extraction well in October 2013.

APPENDIX A (continued)
BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - THIRD QUARTER 2019
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Results of Total Organic Vapor Screening and Combustible Gas Reading			Purging Method	Groundwater Elevation 8/13/19 (feet above msl)
							PID (ppm)	% LEL			
GM-1S	7.46	16.75	0.730	0	93	4.73	0	0		Submersible pump	41.27
GM-1I	7.87	14.56	0.656	0	70	4.19	0	0		Submersible pump	41.49
GM-2S	4.93	14.72	0.173	0	250	3.14	0	0		Submersible pump	41.67
GM-2I	7.80	12.08	0.285	0	135	7.00	0	0		Submersible pump	41.64
GM-2D	4.99	11.46	0.046	0	97	0.56	0	0		Submersible pump	41.15
4G-1	6.30	24.42	1.05	0	-135	0.38	0	0		Submersible pump	42.10
4G-2	6.39	22.78	0.739	0	-43	0.33	0	0		Submersible pump	41.94
4M-1	7.21	20.32	3.93	0	-108	1.04	0	0		Submersible pump	41.65
4M-2	6.15	15.45	1.51	0	-81	0.24	0	0		Submersible pump	39.48
6G-1	6.36	18.53	0.202	0	236	10.53	0	0		Submersible pump	41.57
6G-2	6.42	19.51	0.648	0	85	1.14	0	0		Submersible pump	41.70
6G-3	6.90	17.84	0.670	0	-97	0.53	0	0		Submersible pump	41.80
6M-1	6.73	13.70	0.237	0	-10	0.67	0	0		Submersible pump	40.97
7M-1	4.91	13.00	0.179	0	258	0.57	0	0		Submersible pump	42.17
8G-1	5.83	12.36	2.73	0	182	12.34	0	0		Submersible pump	40.62
8M-1	7.27	13.93	0.804	0	30	0.40	0	0		Submersible pump	41.02
8M-2	6.32	11.99	0.177	0	82	1.04	0	0		Submersible pump	40.69
9G-1	5.09	13.00	0.034	0	269	11.34	0	0		Submersible pump	42.73
10G-1	4.89	14.01	0.380	0	280	7.68	0	0		Submersible pump	40.11
10M-1	7.40	12.47	0.574	0	91	0.61	0	0		Submersible pump	40.12
11G-1	7.25	25.60	2.56	0	-112	0.88	0	0		Submersible pump	41.81
11G-2	6.98	22.54	2.62	0	-138	0.77	0	0		Submersible pump	41.85
11M-1	6.17	14.70	0.448	0	58	0.64	0	0		Submersible pump	41.73
12M-1	6.90	16.66	0.887	0	-51	2.85	0	0		Submersible pump	40.89
13G-1	5.20	13.52	0.178	0	263	9.58	0	0		Submersible pump	40.74
13M-1	7.11	11.26	1.12	0	-66	0.46	0	0		Submersible pump	40.78
14G-1A	7.03	16.49	0.812	0	76	7.05	0	0		Submersible pump	41.71
14G-2	7.21	16.56	0.591	0	244	4.84	0	0		Submersible pump	41.71

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM GROUNDWATER SAMPLING - THIRD QUARTER 2019 SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Results of Total Organic Vapor Screening and Combustible Gas Reading		Purging Method	Groundwater Elevation 8/13/19 (feet above msl)
14M-1	6.72	15.89	2.61	0	-86	1.10	0	0	Submersible pump	41.45
15G-1	5.52	13.04	0.232	0	203	7.99	0	0	Submersible pump	41.43
16G-1	5.51	14.52	0.089	0	266	9.81	0	0	Submersible pump	39.08
16M-1	6.92	12.96	0.480	0	154	0.61	0	0	Submersible pump	39.11
18G-1	6.37	21.37	0.908	0	38	3.98	0	0	Submersible pump	41.98
18G-2	6.26	21.74	0.739	0	104	1.39	0	0	Submersible pump	42.01
22M-1	5.26	13.09	0.251	0	124	0.220	0	0	Submersible pump	41.99
23M-1	6.61	12.61	0.461	0	117	1.08	0	0	Submersible pump	41.98

Note: Final field parameter readings were measured upon completion of sample collection.

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX **POST CLOSURE GROUNDWATER MONITORING PROGRAM** **GROUNDWATER SAMPLING - THIRD QUARTER 2019** **SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA**

Monitoring Well	Initial Depth to Water (in feet)	Depth of Well (in feet)	Well Diameter (inches)	Volume of Water Purged (gallons)	Date of Sampling	Time of Sampling	Initials of Samplers	Weather Condition
GM-1S	109.59	135	4	85	8/19/19	3:45 p.m.	KR	Sunny
GM-1I	109.70	285	4	450	8/19/19	2:40 p.m.	KR	Sunny
GM-2S	119.41	149	4	375	8/20/19	1:00 p.m.	KR	Sunny
GM-2I	120.01	298	4	110	8/20/19	12:15 p.m.	KR	Sunny
GM-2D	120.56	398	4	550	8/20/19	10:15 a.m.	KR	Sunny
4G-1	126.37	164	4	100	8/16/19	1:15 p.m.	KR	Sunny
4G-2	128.09	211	4	180	8/16/19	12:10 p.m.	KR	Sunny
4M-1	127.35	325	4	450	8/16/19	1:00 p.m.	KR	Sunny
4M-2	130.05	486	4	700	8/16/19	10:10 a.m.	KR	Sunny
6G-1	138.60	147	4	60	8/15/19	12:00 p.m.	KR	Sunny
6G-2	136.95	230	4	225	8/15/19	11:10 a.m.	KR	Sunny
6G-3	138.03	315	4	350	8/15/19	9:40 a.m.	KR	Sunny
6M-1	137.43	545	4	800	8/15/19	10:30 a.m.	KR	Sunny
7M-1	25.39	214	4	500	8/20/19	4:30 p.m.	KR	Sunny
8G-1	93.35	114	4	75	8/19/19	12:00 p.m.	KR	Sunny
8M-1	94.19	270	4	450	8/19/19	10:30 a.m.	KR	Sunny
8M-2	94.12	384	4	600	8/19/19	9:35 a.m.	KR	Sunny
9G-1	48.10	68	4	105	8/20/19	2:20 p.m.	KR	Overcast
10G-1	48.41	69	4	120	8/21/19	10:40 a.m.	KR	Overcast
10M-1	48.12	256	4	565	8/21/19	9:35 a.m.	KR	Overcast
11G-1	127.09	145	4	60	8/14/19	10:30 a.m.	KR	Overcast
11G-2	126.47	221	4	250	8/14/19	9:10 a.m.	KR	Overcast
11M-1	127.46	320	4	400	8/14/19	8:35 a.m.	KR	Sunny
12M-1	136.93	338	4	450	8/15/19	3:35 p.m.	KR	Overcast
13G-1	69.60	93	4	80	8/14/19	4:15 p.m.	KR	Overcast
13M-1	69.18	265	4	500	8/14/19	3:40 p.m.	KR	Overcast
14G-1A	119.95	220	4	200	8/13/19	10:40 a.m.	KR	Overcast
14G-2	120.56	264	4	300	8/13/19	9:50 a.m.	KR	Overcast

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM GROUNDWATER SAMPLING - THIRD QUARTER 2019 SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	Initial Depth to Water (in feet)	Depth of Well (in feet)	Well Diameter (inches)	Volume of Water Purged (gallons)	Date of Sampling	Time of Sampling	Initials of Samplers	Weather Condition
14M-1	120.56	355	4	475	8/13/19	9:10 a.m.	KR	Overcast
15G-1	141.62	160	4	100	8/15/19	5:45 p.m.	KR	Sunny
16G-1	37.84	57	4	120	8/21/19	1:55 p.m.	KR	Overcast
16M-1	37.79	240	4	500	8/21/19	1:00 p.m.	KR	Overcast
18G-1	126.64	157.5	4	100	8/13/19	1:25 p.m.	KR	Overcast
18G-2	126.77	197.5	4	150	8/13/19	12:30 p.m.	KR	Overcast
22M-1	19.05	222.5	4	450	8/16/19	3:45 p.m.	KR	Sunny
23M-1	34.83	240	4	450	8/14/19	12:30 p.m.	KR	Overcast

Note: Final field parameter readings were measured upon completion of sample collection.

APPENDIX A (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM GROUNDWATER SAMPLING - THIRD QUARTER 2019 SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Extraction Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Date of Sampling	Time of Sampling
EW-1	6.17	20.37	0.622	0	169	7.40	8/14/19	1:10 p.m.
EW-2	7.00	20.34	0.489	53.5	-66	7.74	8/16/19	9:30 a.m.
EW-3	7.46	17.28	0.136	0	180	8.58	8/13/19	2:05 p.m.
EW-4	7.35	17.65	0.673	0	177	6.37	8/13/19	4:00 p.m.
EW-5	NS	NS	NS	NS	NS	NS	NS	NS
EW-6	6.18	15.10	0.302	0	14	7.43	8/14/19	1:45 p.m.
GM-1D*	7.35	15.68	1.40	0	-51	2.85	8/19/19	1:45 p.m.

Notes:

Final field parameter readings were measured upon completion of sample collection.

ppm: Parts Per Million
 % LEL: Lower Explosive Limit
 PID: Photoionization Detector
 mV: Millivolt
 mg/l: Milligrams Per Liter
 ORP: Oxidation Reduction Potential
 NS: Not sampled, due to extraction well not in service
 °C: Degrees Celsius
 ms/cm: Millisiemens Per Centimeter
 NTU: Nephelometric Turbidity Unit
 DO: Dissolved Oxygen
 msl: Mean Sea Level
 * GM-1D was converted into a temporary extraction well in October 2013

APPENDIX B-1

MONITORING WELL SAMPLE RESULTS - VOLATILE ORGANIC COMPOUNDS

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	06/09/17	08/04/17	10/27/17	12/18/17
			Depth of Well BGS	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	2.7	6.1	7.4	5.6	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	1.1	1.3	1	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	1		
1,4-Dichlorobenzene	106-46-7	3 ST++	5.7	7	8.5	7.1	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	1.4	1.6	1.8	1.5	
Chlorodifluoromethane (Freon 22)	75-45-6	---	3.1	7.9	U	8 J	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	5.2	10.4	13.5	9.5	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	7.3	11.9	U	11.9 J	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	2.6	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	3.9	3.2	4.4	3.3	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	1.8	2.9	3.1	2.9	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	2.4	2.7	2.3	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				31.1	54.5	46.3	53.1

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported ug/l Micrograms per liter
U Compound was analyzed for but not detected BGS Below Ground Surface
J Estimated detection limit or value MSL Mean Sea Level
UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

* Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unusable due to pumping issues

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	02/21/18	04/27/18	07/03/18	09/07/18
			Depth of Well BGS	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	6	5.9	4.3	4.3	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	1.1	0.68 J	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	0.74 J	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	6.2	6.9	4.6	6.2	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	2 J	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	1.3	1.5	U	1.3	
Chlorodifluoromethane (Freon 22)	75-45-6	---	8.8	NR	9.8	7	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	9.4	10.1	7.1	6.8	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	11.1	9.6 J	4.2	9.1	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	2.8	3.3	1.7	3.1	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	2.5	3.1	2.3	2.7	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	2.5	2.8	1.8	1.8	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			50.6	44.3	37.22	44.3	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

U Compound was analyzed for but not detected

J Estimated detection limit or value

UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

* Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unusable due to pumping issues

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	10/25/18	12/24/18	02/14/19	08/19/19	10/30/19	12/20/19
			Depth of Well BGS	399'	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l									
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	5.1	3.7	6.7	5.1	4.8	5.8	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0008 ST	U	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	1	0.65 J	1.1	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	6.4	3.9	7	5.3	5.6	5.7	
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U	U
Acetone	67-64-1	50 GV	J	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U	U
Benzene	71-43-2	1 ST	0.56 J	U	U	0.54 J	0.52 J	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	1.6	0.95 J	1.5	1.2	1.3	1.3	
Chlorodifluoromethane (Freon 22)	75-45-6	---	9.9	5.8	9.4	8.1	7.3	9.1	
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	7.7	5.6	10.3 J	7.9	8	9	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U	U
Dichlorodifluoromethane (Freon 21)	75-43-4	5 ST	10.3	8.3	14.6	13	12.8	14.7	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	3.8	1.7	3	2.2	2.7	2.4	
Toluene	108-88-3	5 ST	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	2.6	1.9	2.7	2.1	2	2.2	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	2.4	1.5	2.7	2.4	2.6	3.2	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U	U
Total Volatile Organic Compounds				51.36	34	59	47.84	47.62	53.4

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

U Compound was analyzed for but not detected

J Estimated detection limit or value

UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

* Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unsuable due to pumping issues

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-11	GM-11	GM-11	GM-11
			Sample_date	08/14/17	02/21/18	02/14/19	08/19/19
			Depth of Well BGS	285'	285'	285'	285'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds		---	0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-1S	GM-1S	GM-1S	GM-1S
			Sample_date	09/03/15	08/03/16	08/14/17	08/19/19
			Depth of Well BGS	135'	135'	135'	135'
			Depth to bottom screen, relative to MSL	19'	19'	19'	19'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS	NYSDEC CLASS GA					
COMPOUNDS	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Monitoring Well Sample Results
 Volatile Organic Compounds

			Sample ID	GM-2D	GM-2D	GM-2D	GM-2D
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	398'	398'	398'	398'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
	1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
	1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
	1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
	1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
	1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
	1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
	1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
	1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
	1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
	1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
	1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
	1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
	1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
	2-Hexanone	591-78-6	50 GV	U	U	U	U
	Acetone	67-64-1	50 GV	U	U	U	U
	Acrylonitrile	107-13-1	5 ST	U	U	U	U
	Benzene	71-43-2	1 ST	U	U	U	U
	Bromochloromethane	74-97-5	5 ST	U	U	U	U
	Bromodichloromethane	75-27-4	50 GV	U	U	U	U
	Bromoform	75-25-2	50 GV	U	U	U	U
	Bromomethane	74-83-9	5 ST	U	U	U	U
	Carbon Disulfide	75-15-0	60 GV	U	U	U	U
	Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
	Chlorobenzene	108-90-7	5 ST	U	U	U	U
	Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
	Chloroethane	75-00-3	5 ST	U	U	U	U
	Chloroform	67-66-3	7 ST	U	U	U	U
	Chloromethane	74-87-3	5 ST	U	U	U	U
	Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
	Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
	Dibromochloromethane	124-48-1	50 GV	U	U	U	U
	Dibromomethane	74-95-3	5 ST	U	U	U	U
	Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
	Ethylbenzene	100-41-4	5 ST	U	U	U	U
	Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
	Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
	Methylene Chloride	75-09-2	5 ST	U	U	U	U
	Styrene	100-42-5	5 ST	U	U	U	U
	Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
	Toluene	108-88-3	5 ST	U	U	U	U
	Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
	Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
	Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
	Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
	Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
	Vinyl Acetate	108-05-4	---	U	U	U	U
	Vinyl Chloride	75-01-4	2 ST	U	U	U	U
	Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds			---	0	0	0	0

+ Applies to each isomer individually **Exceeds Class GA Standard/Guidance value**
 NR Not reported ug/l Micrograms per liter
 U Compound was analyzed for but not detected BGS Below Ground Surface
 J Estimated detection limit or value MSL Mean Sea Level
 UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 ++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-21	GM-21	GM-21	GM-21
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	298'	298'	298'	298'
			Depth to bottom screen, relative to MSL	-136'	-136'	-136'	-136'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	Z	U	2.3	4.2	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	g	g	4	5.2	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	g	g	1.5	3.7	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				22	14	7.8	13.1

+ Applies to each isomer individually

~~Exceeds Class GA Standard/Guidance value~~

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	GM-2S	GM-2S	GM-2S	GM-2S
			Sample_date	09/01/15	08/08/16	08/14/17	08/23/19
			Depth of Well BGS	149'	149'	149'	149'
			Depth to bottom screen, relative to MSL	12'	12'	12'	12'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	UB	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	4 J	2.5	2.6	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	1 J	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	5	2.5	2.6	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	4G-1	4G-1	4G-1	4G-1
			Sample_date	08/11/17	05/25/18	09/04/18	08/16/19
			Depth of Well BGS	164'	164'	164'	164'
			Depth to bottom screen, relative to MSL	2'	2'	2'	2'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	UJ	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.1	2.6	2.1	2.5	
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	UB	UB	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	0.44 J	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	1.3	1.2	1.3	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	NR	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	NR	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds			1.1	3.9	3.3	4.24	

+ Applies to each isomer individually.

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	4G-2	4G-2	4G-2	4G-2
			Sample_date	05/26/18	02/16/18	02/11/19	08/16/19
			Depth of Well BGS	211'	211'	211'	211'
			Depth to bottom screen, relative to MSL	-45'	-45'	-45'	-45'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	4M-1	4M-1	4M-1	4M-1
			Sample_date	02/16/18	09/04/18	02/11/19	08/16/19
			Depth of Well BGS	325'	325'	325'	325'
			Depth to bottom screen, relative to MSL	-159'	-159'	-159'	-159'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	1.5	1.2	1.3	1.4	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	2.4	1.4	2.5	2.4	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	11.4	4.6	12.1	11.7	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	3.5 J	UB	1.6 J	4.5 J	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	3.2	2.9	3.1	2.9	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	3.6	3	3.9	3.6	
Chlorodifluoromethane (Freon 22)	75-45-6	---	6.6	5.3	6.4	6.2	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	1.5	1.2	1.8	2	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				33.7	19.6	32.7	34.7

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	4M-2	4M-2	4M-2	4M-2
			Sample_date	08/11/17	02/26/18	02/11/19	08/16/19
			Depth of Well BGS	486'	486'	486'	486'
			Depth to bottom screen, relative to MSL	-320'	-320'	-320'	-320'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	1.1	1.2	1.8	
1,1-Dichloroethene	75-35-4	5 ST	U		U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	1.5	4.1	5	6.9	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	1.6	4.6	6.4	7.2	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	1.2	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds		---	3.1	9.8	12.6	17.1	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	6G-1	6G-1	6G-1	6G-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			Depth of Well BGS	147'	147'	147'	147'
			Depth to bottom screen, relative to MSL	32'	32'	32'	32'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	6G-2	6G-2	6G-2	6G-2
			Sample_date	08/09/17	02/28/18	02/14/19	08/15/19
			Depth of Well BGS	230'	230'	230'	230'
			Depth to bottom screen, relative to MSL	-53'	-53'	-53'	-53'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

U Compound was analyzed for but not detected

J Estimated detection limit or value

UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	6G-3	6G-3	6G-3	6G-3
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			Depth of Well BGS	315'	315'	315'	315'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	3	3.9	3.7	3.6	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	1.4	2	1.8	1.5	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			4.4	5.9	5.5	5.1	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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		Sample ID	6M-1	6M-1	6M-1	6M-1
		Sample_date	09/02/15	08/11/16	08/09/17	08/15/19
		Depth of Well BGS	545'	545'	545'	545'
		Depth to bottom screen, relative to MSL	-368'	-368'	-368'	-368'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l						
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	UB	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	UJ	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported ug/l Micrograms per liter
 U Compound was analyzed for but not detected BGS Below Ground Surface
 J Estimated detection limit or value MSL Mean Sea Level
 UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 ++ Applies to sum of isomer

Appendix B-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Monitoring Well Sample Results
 Volatile Organic Compounds

			Sample ID	7M-1	7M-1	7M-1	7M-1
			Sample_date	08/10/17	02/23/18	02/12/19	08/20/19
			Depth of Well BGS	214'	214'	214'	214'
			Depth to bottom screen, relative to MSL	-152'	-152'	-152'	-152'
			Gradient relative to MSW	CROSS	CROSS	CROSS	CROSS
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	2.9	1.3	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	0.43 J	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	1.4	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds				4.3	1.73	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported ug/l Micrograms per liter
 U Compound was analyzed for but not detected BGS Below Ground Surface
 J Estimated detection limit or value MSL Mean Sea Level
 UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 ++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	BGS-1	BGS-1	BGS-1	BGS-1
			Sample_date	08/14/17	02/27/18	02/16/19	05/18/19
			Depth of Well BGS	114'	114'	114'	114'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	8M-1	8M-1	8M-1	8M-1
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			Depth of Well BGS	270'	270'	270'	270'
			Depth to bottom screen, relative to MSL	-134'	-134'	-134'	-134'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	08/14/17	02/27/16	02/16/19	08/19/19
			Depth of Well BGS	383'	383'	383'	383'
			Depth to bottom screen, relative to MSL	-249'	-248'	-248'	-248'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorodifluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	9G-1	9G-1	9G-1	9G-1
			Sample_date	08/09/16	08/08/17	09/07/18	08/20/19
			Depth of Well BGS	68'	68'	68'	66'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	UP	UP	UP	UP
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l			10G-1 08/14/15 33' 20' DOWN	10G-1 08/10/16 69' 20' DOWN	10G-1 08/10/17 69' 20' DOWN	10G-1 08/21/19 69' 20' DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds			0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	10M-1	10M-1	10M-1	10M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			Depth of Well BGS	256	256	256	256
			Depth to bottom screen, relative to MSL	-167	-167	-167	-167
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	1.4	1.6	1.3	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	1.5	1.8	1.7	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	1.3	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	1.5	2	1.8	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	1.6	1.9	1.1	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	UJ	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			1.6	7.6	6.5	4.8	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	11G-1	11G-1	11G-1	11G-1
			Sample_date	05/24/18	08/31/18	02/13/19	08/14/19
			Depth of Well BGS	145'	145'	145'	145'
			Depth to bottom screen, relative to MSL	22'	22'	22'	22'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
	1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
	1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
	1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
	1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
	1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
	1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
	1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
	1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
	1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
	1,2-Dichlorobenzene	95-50-1	3 ST++	1.1	1.1	U	U
	1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
	1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
	1,4-Dichlorobenzene	106-46-7	3 ST++	4.3	4.9	3.9	3.8
	2-Hexanone	591-78-6	50 GV	U	U	U	U
	Acetone	67-64-1	50 GV	UB	3.8 J	2 J	U
	Acrylonitrile	107-13-1	5 ST	U	U	U	U
	Benzene	71-43-2	1 ST	U	U	0.97 J	U
	Bromochloromethane	74-97-5	5 ST	U	U	U	U
	Bromodichloromethane	75-27-4	50 GV	U	U	U	U
	Bromoform	75-25-2	50 GV	U	U	U	U
	Bromomethane	74-83-9	5 ST	U	U	U	U
	Carbon Disulfide	75-15-0	60 GV	U	U	U	U
	Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
	Chlorobenzene	108-90-7	5 ST	1.2	1.3	1.2	1.1
	Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U
	Chloroethane	75-00-3	5 ST	U	U	U	U
	Chloroform	67-66-3	7 ST	U	U	U	U
	Chloromethane	74-87-3	5 ST	U	U	U	U
	Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
	Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
	Dibromochloromethane	124-48-1	50 GV	U	U	U	U
	Dibromomethane	74-95-3	5 ST	U	U	U	U
	Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U
	Ethylbenzene	100-41-4	5 ST	U	U	U	U
	Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ
	Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
	Methylene Chloride	75-09-2	5 ST	U	U	U	U
	Styrene	100-42-5	5 ST	U	U	U	U
	Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
	Toluene	108-88-3	5 ST	U	U	U	U
	Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
	Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ
	Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
	Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
	Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				6.6	11.1	8.07	4.9

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

			Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	05/24/18	08/31/18	02/13/19	08/14/19
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-51	-51	-51	-51
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	2.3	2.2	2.8	2.7	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	5.3	3.5	5	4.1	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	27.7	15.1	26.7	20.2	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	4.8 J	2.2 J	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	2.4	2.3	2.5	1.6	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	6.5	5.1	5.7	4.2	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	8.2	7.2	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	1.3	U	1.8	2	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	8.1	10.3	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	1.3	2.6	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	1.3	2.1	1.7	1.9	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				46.8	35.1	66	56.8

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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		Sample ID	11M-1	11M-1	11M-1	11M-1
		Sample_date	08/19/15	08/06/16	08/02/17	08/14/19
		Depth of Well BGS	320'	320'	320'	320'
		Depth to bottom screen, relative to MSL	-154'	-154'	-154'	-154'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l						
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	1 J	2 J	U	1.6
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	2 J	U	1.8
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	2 J	3 J	U	2.9
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	3 J	4 J	1.9	4.1
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	4 J	5	1.7	5.7
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	2 J	3 J	1.3	2.6
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	1 J	2 J	U	1.6
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	1 J	1 J	U	1.2
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	14	22	4.9	21.5

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			Depth of Well BGS	338'	338'	338'	338'
			Depth to bottom screen, relative to MSL	-163'	-163'	-163'	-163'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	1.4	2.4	2.3	2.4	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	1.2	9.9	10.3	10.4	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	5.3	5.5	5.1	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	1.8	1.6	1.4	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	2	1.3 J	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				2.6	21.4	21	19.3

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	13G-1	13G-1	13G-1	13G-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			Depth of Well BGS	93'	93'	93'	93'
			Depth to bottom screen, relative to MSL	17'	17'	17'	17'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported ug/l Micrograms per liter
 U Compound was analyzed for but not detected BGS Below Ground Surface
 J Estimated detection limit or value MSL Mean Sea Level
 UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 ++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	13M-1	13M-1	13M-1	13M-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			Depth of Well BGS	265'	265'	265'	265'
			Depth to bottom screen, relative to MSL	-155	-155	-155	-155
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	3.3	3.3	2.7	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	5.8	6	4.7	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	1.4	1.2	1	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	3.5	3.6	3.2	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	5.7	5.7	4.8	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	5.9	6.9	6	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	7.8	7.9	7.8	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	2.6	1.8	1.7	
Trichlorofluoromethane	75-69-4	5 ST	U	1	1.3	1.3	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	37	37.7	33.2	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	05/21/18	02/14/18	02/11/19	08/13/19
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-58	-58	-58	-58
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	UJ	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			0	0	0	0	

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

U Compound was analyzed for but not detected

J Estimated detection limit or value

UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

			Sample ID	14G-2	14G-2	14G-2	14G-2
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			Depth of Well BGS	264'	264'	264'	264'
			Depth to bottom screen, relative to MSL	-103	-103	-103	-103
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	UJ	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	14M-1	14M-1	14M-1	14M-1
			Sample_date	05/21/18	09/05/18	02/11/19	08/13/19
			Depth of Well BGS	355'	355'	355'	355'
			Depth to bottom screen, relative to MSL	-194'	-194'	-194'	-194'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	6.7	5	6.8	5.9	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	UJ	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	2.7	1.6	2.9	2.6	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	13.2	6.2	14.3	12.3	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	5.6	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	0.99 J	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	3.2	2.3	3	2.8	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	8.4	10.7	9.6	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	3.2	2.7	3.3	3	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	5.9	9	7.7	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	1	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				29.99	37.7	50	44.9

+ Applies to each isomer individually **Exceeds Class GA Standard/Guidance value**

NR Not reported ug/l Micrograms per liter
U Compound was analyzed for but not detected BGS Below Ground Surface
J Estimated detection limit or value MSL Mean Sea Level
UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	15G-1	15G-1	15G-1	15G-1
			Sample_date	08/19/15	08/09/16	08/14/17	08/15/19
			Depth of Well BGS	160'	160'	160'	160'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	UB	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds				0	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	16G-1	16G-1	16G-1	16G-1
			Sample_date	08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS	57'	57'	57'	57'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			---	0	0	0	0
+ Applies to each isomer individually			Exceeds Class GA Standard/Guidance value				

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported ug/l Micrograms per liter
U Compound was analyzed for but not detected BGS Below Ground Surface
J Estimated detection limit or value MSL Mean Sea Level
UB Qualified as non detect (U) due to blank results MSW Municipal Solid Waste
GV Guidance Value
ST Standard
++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-163	-163	-163	-163
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS	NYSDEC CLASS GA					
	Number	GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	0.68 J	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	3.1	3.4	2.6	2	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	UJ	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				3.78	3.4	2.6	2

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	18G-1	18G-1	18G-1	18G-1
			Sample_date	05/21/18	02/16/18	02/13/19	08/13/19
			Depth of Well BGS	157'	157'	157'	157'
			Depth to bottom screen, relative to MSL	11'	11'	11'	11'
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	2.1	2	1.4	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	UJ	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds			---	2.1	2	1.4	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	05/21/18	09/06/18	02/13/19	08/13/19
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	1.4	U	1.1	1	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	NR	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	NR	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	UJ	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				1.4	0	1.1	1

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	22M-1	22M-1	22M-1	22M-1
			Sample_date	02/26/18	09/05/18	02/12/19	08/16/19
			Depth of Well BGS	222'	222'	222'	222'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	UP	UP	UP	UP
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	1.4 J	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds		---	0	1.4	0	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

U Compound was analyzed for but not detected

J Estimated detection limit or value

UB Qualified as non detect (U) due to blank results

ug/l Micrograms per liter

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

Appendix B-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

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			Sample ID	23M-1	23M-1	23M-1	23M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/14/19
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	UB	U	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	UJ	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	1	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds				0	1	0	0

+ Applies to each isomer individually

Exceeds Class GA Standard/Guidance value

NR Not reported

ug/l Micrograms per liter

U Compound was analyzed for but not detected

BGS Below Ground Surface

J Estimated detection limit or value

MSL Mean Sea Level

UB Qualified as non detect (U) due to blank results

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

++ Applies to sum of isomer

APPENDIX B-2

MONITORING WELL SAMPLE RESULTS - INORGANIC PARAMETERS

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
Units in ug/l			10/24/16	04/05/17	06/09/17	08/04/17	10/27/17
			399'	399'	399'	399'	399'
			-247'	-247'	-247'	-247'	-247'
			DOWN	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--	U	36.2 J	U	UB	UB
Antimony	7440-38-0	3 ST	U	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U	U
Barium	7440-39-3	1000 ST	U	38 J	11.9 J	6.3 J	3.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U	U
Boron	7440-42-8	1000 ST	168	205	315	331	318
Cadmium	7440-43-0	5 ST	U	0.34 J	0.074 J	U	U
Calcium	7440-70-2	--	46200	48400	88400	95500	92900
Chromium, Hexavalent	12503-29-9	50 ST	U	U	U	U	U
Chromium, Total	7440-47-3	50 ST	U	U	U	U	U
Cobalt	7440-49-4	--	U	4.6 J	1.6 J	0.96 J	U
Copper	7440-50-9	200 ST	U	U	145	U	U
Cyanide	57-12-5	200 ST	U	U	U	U	U
Iron	7439-89-6	300 ST#	U	125	65.2 J	UB	145
Lead	7439-92-1	25 ST	U	3.4 J	U	5.2	U
Magnesium	7429-95-4	35000 GV	28100	33400	56200	60400	60100
Manganese	7439-96-5	300 ST#	416	327	98	39.4	20.5
Mercury	7439-97-6	0.7 ST	U	U	U	UB	U
Nickel	7440-02-0	100 ST	U	11.2 J	11.4 J	9.6 J	9.2 J
Potassium	7440-09-7	--	6800	6960	6460	6100	5360
Selenium	7782-49-2	10 ST	U	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U	U
Sodium	7440-23-5	20000 ST	60300	71600	142000	154000	147000
Thallium	7440-28-0	0.5 GV	U	U	U	U	U
Vanadium	7440-62-2	--	U	U	0.82 J	U	U
Zinc	7440-66-6	2000 GV	U	9.6 J	255	UB	6.2 J

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated detection limit or value
J+ Estimated bias low
J- Estimated bias high
B Detected between the IDL and CRDL
IDL Instrument Detection Limit
CRDL Contract Required Detection Limit
D Detected at secondary dilution
UB Qualified as non detect (U) based on blank results
-- No ST or GV
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
* Collected under pumping conditions
NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			GM-1D* 12/13/17 399' -247' DOWN	GM-1D* 02/21/18 399' -247' DOWN	GM-1D* 04/27/18 399' -247' DOWN	GM-1D* 07/03/18 399' -247' DOWN	GM-1D* 09/07/18 399' -247' DOWN	GM-1D* 10/25/18 399' -247' DOWN
Units in ug/l								
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Aluminum	7429-90-5	--	U	U	25.5 J	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	7.2 J	U	U	U
Barium	7440-39-3	1000 ST	3.1 J	2.5 J	2.6 J	2.5 J	2.5 J	2.4 J
Beryllium	7440-41-7	3 GV	U	U	U	U	U	U
Boron	7440-42-8	1000 ST	341	330	330	335	318	354
Cadmium	7440-43-9	5 ST	U	U	0.10 J	U	U	U
Calcium	7440-70-2	--	95800	93700	94800	95400	98500	99200
Chromium, Hexavalent	18540-29-9	50 ST	U	U	5.6 J	U	U	U
Chromium, Total	7440-47-3	50 ST	U	U	4.3 J	U	U	U
Cobalt	7440-48-4	--	U	2 J	U	U	U	U
Copper	7440-50-8	200 ST	2.9 J	1.5 J	41.1	U	U	11. J
Cyanide	57-12-5	200 ST	U	U	U	U	U	U
Iron	7439-89-6	300 ST#	232	178	171	533	368	474
Lead	7439-92-1	25 ST	U	U	U	U	U	U
Magnesium	7439-95-4	35000 GV	63200	62200	62500	62500	63800	64500
Manganese	7439-96-5	300 ST#	18	16.2	16.3	17.1	18.8	19.2
Mercury	7439-97-6	0.7 ST	U	UB	U	U	UB	U
Nickel	7440-02-0	100 ST	9.7 J	34.5 J	30.6 J	9.5 J	8.9 J	11.2 J
Potassium	7440-09-7	--	6340	5350	6260	5380	5030	5950
Selenium	7782-49-2	10 ST	U	U	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U	U	U
Sodium	7440-23-5	20000 ST	157000	151000	159000	159000	168000	174000
Thallium	7440-28-0	0.5 GV	U	UB	8.1 J	U	U	U
Vanadium	7440-62-2	--	U	U	0.86 J	U	UB	U
Zinc	7440-66-6	2000 GV	4.2 J	4.4 J	69.1	9.6 J	UB	7.5 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			GM-1D* 12/24/18 399' -247' DOWN	GM-1D* 02/14/19 399' -247' DOWN	GM-1D* 08/19/19 399' -247' DOWN	GM-1D* 10/30/19 399' -247' DOWN	GM-1D* 12/20/19 399' -247' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--	24.8 J	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U	U
Barium	7440-39-3	1000 ST	2.4 J	2.5 J	U	3.4 J	2.5 J
Beryllium	7440-41-7	0 GV	U	U	U	U	U
Boron	7440-42-8	1000 ST	343	358	UB	316	307
Cadmium	7440-43-0	5 ST	U	UB	U	U	U
Calcium	7440-70-2	--	97200	101000	86200	90300	89300
Chromium, Hexavalent	18540-28-9	50 ST	U	U	U	U	U
Chromium, Total	7440-47-3	50 ST	1.9 J	U	U	U	2.1 J
Cobalt	7440-48-4	--	U	0.66 J	U	U	U
Copper	7440-50-9	200 ST	U	4.3 J	U	5.6 J	U
Cyanide	57-12-5	200 ST	U	5.6 J	U	U	2.9 J
Iron	7439-89-8	300 ST#	388	375	47.9	370	75
Lead	7439-92-1	25 ST	U	U	4.8 J	U	U
Magnesium	7439-95-1	25000 GV	64000	66200	55400 J	59000	58700
Manganese	7439-96-6	300 ST#	17.4	19.3	13.8	17.3	15.1
Mercury	7439-97-6	0.7 ST	U	U	U	U	U
Nickel	7440-02-0	100 ST	11.4 J	11.8 J	9.8 J	30.2 J	21 J
Potassium	7440-09-7	--	5680	6280	6010	5870	4940
Selenium	7782-49-2	10 ST	U	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U	U
Sodium	7440-23-5	20000 ST	180000	180000	150000	156000	149000
Thallium	7440-28-0	0.5 GV	U	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U	U
Zinc	7440-66-6	2000 GV	5 J	6 J	178	316	199

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated detection limit or value
J+ Estimated bias low
J- Estimated bias high
B Detected between the IDL and CRDL
IDL Instrument Detection Limit
CRDL Contract Required Detection Limit
D Detected at secondary dilution
UB Qualified as non detect (U) based on blank results
-- No ST or GV
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
Standard for total iron and manganese is 500 ug/l

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			GM-11 08/14/17 285' -138' DOWN	GM-11 02/21/18 285' -138' DOWN	GM-11 02/14/19 285' -138' DOWN	GM-11 03/19/19 285' -138' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	88.4 J	U	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	28.5 J	24.7 J	24.3 J	23.6 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	130	136	138	UB
Cadmium	7440-43-9	5 ST	0.22 J	U	UB	U
Calcium	7440-70-2	--	46700	45300	39700	42200
Chromium, Hexavalent	18540-29-9	50 ST	UJ	U	U	U
Chromium, Total	7440-47-3	50 ST	5.2 J	U	2.2 J	U
Cobalt	7440-48-4	--	4.5 J	5.3 J	3.9 J	U
Copper	7440-50-8	200 ST	5.1 J	0.75 J	U	U
Cyanide	57-12-5	200 ST	U	U	3.7 J	U
Iron	7439-89-6	300 ST#	195 J	43.7	13.6 J	11 J
Lead	7439-92-1	25 ST	3.2 J	U	U	5
Magnesium	7439-95-4	35000 GV	29400	27900	23800	24800 J
Manganese	7439-96-5	300 ST#	8.9 J	U	U	U
Mercury	7439-97-6	0.7 ST	0.031 J	U	U	U
Nickel	7440-02-0	100 ST	13.2 J	29.8 J	8.6 J	8.5 J
Potassium	7440-09-7	--	3640 J	2980 J	3340 J	4180 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	50500	52600	61000	57100
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	1.9 J	U	0.99 J	U
Zinc	7440-66-6	2000 GV	19.4 J	3.9 J	1.5 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW Units in ug/l			GM-1S 09/03/15 135' 19' DOWN	GM-1S 05/03/16 135' 19' DOWN	GM-1S 08/14/17 135' 19' DOWN	GM-1S 09/19/19 135' 19' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	816	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	19.3 B	17.9 J	22.7 J	22.6 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	138	126	134	UB
Cadmium	7440-43-9	5 ST	UB	U	2.8	U
Calcium	7440-70-2	--	43100	39600	38200	47000
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	U
Chromium, Total	7440-47-3	50 ST	U	U	21.9	U
Cobalt	7440-48-4	--	4.5 B	4.1 J	8.5 J	U
Copper	7440-50-8	200 ST	UB	0.8 J	6.9 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	U	1090 J	20.5
Lead	7439-92-1	25 ST	6.1	8.3	7.7	4.9 J
Magnesium	7439-95-4	35000 GV	25400	23000	22200	26400 J
Manganese	7439-96-5	300 ST#	0.7 B	U	58.6	U
Mercury	7439-97-6	0.7 ST	UB	U	0.032 J	U
Nickel	7440-02-0	100 ST	10.9 B	15.4 J	47.8	21.8 J
Potassium	7440-09-7	--	4970 B	3130 J	4810 J	5770
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	UBJ	U	U	U
Sodium	7440-23-5	20000 ST	51300	57400 J	48400	66200
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	2.3 J	U
Zinc	7440-66-6	2000 GV	7.7 B	UB	30.7	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			GM-2D 09/01/15 398' -248' DOWN	GM-2D 08/08/16 398' -248' DOWN	GM-2D 08/14/17 398' -248' DOWN	GM-2D 08/20/19 398' -248' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	151 J	U
Antimony	7440-36-0	3 ST	UB	UB	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	1.8 B	U	4 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	7.6 J	UB	UB
Cadmium	7440-43-9	5 ST	U	U	0.32 J	U
Calcium	7440-70-2	--	5180 J	4960	4980	4980
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	UB	U	18.4	U
Cobalt	7440-48-4	--	0.3 B	0.5 J	0.79 J	U
Copper	7440-50-8	200 ST	3.9 B	U	4.8 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	135	112	461 J	114
Lead	7439-92-1	25 ST	2.6 BJ	1.7 J	1.6 J	3.7 J
Magnesium	7439-95-4	35000 GV	1950 BJ	1900	1830	1870 J
Manganese	7439-96-5	300 ST#	9.8 BJ	8.8 J	36.4	8.8 J
Mercury	7439-97-6	0.7 ST	UJ	UB	0.025 J	U
Nickel	7440-02-0	100 ST	U	U	15.5 J	U
Potassium	7440-09-7	--	UBJ	U	1240 J	U
Selenium	7782-49-2	10 ST	UJ	UJ	U	U
Silver	7440-22-4	50 ST	UJ	U	U	U
Sodium	7440-23-5	20000 ST	3450 BJ	849 J	2890 J	4340 J
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	18.2 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			GM-2I 09/01/15 280' -136' DOWN	GM-2I 08/08/16 298' -136' DOWN	GM-2I 09/04/17 285' -136' DOWN	GM-2I 09/29/19 289' -136' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	152 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	3.4 B	U	6.5 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	9 J	UB	UB
Cadmium	7440-43-9	5 ST	U	U	0.15 J	U
Calcium	7440-70-2	--	32500 J	30100	31900	35700
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	UB	U	4.3 J	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	U	14.1 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	U	352 J	U
Lead	7439-92-1	25 ST	2.5 BJ	2.6 J	2.9 J	2.8 J
Magnesium	7439-95-4	35000 GV	16700 J	15900	16700	18300 J
Manganese	7439-96-5	300 ST#	UBJ	U	22.9	U
Mercury	7439-97-6	0.7 ST	UJ	UB	0.031 J	U
Nickel	7440-02-0	100 ST	U	U	3.8 J	U
Potassium	7440-09-7	--	1940 BJ	668 J	2190 J	2970 J
Selenium	7782-49-2	10 ST	UJ	UJ	U	5 J
Silver	7440-22-4	50 ST	UJ	U	U	U
Sodium	7440-23-5	20000 ST	10100 J	11800 J	10800	14400
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	6.3 B	4.3 J	5.7 J	U
Zinc	7440-66-6	2000 GV	UB	U	18.3 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			GM-2S 09/01/15 149' 12' DOWN	GM-2S 03/03/16 149' 12' DOWN	GM-2S 08/14/17 149' 12' DOWN	GM-2S 08/20/19 149' 12' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	242	U	314	U
Antimony	7440-36-0	3 ST	UB	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	13.4 B	16 J	18.8 J	20.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	16.1 J	UB	UB
Cadmium	7440-43-9	5 ST	0.4 B	U	UB	U
Calcium	7440-70-2	--	12900 J	14000	13800	16700
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	6.4 J	U
Cobalt	7440-48-4	--	0.5 B	U	U	U
Copper	7440-50-8	200 ST	UB	U	4.6 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	130	U	861	U
Lead	7439-92-1	25 ST	3.5 J	3.2 J	4.8 J	3.6 J
Magnesium	7439-95-4	35000 GV	5480 J	5960	5840	6960 J
Manganese	7439-96-5	300 ST#	11.3 BJ	U	48.5	4.6 J
Mercury	7439-97-6	0.7 ST	UJ	UB	U	U
Nickel	7440-02-0	100 ST	UB	3.2 J	8.5 J	6.1 J
Potassium	7440-09-7	--	1790 BJ	860 J	1920 J	U
Selenium	7782-49-2	10 ST	UJ	UJ	U	U
Silver	7440-22-4	50 ST	1.1 BJ-	U	U	U
Sodium	7440-23-5	20000 ST	6740 J	7700 J	7320	11400
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	1.2 J	U
Zinc	7440-66-6	2000 GV	UB	U	21.6	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW Units in ug/l			4G-1 08/11/17 164' 2' DOWN	4G-1 02/21/18 164' 2' DOWN	4G-1 09/04/18 164' 2' DOWN	4G-1 08/16/19 164' 2' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	78.4 J	NR	26.3 J	U
Antimony	7440-36-0	3 ST	U	NR	U	U
Arsenic	7440-38-2	25 ST	U	NR	U	U
Barium	7440-39-3	1000 ST	128 J	NR	184 J	190 J
Beryllium	7440-41-7	3 GV	U	NR	U	U
Boron	7440-42-8	1000 ST	179	NR	386	UB
Cadmium	7440-43-9	5 ST	UB	U	U	U
Calcium	7440-70-2	--	11500	20800	19700	17500
Chromium, Hexavalent	18540-29-9	50 ST	U	NR	UJ	U
Chromium, Total	7440-47-3	50 ST	U	NR	2.6 J	U
Cobalt	7440-48-4	--	11.2 J	NR	10.8 J	10.2 J
Copper	7440-50-8	200 ST	5 J	NR	U	6.5 J
Cyanide	57-12-5	200 ST	U	NR	U	2.1 J
Iron	7439-89-6	300 ST#	5780	11400	9450	7170
Lead	7439-92-1	25 ST	3.1 J	UB	U	U
Magnesium	7439-95-4	35000 GV	5400	9280	9550	8120
Manganese	7439-96-5	300 ST#	6430	8020	5940	5280
Mercury	7439-97-6	0.7 ST	UJ	NR	U	U
Nickel	7440-02-0	100 ST	21 J	NR	35.7 J	45.8
Potassium	7440-09-7	--	13700	16200	25800	27200
Selenium	7782-49-2	10 ST	U	NR	U	U
Silver	7440-22-4	50 ST	U	NR	U	U
Sodium	7440-23-5	20000 ST	84500	123000	142000	121000
Thallium	7440-28-0	0.5 GV	8.4 J	NR	U	U
Vanadium	7440-62-2	--	U	NR	1.5 J	U
Zinc	7440-66-6	2000 GV	20.7	NR	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			4G-2 08/11/17 211' -45' DOWN	4G-2 02/16/18 211' -45' DOWN	4G-2 02/11/19 211' -45' DOWN	4G-2 08/16/19 211' -45' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	266	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	6.5 J	U	U
Barium	7440-39-3	1000 ST	132 J	85.4 J	77.1 J	94.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	142	128	116	UB
Cadmium	7440-43-9	5 ST	UB	U	U	U
Calcium	7440-70-2	--	37200	32500	28500	34400
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	U
Chromium, Total	7440-47-3	50 ST	3.6 J	U	U	U
Cobalt	7440-48-4	--	5.5 J	3.1 J	3.6 J	3.8 J
Copper	7440-50-8	200 ST	10.3 J	4.2 J	3.5 J	8.9 J
Cyanide	57-12-5	200 ST	U	U	9.2 J	U
Iron	7439-89-6	300 ST#	2490	182	210	126
Lead	7439-92-1	25 ST	3.9 J	U	1.9 J	U
Magnesium	7439-95-4	35000 GV	9240	8050	7100	7960
Manganese	7439-96-5	300 ST#	7040	4870	4110	4420
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	U
Nickel	7440-02-0	100 ST	18.8 J	28.8 J	10.4 J	25.2 J
Potassium	7440-09-7	--	11500	9850	8810	11600
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	85200	81900	94400	98600
Thallium	7440-28-0	0.5 GV	6 J	U	6 J	U
Vanadium	7440-62-2	--	U	U	UB	U
Zinc	7440-66-6	2000 GV	40.3	5.4 J	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			4M-1 02/16/18 325' -159' DOWN	4M-1 09/04/18 325' -159' DOWN	4M-1 02/11/19 325' -159' DOWN	4M-1 08/16/19 325' -159' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	46.5 J	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	20.3	16.8	20.2	UB
Barium	7440-39-3	1000 ST	18.4 J	8.5 J	16.9 J	17.1 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	1620	1580	1620	1650
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	50900	37600	48000	47500
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	UJ	U
Chromium, Total	7440-47-3	50 ST	2.8 J	5.7 J	3.9 J	U
Cobalt	7440-48-4	--	21 J	19.4 J	23.9 J	24.1 J
Copper	7440-50-8	200 ST	6 J	UB	4.6 J	8.4 J
Cyanide	57-12-5	200 ST	U	U	3.5 J	4 J
Iron	7439-89-6	300 ST#	1100	1760	1060	949
Lead	7439-92-1	25 ST	U	U	1.8 J	U
Magnesium	7439-95-4	35000 GV	49000	37100	46000	44900
Manganese	7439-96-5	300 ST#	1750	1300	1670	1640
Mercury	7439-97-6	0.7 ST	UB	U	U	U
Nickel	7440-02-0	100 ST	185	128	153	177
Potassium	7440-09-7	--	96800	96400	92800	103000
Selenium	7782-49-2	10 ST	5.2 J	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	373000	391000	406000	372000
Thallium	7440-28-0	0.5 GV	UB	U	U	U
Vanadium	7440-62-2	--	3.8 J	5.2 J	UB	U
Zinc	7440-66-6	2000 GV	U	UB	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Monitoring Well Sample Results
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Sample ID			4M-2	4M-2	4M-2	4M-2
Sample_date			08/11/17	02/26/18	02/11/19	08/16/19
Depth of Well BGS			486'	486'	486'	486'
Depth to bottom screen, relative to MSL			-320'	-320'	-320'	-320'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	101 J	UB	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	6.9 J	3.6 J	3.6 J	4 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	62.4	UB	50.6	UB
Cadmium	7440-43-8	5 ST	UB	U	U	U
Calcium	7440-70-2	--	62800	59500	61700	65400
Chromium, Hexavalent	16510-29-9	50 ST	U	U	UJ	U
Chromium, Total	7440-47-2	50 ST	1.6 J	U	U	U
Cobalt	7440-48-4	--	3.4 J	2.9 J	3 J	3.4 J
Copper	7440-50-8	200 ST	5.1 J	UB	U	U
Cyanide	57-12-5	200 ST	U	U	2.8 J	2.1 J
Iron	7439-39-8	300 ST#	1490	1530 J	1560	1580
Lead	7439-92-1	25 ST	2.2 J	U	U	U
Magnesium	7439-95-4	35000 GV	35600	33400	34400	36900
Manganese	7439-96-5	300 ST#	56.6	18.2	UB	21.5
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	U
Nickel	7440-02-0	100 ST	13.6 J	25.1 J	9.2 J	25.4 J
Potassium	7440-08-7	--	4540 J	3870 J	3490 J	5520
Selenium	7782-49-2	10 ST	U	7.2 J	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	169000	166000	188000	189000
Thallium	7440-28-6	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	26.1	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			6G-1 08/09/17 147' 32' DOWN	6G-1 02/22/18 147' 32' DOWN	6G-1 02/14/19 147' 32' DOWN	6G-1 08/15/19 147' 32' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	6160	UB	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	61.3 J	15.7 J	11.7 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	63.5	81.4	UB	31.4 J
Cadmium	7440-43-9	5 ST	0.25 J	U	UB	U
Calcium	7440-70-2	--	17300	14700	14300	13700
Chromium, Hexavalent	18540-29-9	50 ST	UJ	4.1 J	U	UJ
Chromium, Total	7440-47-3	50 ST	1930	UB	5.2 J	U
Cobalt	7440-48-4	--	24.9 J	0.84 J	U	U
Copper	7440-50-8	200 ST	47.5	UB	U	U
Cyanide	57-12-5	200 ST	U	UJ	3.7 J	2.1 J
Iron	7439-89-6	300 ST#	17400	47.6	78.8	U
Lead	7439-92-1	25 ST	13.8	U	U	U
Magnesium	7439-95-4	35000 GV	6930	4820	4550	4690
Manganese	7439-96-5	300 ST#	1130	UB	3 J	U
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	114	16.9 J	4.9 J	UB
Potassium	7440-09-7	--	4950 J	4330 J	3450 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	46400	54200	24000	27500
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	23.6 J	U	U	U
Zinc	7440-66-6	2000 GV	33.2	U	3.6 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Monitoring Well Sample Results
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			6G-2 08/09/17 230' -53' DOWN	6G-2 02/23/18 230' -53' DOWN	6G-2 02/14/19 230' -53' DOWN	6G-2 08/15/19 230' -53' DOWN
Units in ug/l						
		NYSDEC CLASS GA GROUNDWATER ST/GV				
METALS	CAS Number					
Aluminum	7429-90-5	--	UB	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	48.2 J	39.8 J	42.3 J	46.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	111	120	120	111
Cadmium	7440-43-9	5 ST	0.16 J	U	UB	U
Calcium	7440-70-2	--	22400	22100	23500	27200
Chromium, Hexavalent	18540-29-9	50 ST	UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	9.5 J	6.8 J	8 J	5.4 J
Copper	7440-50-8	200 ST	3.4 J	1.1 J	U	U
Cyanide	57-12-5	200 ST	4.7 J	U	UJ	2.8 J
Iron	7439-89-6	300 ST#	132	U	U	12.6 J
Lead	7439-92-1	25 ST	3.3 J	U	U	U
Magnesium	7439-95-4	35000 GV	8580	8510	9220	10300
Manganese	7439-96-5	300 ST#	347	96.5	77	81.7
Mercury	7439-97-6	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	6.8 J	5 J	5.9 J	UB
Potassium	7440-09-7	--	2580 J	1840 J	1970 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	85100	84800	93300	91200
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	2.1 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			6G-3 08/09/17 315' -138' DOWN	6G-3 02/28/18 315' -138' DOWN	6G-3 02/14/19 315' -138' DOWN	6G-3 05/15/19 315' -138' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	101 J	49.9 J	46.3 J	48.7 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	227	246	214	198
Cadmium	7440-43-9	5 ST	U	U	UB	U
Calcium	7440-70-2	--	40000	38800	37200	39400
Chromium, Hexavalent	18540-29-9	50 ST	UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	36.8 J	6 J	5.5 J	5.3 J
Copper	7440-50-8	200 ST	2.9 J	5 J	U	U
Cyanide	57-12-5	200 ST	U	U	UJ	U
Iron	7439-89-6	300 ST#	1910	170	141	130
Lead	7439-92-1	25 ST	5.3	2.6 J	2.7 J	U
Magnesium	7439-95-4	35000 GV	22700	22300	21300	22000
Manganese	7439-96-5	300 ST#	5730	4710	3550	3760
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	18.4 J	15.7 J	12.5 J	13.2 J
Potassium	7440-09-7	--	9600	8760	8460	8220
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	41000	43800	42600	46400
Thallium	7440-28-0	0.5 GV	UB	UB	4.6 J	6.4 J
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	42.3	U	2.3 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			6M-1 05/02/15 545' -368' DOWN	6M-1 02/11/15 545' -368' DOWN	6M-1 03/03/17 545' -368' DOWN	6M-1 08/15/19 545' -368' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	26.7 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	2.5 B	U	U	U
Barium	7440-39-3	1000 ST	9 B	U	12.4 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	44 B	41.5 J	46 J	33.4 J
Cadmium	7440-43-9	5 ST	U	U	UB	U
Calcium	7440-70-2	--	13000	13200	13000	16100
Chromium, Hexavalent	18540-29-9	50 ST	U	U	14 J	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	1.6 B	1.1 J	1.8 J	U
Copper	7440-50-8	200 ST	UB	U	U	U
Cyanide	57-12-5	200 ST	U	UJ	U	2.1 J
Iron	7439-89-6	300 ST#	94.4 B	155	183	102
Lead	7439-92-1	25 ST	5.8	3.1 J	U	U
Magnesium	7439-95-4	35000 GV	9190	9240	9100	10400
Manganese	7439-96-5	300 ST#	84.6	75.4	248	73
Mercury	7439-97-6	0.7 ST	U	UJ	UJ	U
Nickel	7440-02-0	100 ST	3 B	2.9 J	4.2 J	UB
Potassium	7440-09-7	--	1880 B	1030 J	2110 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	UBJ	UJ	U	U
Sodium	7440-23-5	20000 ST	18100	19500	18600	19500
Thallium	7440-28-0	0.5 GV	2.8 B	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	U	U	9.8 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			7M-1 08/10/17 214' -152' CROSS	7M-1 02/22/18 214' -152' CROSS	7M-1 02/12/19 214' -152' CROSS	7M-1 08/20/19 214' -152' CROSS
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	44.3 J	U	17.3 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	14.2 J	12.2 J	12.5 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	UB	34.9 J	UB
Cadmium	7440-43-9	5 ST	UB	U	UB	U
Calcium	7440-70-2	--	17700	17200	16200	16800
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	UB	U	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	60.1	U	U	U
Lead	7439-92-1	25 ST	1.6 J	U	U	3.7 J
Magnesium	7439-95-4	35000 GV	7470	6980	6350	6370 J
Manganese	7439-96-5	300 ST#	21.5	UB	UB	23.1
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	U
Nickel	7440-02-0	100 ST	U	U	U	U
Potassium	7440-09-7	--	1870 J	2140 J	2020 J	3310 J
Selenium	7782-49-2	10 ST	U	U	U	4.8 J
Silver	7440-22-4	50 ST	U	U	U	UB
Sodium	7440-23-5	20000 ST	13800	16800	16800	15800
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	12.6 J	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			8G-1 08/14/17 114' 20' DOWN	8G-1 02/27/18 114' 20' DOWN	8G-1 02/15/19 114' 20' DOWN	8G-1 08/19/19 114' 20' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	641	UB	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	125 J	163 J	257	382
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	UB	UB	UB
Cadmium	7440-43-9	5 ST	8.6	0.38 J	UB	0.46 J
Calcium	7440-70-2	--	78100	56600	68400	98800
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	70.2	UB	3.7 J	5.3 J
Cobalt	7440-49-4	--	0.79 J	1.5 J	U	U
Copper	7440-50-8	200 ST	9.2 J	UB	U	U
Cyanide	57-12-5	200 ST	U	U	3.8 J	U
Iron	7439-39-6	300 ST#	1100	26.4 J	21.8	27.2
Lead	7439-32-1	25 ST	8.1	U	U	U
Magnesium	7439-95-4	35000 GV	20000	22400	38000	48600 J
Manganese	7439-96-5	300 ST#	51.4	22.8	23.2	41.1
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	16.9 J	23.6 J	24.2 J	8.7 J
Potassium	7440-09-7	--	5780	4480 J	5450	6770
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-22-3	20090 ST	118000	194000	256000	342000
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-6	--	1.6 J	U	0.94 J	U
Zinc	7440-66-3	2000 GV	140	17.8 J	23.8	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l			8M-1 08/14/17 270' -134' DOWN	8M-1 02/27/18 270' -134' DOWN	8M-1 02/15/19 270' -134' DOWN	8M-1 08/19/19 270' -134' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	6520	UB	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	150 J	31.9 J	29.7 J	32.2 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	178	244	187	UB
Cadmium	7440-43-9	5 ST	2 J	0.18 J	UB	U
Calcium	7440-70-2	--	46000	39400	40600	44000
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	15.5	U	U	U
Cobalt	7440-48-4	--	7.8 J	7.1 J	5.2 J	5.2 J
Copper	7440-50-8	200 ST	41.6	UB	U	U
Cyanide	57-12-5	200 ST	14.2	U	3.8 J	U
Iron	7439-89-6	300 ST#	5880	15.2 J	U	U
Lead	7439-92-1	25 ST	20.6	U	U	4.3 J
Magnesium	7439-95-4	35000 GV	15000	25500	26200	28500 J
Manganese	7439-96-5	300 ST#	122	37.5	37.8	43.5
Mercury	7439-97-6	0.7 ST	3.4	UB	U	U
Nickel	7440-02-0	100 ST	29 J	35.2 J	32.5 J	12.4 J
Potassium	7440-09-7	--	6380	8350	7320	7890
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	UB
Sodium	7440-23-5	20000 ST	94100	69900	56900	63700
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	11.3 J	U	0.98 J	U
Zinc	7440-66-6	2000 GV	745	14.8 J	8.5 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			8M-2 08/14/17 383' -243' DOWN	8M-2 02/27/18 383' -249' DOWN	8M-2 02/15/19 383' -248' DOWN	8M-2 08/16/19 383' -248' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	766	U	U	U
Antimony	7440-36-0	3 ST	U	U	3.1 J	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	15.1 J	4.2 J	4.5 J	113 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	UB	UB	459 J
Cadmium	7440-43-9	5 ST	10.2	U	2.9 J	U
Calcium	7440-70-2	--	12500	10500	11000	30600 J
Chromium, Hexavalent	18540-29-9	50 ST	UJ	U	U	UJ
Chromium, Total	7440-47-3	50 ST	5.1 J	U	U	U
Cobalt	7440-48-4	--	1.8 J	1.2 J	U	3.6 J
Copper	7440-50-8	200 ST	20.6 J	UB	U	U
Cyanide	57-12-5	200 ST	U	U	5 J	U
Iron	7439-89-6	300 ST#	2040 J	UJ	U	31.4 J
Lead	7439-92-1	25 ST	65.5	U	U	3.6 J
Magnesium	7439-95-4	35000 GV	6460	5840	6040	11100 J
Manganese	7439-96-5	300 ST#	144	UB	11.6	1900 J
Mercury	7439-97-6	0.7 ST	0.029 J	UB	U	U
Nickel	7440-02-0	100 ST	10.1 J	15.3 J	16 J	8.6 J
Potassium	7440-09-7	--	1810 J	1130 J	1120 J	44000 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	22100	9950	11800	85100 J
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	2.9 J	U	U	U
Zinc	7440-66-6	2000 GV	248	U	3 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW Units in ug/l			9G-1 08/09/16 68' 23' UP	9G-1 08/08/17 68' 23' UP	9G-1 09/07/18 68' 23' UP	9G-1 08/20/19 68' 23' UP
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	2880	1030	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	U	14.5 J	8.3 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	6.4 J	UB	UB	UB
Cadmium	7440-43-9	5 ST	U	0.36 J	UB	U
Calcium	7440-70-2	--	4530	1720	1350	1870
Chromium, Hexavalent	18540-29-9	50 ST	U	U	23	UJ
Chromium, Total	7440-47-3	50 ST	2.4 J	21.4	53	6.1 J
Cobalt	7440-48-4	--	U	1.1 J	0.74 J	U
Copper	7440-50-8	200 ST	U	5.1 J	UB	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	2680	1480	27.2
Lead	7439-92-1	25 ST	U	8	3.7 J	U
Magnesium	7439-95-4	35000 GV	1400	611	519	607 J
Manganese	7439-96-5	300 ST#	4.1 J	83	74.4	U
Mercury	7439-97-6	0.7 ST	UB	UB	UB	U
Nickel	7440-02-0	100 ST	7.4 J	7 J	16 J	3.3 J
Potassium	7440-09-7	--	U	3530 J	1480 J	U
Selenium	7782-49-2	10 ST	UJ	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	7040 J	5970	7480	5100
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	5.4 J	3.5 J	U
Zinc	7440-66-6	2000 GV	U	70.7	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			10G-1 08/14/15 69' 20' DOWN	10G-1 08/10/16 69' 20' DOWN	10G-1 08/10/17 69' 20' DOWN	10G-1 08/21/19 69' 20' DOWN
METALS	CAS Number	NYSED CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-00-5	--	UB	U	323	99.3 J
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	101 B	104 J	43.4 J	68.1 J
Beryllium	7440-11-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UJ	14.4 J	UB	UB
Cadmium	7440-43-9	5 ST	0.4 B	0.3 J	14.7	U
Calcium	7440-70-2	--	14700 J	12700	6580	8850
Chromium, Hexavalent	18540-29-9	50 ST	U	U	15 J	U
Chromium, Total	7440-47-3	50 ST	30	7.4 J	348	6.8 J
Cobalt	7440-48-4	--	0.8 B	U	U	U
Copper	7440-50-8	200 ST	UB	UB	8.9 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	170	59.1 J	5160	33.6
Lead	7439-92-1	25 ST	8.8	2.3 J	1.9 J	U
Magnesium	7439-95-4	35000 GV	4670 BJ	5130	2210	3930
Manganese	7439-96-5	300 ST#	258 J	224	248	121
Mercury	7439-97-6	0.7 ST	UJ	UB	UBJ	U
Nickel	7440-02-0	100 ST	7 B	4 J	9.3 J	14.4 J
Potassium	7440-09-7	--	2330 B	1180 J	11300	UB
Selenium	7782-49-2	10 ST	U	UJ	U	U
Silver	7440-22-4	50 ST	UB	U	U	U
Sodium	7440-23-5	26000 ST	64100	73500 J	38600	76700
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-32-2	--	U	U	1.2 J	U
Zinc	7440-86-8	2000 GV	UB	U	68.3	14.1 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			10M-1 08/10/17 256 -167 DOWN	10M-1 02/15/18 256 -167 DOWN	10M-1 02/12/19 256 -167 DOWN	10M-1 08/21/19 256 -167 DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	582	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	5 J	U	U
Barium	7440-39-3	1000 ST	6.6 J	3 J	3.7 J	3.6 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	38.5 J	68.9	70.7	UB
Cadmium	7440-43-9	5 ST	5.3	U	U	U
Calcium	7440-70-2	--	19700	68700	71300	73500
Chromium, Hexavalent	18540-29-9	50 ST	15 J	UJ	UJ	U
Chromium, Total	7440-47-3	50 ST	2.5 J	U	U	U
Cobalt	7440-48-4	--	1.1 J	1.3 J	0.98 J	U
Copper	7440-50-8	200 ST	7.7 J	U	U	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	2600	U	U	9.6 J
Lead	7439-92-1	25 ST	U	U	U	U
Magnesium	7439-95-4	35000 GV	9860	43200	45600	47500
Manganese	7439-96-5	300 ST#	135	3.4 J	UB	5.6 J
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	0.11 J
Nickel	7440-02-0	100 ST	9 J	27.4 J	6.8 J	26.6 J
Potassium	7440-09-7	--	12400	3470 J	3550 J	3100 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	11100	46100	63300	65500
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	UB	U
Zinc	7440-66-6	2000 GV	110	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID			11G-1	11G-1	11G-1	11G-1
Sample_date			02/26/18	08/31/18	02/13/19	08/14/19
Depth of Well BGS			145'	145'	145'	145'
Depth to bottom screen, relative to MSL			22'	22'	22'	22'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	115 J	U	U
Antimony	7440-36-0	3 ST	UB	U	U	U
Arsenic	7440-38-2	25 ST	4.3 J	U	U	U
Barium	7440-39-3	1000 ST	53.6 J	58.8 J	55.3 J	58.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	892	955	922	959
Cadmium	7440-43-9	5 ST	U	U	UB	U
Calcium	7440-70-2	--	2120	1600	1960	1960
Chromium, Hexavalent	18540-29-9	50 ST	UJ	11 J	UJ	UJ
Chromium, Total	7440-47-3	50 ST	UB	7.8 J	3.6 J	U
Cobalt	7440-48-4	--	23 J	23.5 J	23 J	23.7 J
Copper	7440-50-8	200 ST	22.5 J	39.2	22.6 J	21 J
Cyanide	57-12-5	200 ST	UJ	U	U	2.8 J
Iron	7439-89-6	300 ST#	479 J	636	451	462
Lead	7439-92-1	25 ST	U	1.3 J	U	U
Magnesium	7439-95-4	35000 GV	5450	6440	6800	7170
Manganese	7439-96-5	300 ST#	1780	964	1520	1500
Mercury	7439-97-6	0.7 ST	UB	UB	U	0.11 J
Nickel	7440-02-0	100 ST	113	104	98.6	102
Potassium	7440-09-7	--	70700	71500	68400	72900
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	227000	255000	249000	248000
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	1.8 J	UB	U
Zinc	7440-66-6	2000 GV	UB	UB	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			11G-2 02/26/18 220' -51 DOWN	11G-2 08/31/18 220' -51 DOWN	11G-2 02/13/19 220' -51 DOWN	11G-2 08/14/19 220' -51 DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	182 J	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	234	221	177 J	145 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	1670	1600	1490	1240
Cadmium	7440-43-9	5 ST	U	UB	U	U
Calcium	7440-70-2	--	22300	17100	17000	25600
Chromium, Hexavalent	18540-29-9	50 ST	UJ	20 J	UJ	UJ
Chromium, Total	7440-47-3	50 ST	U	7.9 J	2.8 J	U
Cobalt	7440-48-4	--	37.9 J	33.7 J	33.4 J	25.9 J
Copper	7440-50-8	200 ST	25.3	85	22.9 J	11.3 J
Cyanide	57-12-5	200 ST	UJ	U	U	2.1 J
Iron	7439-89-6	300 ST#	687 J	951	627	1290
Lead	7439-92-1	25 ST	U	4.1 J	U	U
Magnesium	7439-95-4	35000 GV	19700	16200	17000	17100
Manganese	7439-96-5	300 ST#	2630	2940	2490	3640
Mercury	7439-97-6	0.7 ST	UB	UB	U	0.1 J
Nickel	7440-02-0	100 ST	210	194	175	136
Potassium	7440-09-7	--	105000	95500	84600	67900
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	384000	394000	375000	302000
Thallium	7440-28-0	0.5 GV	U	U	U	6 J
Vanadium	7440-62-2	--	U	1.8 J	UB	U
Zinc	7440-66-6	2000 GV	U	UB	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			11M-1 08/18/15 320' -154' DOWN	11M-1 08/09/16 320' -154' DOWN	11M-1 08/03/17 320' -154' DOWN	11M-1 08/14/19 320' -154' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	UB	U
Antimony	7440-36-0	3 ST	UB	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	5 B	U	7.2 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	26.2 J	UB	U
Cadmium	7440-43-9	5 ST	U	U	0.093 J	U
Calcium	7440-70-2	--	41400 J	40000	36800	40000
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	4.7 J	U
Cobalt	7440-48-4	--	0.9 B	1.1 J	0.93 J	U
Copper	7440-50-8	200 ST	UB	UB	U	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	129	248	75.2
Lead	7439-92-1	25 ST	1.6 BJ	3.5 J	3.8 J	4.4 J
Magnesium	7439-95-4	35000 GV	22900 J	22500	18900	21500
Manganese	7439-96-5	300 ST#	144 J	158	121	126
Mercury	7439-97-6	0.7 ST	UJ	UB	UB	U
Nickel	7440-02-0	100 ST	7.2 B	6.9 J	9.2 J	UB
Potassium	7440-09-7	--	2660 BJ	1970 J	2770 J	U
Selenium	7782-49-2	10 ST	UJ	UJ	U	U
Silver	7440-22-4	50 ST	UJ	U	U	U
Sodium	7440-23-5	20000 ST	39600 J	39300 J	32600	41800
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			12M-1 08/09/17 338' -163' DOWN	12M-1 02/22/18 338' -163' DOWN	12M-1 02/14/19 338' -163' DOWN	12M-1 08/15/19 338' -163' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	UB	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	57.7	25.2	21.2	UB
Barium	7440-39-3	1000 ST	53.8 J	20.4 J	18.5 J	19.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	251	281	257	UB
Cadmium	7440-43-9	5 ST	0.35 J	U	UB	U
Calcium	7440-70-2	--	74700	72000	70100	74900
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	13.9 J	2.4 J	2.2 J	3.1 J
Copper	7440-50-8	200 ST	6.8 J	UB	U	5.3 J
Cyanide	57-12-5	200 ST	U	U	8.1 J	U
Iron	7439-89-6	300 ST#	6300	1860	1430	1370
Lead	7439-92-1	25 ST	9.1	UB	U	U
Magnesium	7439-95-4	35000 GV	40700	39000	38500	41300
Manganese	7439-96-5	300 ST#	6680	1590	1350	1390
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	13.7 J	13 J	11.6 J	38.1 J
Potassium	7440-09-7	--	5630	4840 J	4140 J	UB
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	67400	70400	69900	71400
Thallium	7440-28-0	0.5 GV	UB	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	3 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			13G-1 08/11/17 93' 17' DOWN	13G-1 02/15/18 93' 17' DOWN	13G-1 02/13/19 93' 17' DOWN	13G-1 08/14/19 93' 17' DOWN
Units in ug/l						
		NYSDEC CLASS GA GROUNDWATER ST/GV				
METALS	CAS Number					
Aluminum	7429-90-5	--	215	U	U	U
Antimony	7440-36-0	3 ST	U	UB	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	21.4 J	22.6 J	24.3 J	17.9 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	20.1 J	17.2 J	U
Cadmium	7440-43-9	5 ST	0.88 J	U	UB	U
Calcium	7440-70-2	--	13500	18800	17500	11800
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	19.9	3.5 J	4.5 J	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	4.8 J	U	U	7.8 J
Cyanide	57-12-5	200 ST	U	U	UJ	2.8 J
Iron	7439-89-6	300 ST#	360	13.8 J	34.6	U
Lead	7439-92-1	25 ST	U	U	U	U
Magnesium	7439-95-4	35000 GV	5240	7030	6590	4380
Manganese	7439-96-5	300 ST#	10	5.3 J	UB	U
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	U
Nickel	7440-02-0	100 ST	2.1 J	21.2 J	5.5 J	UB
Potassium	7440-09-7	--	2160 J	1530 J	1470 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	11300	14600	20400	18400
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	33.4	20.2	UB	19.2 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			13M-1 08/11/17 265' -155' DOWN	13M-1 02/15/18 265' -155' DOWN	13M-1 02/13/19 265' -155' DOWN	13M-1 08/14/19 265' -155' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	402	U	30.2 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	20.4 J	20.6 J	18.5 J	17.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	58.8	138	149	141
Cadmium	7440-43-9	5 ST	1.5 J	U	UB	U
Calcium	7440-70-2	--	45000	94900	83900	89400
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	2.4 J	U	1.7 J	U
Cobalt	7440-48-4	--	0.64 J	1.8 J	1.1 J	U
Copper	7440-50-8	200 ST	21.5 J	2.7 J	U	U
Cyanide	57-12-5	200 ST	U	U	U	2.1 J
Iron	7439-89-6	300 ST#	469	200	50.7	37.6
Lead	7439-92-1	25 ST	4.3 J	U	1.3 J	U
Magnesium	7439-95-4	35000 GV	9110	70400	61300	65600
Manganese	7439-96-5	300 ST#	15.4	27.2	26.4	24.3
Mercury	7439-97-6	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	4 J	43.8	9.1 J	UB
Potassium	7440-09-7	--	11300	4580 J	4280 J	3750 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	16000	63000	61700	52000
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	9.1 J	U	UB	U
Zinc	7440-66-6	2000 GV	41.2	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			14G-1A 08/02/17 220' -58 DOWN	14G-1A 02/14/18 220' -58 DOWN	14G-1A 02/11/19 220' -58 DOWN	14G-1A 08/13/19 220' -58 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	29.5 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	54.4 J	28.4 J	36.1 J	39 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	122	122	151	168
Cadmium	7440-43-9	5 ST	3.5	U	U	U
Calcium	7440-70-2	--	47800	38800	48000	49100
Chromium, Hexavalent	18540-29-9	50 ST	UB	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	21.4	U	U	U
Cobalt	7440-48-4	--	3.6 J	3.6 J	4.2 J	4.6 J
Copper	7440-50-8	200 ST	3.8 J	0.52 J	U	U
Cyanide	57-12-5	200 ST	U	U	2.8 J	2.4 J
Iron	7439-89-6	300 ST#	1640	U	39.3	14.8 J
Lead	7439-92-1	25 ST	10.4	U	1.4 J	U
Magnesium	7439-95-4	35000 GV	21300	20100	27100	28200
Manganese	7439-96-5	300 ST#	44.9	U	UB	U
Mercury	7439-97-6	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	23.4 J	23.3 J	6.4 J	27.4 J
Potassium	7440-09-7	--	15600	4540 J	4310 J	4130 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	56300	50300	66500	71600
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	2.2 J	U	UB	U
Zinc	7440-66-6	2000 GV	76.6	U	UB	5.4 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW Units in ug/l			14G-2 08/02/17 264' -103' DOWN	14G-2 02/14/18 264' -103' DOWN	14G-2 02/11/19 264' -103' DOWN	14G-2 02/13/19 264' -103' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	52.2 J	48.6 J	56 J	53.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	129	116	137	131
Cadmium	7440-43-9	5 ST	0.85 J	U	UB	U
Calcium	7440-70-2	--	39300	40000	46900	43200
Chromium, Hexavalent	18540-29-9	50 ST	UB	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	9.9 J	3.4 J	7 J	6 J
Cobalt	7440-48-4	--	4.6 J	3.5 J	3.8 J	3.2 J
Copper	7440-50-8	200 ST	3.9 J	U	U	7.3 J
Cyanide	57-12-5	200 ST	U	U	2.8 J	U
Iron	7439-89-6	300 ST#	676	16.2 J	48.5	72.6
Lead	7439-92-1	25 ST	7.5	U	U	U
Magnesium	7439-95-4	35000 GV	23600	24200	28700	26800
Manganese	7439-96-5	300 ST#	20.8	U	UB	U
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	21.1 J	37 J	28.2 J	45.8
Potassium	7440-09-7	--	2750 J	2430 J	2430 J	2250 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	45200	45500	53800	49100
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	29.2	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			14M-1 02/14/18 355' -194' DOWN	14M-1 09/05/18 355' -194' DOWN	14M-1 02/11/19 355' -194' DOWN	14M-1 08/13/19 355' -194' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	157 J	19.7 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	35.6 J	50.6 J	37.1 J	36.4 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	1090	1120	1160	1130
Cadmium	7440-43-9	5 ST	U	UB	UB	U
Calcium	7440-70-2	--	93400	91800	97100	88100
Chromium, Hexavalent	18540-29-9	50 ST	UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	U	2.5 J	U	U
Cobalt	7440-48-4	--	14.3 J	12.4 J	13.7 J	13.4 J
Copper	7440-50-8	200 ST	3.8 J	65.9	6 J	8.7 J
Cyanide	57-12-5	200 ST	U	U	2.2 J	U
Iron	7439-89-6	300 ST#	607	518	689	551
Lead	7439-92-1	25 ST	U	2.6 J	3.7 J	U
Magnesium	7439-95-4	35000 GV	58200	56200	59600	54500
Manganese	7439-96-5	300 ST#	4900	3920	5380	5130
Mercury	7439-97-6	0.7 ST	U	U	U	U
Nickel	7440-02-0	100 ST	133	100	105	124
Potassium	7440-09-7	--	38900	40300	38500	40300
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	277000	286000	307000	267000
Thallium	7440-28-0	0.5 GV	UB	U	U	U
Vanadium	7440-62-2	--	U	UB	UB	U
Zinc	7440-66-6	2000 GV	U	UB	UB	5.6 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Blydenburgh Road Landfill Complex
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW Units in ug/l			15G-1 08/19/15 160' 23' DOWN	15G-1 08/09/16 160' 23' DOWN	15G-1 08/14/17 160' 25' DOWN	15G-1 08/15/19 160' 23' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	33.4 J	289	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	16.7 B	17.6 J	57.6 J	17.1 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UJ	12.9 J	UB	UB
Cadmium	7440-43-9	5 ST	U	U	1.7 J	U
Calcium	7440-70-2	--	18900 J	19900	23600	20900
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	UB	2.4 J	7.6 J	4.6 J
Cobalt	7440-48-4	--	U	0.4 J	U	U
Copper	7440-50-8	200 ST	U	UB	6.6 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	98.9 J	415	14.3 J
Lead	7439-92-1	25 ST	9	2 J	6.1	U
Magnesium	7439-95-4	35000 GV	7300 J	7850	7520	9530
Manganese	7439-96-5	300 ST#	UJ	12.2 J	50	5.3 J
Mercury	7439-97-6	0.7 ST	UJ	UB	U	U
Nickel	7440-02-0	100 ST	UB	3 J	9.2 J	16.9 J
Potassium	7440-09-7	--	1760 B	1260 J	2800 J	UB
Selenium	7782-49-2	10 ST	U	UJ	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	5830	7630 J	7630	8570
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	1.4 J	U
Zinc	7440-66-6	2000 GV	UB	U	132	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			16G-1 08/14/15 57' 20' DOWN	16G-1 08/10/16 57' 20' DOWN	16G-1 08/10/17 57' 20' DOWN	16G-1 08/21/19 57' 20' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	99.2 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	13.7 B	18.9 J	23.1 J	20.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UJ	7.7 J	UB	U
Cadmium	7440-43-9	5 ST	U	U	5.7	U
Calcium	7440-70-2	--	7160 J	9110	8620	7480
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	U
Chromium, Total	7440-47-3	50 ST	UB	U	3.5 J	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	U	14.3 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	33.8 B	U	1420	22.9
Lead	7439-92-1	25 ST	3.1	U	U	U
Magnesium	7439-95-4	35000 GV	1540 BJ	2110	1950	1580
Manganese	7439-96-5	300 ST#	UJ	U	132	U
Mercury	7439-97-6	0.7 ST	UJ	UB	UJ	U
Nickel	7440-02-0	100 ST	U	U	4.2 J	U
Potassium	7440-09-7	--	1240 B	U	1940 J	UB
Selenium	7782-49-2	10 ST	U	UJ	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	3150 B	1490 J	UB	10200
Thallium	7440-28-0	0.5 GV	2.4 B	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	27.2	5.9 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

Appendix B-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			16M-1 08/10/17 240' -163 DOWN	16M-1 10/15/18 240' -163 DOWN	16M-1 02/12/19 240' -163 DOWN	16M-1 09/21/19 240' -163 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	96.2 J	U	19.4 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	7.5 J	5.4 J	5.4 J	5.3 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	67.2	66.5	80.4	UB
Cadmium	7440-43-9	5 ST	UB	U	U	U
Calcium	7440-70-2	--	50800	52500	49600	50300
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	U
Chromium, Total	7440-47-3	50 ST	1.6 J	U	U	U
Cobalt	7440-48-4	--	1.7 J	2.9 J	2.8 J	2.6 J
Copper	7440-50-8	200 ST	3 J	U	U	U
Cyanide	57-12-5	200 ST	U	U	4.8 J	U
Iron	7439-89-6	300 ST#	97.9	U	U	U
Lead	7439-92-1	25 ST	U	U	U	U
Magnesium	7439-95-4	35000 GV	32300	32500	31300	31800
Manganese	7439-96-5	300 ST#	27.2	8.2 J	UB	6.4 J
Mercury	7439-97-6	0.7 ST	UBJ	UB	U	U
Nickel	7440-02-0	100 ST	8 J	28.2 J	9 J	24.9 J
Potassium	7440-09-7	--	3180 J	2610 J	2320 J	UB
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	41100	41000	47100	46200
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	2.5 J	U	UB	U
Zinc	7440-66-6	2000 GV	14.5 J	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			18G-1 08/02/17 157' 11' DOWN	18G-1 02/16/18 157' 11' DOWN	18G-1 02/13/19 157' 11' DOWN	18G-1 08/13/19 157' 11' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	43.4 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	50.2 J	42.5 J	29.8 J	40.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	352	329	236	193
Cadmium	7440-43-9	5 ST	0.36 J	U	UB	U
Calcium	7440-70-2	--	6210	5770	5080	10600
Chromium, Hexavalent	18540-29-9	50 ST	UB	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	16.1 J	11 J	11.8 J	13.6 J
Copper	7440-50-8	200 ST	15.4 J	12.8 J	12.9 J	10.5 J
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	360	67.8	53.1	20.9
Lead	7439-92-1	25 ST	5.2	U	2.2 J	U
Magnesium	7439-95-4	35000 GV	4930	4550	3850	6810
Manganese	7439-96-5	300 ST#	11300	12700	9940	12000
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	38.8 J	49	25.6 J	28.8 J
Potassium	7440-09-7	--	30800	26600	19400	16800
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	2.4 J
Sodium	7440-23-5	20000 ST	109000	106000	97100	111000
Thallium	7440-28-0	0.5 GV	UB	U	7.5 J	12.7
Vanadium	7440-62-2	--	U	U	UB	U
Zinc	7440-66-6	2000 GV	UB	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			18G-2 02/16/18 197' -29 DOWN	18G-2 09/06/18 197' -29 DOWN	18G-2 02/13/19 197' -29 DOWN	18G-2 08/13/19 197' -29 DOWN
NYSDEC CLASS GA GROUNDWATER						
METALS	CAS Number	ST/GV				
Aluminum	7429-90-5	--	U	45.2 J	19.4 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	48.8 J	57.7 J	52.2 J	55.6 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-3	1000 ST	182	177	158	160
Cadmium	7440-43-9	5 ST	U	UB	UB	U
Calcium	7440-70-2	--	22200	22000	23100	23600
Chromium, Hexavalent	10540-29-9	50 ST	U	UJ	UJ	UJ
Chromium, Total	7440-47-2	50 ST	U	56.6	5.4 J	U
Cobalt	7440-48-4	--	13.3 J	16 J	11.8 J	11 J
Copper	7440-50-8	200 ST	1 J	UB	3 J	9.3 J
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	356	27.5	U
Lead	7429-92-1	25 ST	U	U	U	U
Magnesium	7439-95-1	35000 GV	8160	8860	8340	8330
Manganese	7439-96-5	300 ST#	4630	7000	4790	7030
Mercury	7460-87-8	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	25.5 J	11.6 J	9.3 J	10.6 J
Potassium	7440-09-7	--	10100	12300	12000	14000
Selenium	7762-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	77200	87400	95600	95100
Thallium	7440-28-0	0.5 GV	U	U	6 J	5.9 J
Vanadium	7440-62-2	--	U	UB	UB	U
Zinc	7440-66-3	2000 GV	U	UB	UB	U

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated detection limit or value
J+ Estimated bias low
J- Estimated bias high
B Detected between the IDL and CRDL
IDL Instrument Detection Limit
CRDL Contract Required Detection Limit
D Detected at secondary dilution
UB Qualified as non detect (U) based on blank results
-- No ST or GV
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard
Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
* Collected under pumping conditions
NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			22M-1 02/26/18 222' -164' UP	22M-1 09/05/18 222' -164' UP	22M-1 02/12/19 222' -164' UP	22M-1 08/16/19 222' -164' UP
Units in ug/l						
		NYSDEC CLASS GA GROUNDWATER ST/GV				
METALS	CAS Number					
Aluminum	7429-90-5	--	U	307 J	281	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	30.3 J	33 J	34.4 J	32.9 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	40.4 J	39.6 J	UB
Cadmium	7440-43-9	5 ST	U	UB	UB	U
Calcium	7440-70-2	--	16200	18100	17400	17600
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	U	U
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	0.49 J	U	0.97 J	U
Copper	7440-50-8	200 ST	UB	U	U	U
Cyanide	57-12-5	200 ST	U	U	2.9 J	2.1 J
Iron	7439-89-6	300 ST#	38.2 J	469	248	21.1
Lead	7439-92-1	25 ST	U	U	2.3 J	U
Magnesium	7439-95-4	35000 GV	4910	5340	5160	5140
Manganese	7439-96-5	300 ST#	UB	UB	UB	5.3 J
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	11.6 J	U	U	9.8 J
Potassium	7440-09-7	--	2210 J	2130 J	2360 J	UB
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	16200	17800	18300	17800
Thallium	7440-28-0	0.5 GV	UB	U	U	U
Vanadium	7440-62-2	--	U	UB	UB	U
Zinc	7440-66-6	2000 GV	U	UB	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			23M-1 08/10/17 240' -164' DOWN	23M-1 02/15/18 240' -164' DOWN	23M-1 02/12/19 240' -164' DOWN	23M-1 08/14/19 240' -164' DOWN
Units in ug/l						
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	41.2 J	U	16.9 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	7.6 J	5 J	5 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	78.5	75.3	78.1	75.2
Cadmium	7440-43-9	5 ST	1.1 J	U	UB	U
Calcium	7440-70-2	--	34800	37800	37100	37600
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	1.3 J	0.97 J	1.6 J	U
Copper	7440-50-8	200 ST	U	U	2.8 J	12.9 J
Cyanide	57-12-5	200 ST	U	U	3.5 J	2.1 J
Iron	7439-89-6	300 ST#	76	U	U	U
Lead	7439-92-1	25 ST	1.4 J	U	2.2 J	U
Magnesium	7439-95-4	35000 GV	17000	18300	18100	18100
Manganese	7439-96-5	300 ST#	54	49.2	50.7	53.4
Mercury	7439-97-6	0.7 ST	UJ	UB	U	U
Nickel	7440-02-0	100 ST	1 J	20.9 J	0.99 J	U
Potassium	7440-09-7	--	8560	2030 J	1860 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	27900	27400	29400	26900
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	0.94 J	U	UB	U
Zinc	7440-66-6	2000 GV	8.4 J	U	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated bias low
 J- Estimated bias high
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 D Detected at secondary dilution
 UB Qualified as non detect (U) based on blank results
 -- No ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions
 NR Not reported

APPENDIX B-3

MONITORING WELL SAMPLE RESULTS - LEACHATE INDICATORS

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	04/05/17	06/09/17	08/04/17	10/27/17
			Depth of Well BGS	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	272	560	579	446	
Biochemical Oxygen Demand (BOD)	BOD5	---	1 J	1 J	UB	1.0 J	
Bromide	24959-67-9	2 GV	0.16 J	1.2	1.5	1.4	
Chloride (as Cl)	16887-00-6	250 ST	85.6	171	227	225	
Cod - Chemical Oxygen Demand	COD	---	23.4	29.6	42.1	45.7	
Color	COLOR	---	U	U	U	10.0	
Hardness (as CaCO3)	HARD	---	260	470	450	480	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.96	4.3	4.9 J	5.0	
Nitrogen, Kjeldahl, Total	KN	---	0.68	26.6	7.8 J	6.0	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	3.6	0.68	U	U	
Nitrogen, Nitrite	14797-65-0	1 ST	1.7	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.033	0.003 J	UB	0.003 J	
Sulfate (as SO4)	14808-79-8	250 ST	33.5	31.5	36.1	34.7	
Total Dissolved Solids	E-10173	---	440	748	842	912	
Total Organic Carbon	TOC	---	4.4	9.2	9.6	10.4	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	12/18/17	02/21/18	04/27/18	07/03/18	09/07/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV						
Chemical Name	CAS Number							
Alkalinity, Total (as CaCO3)	ALK	---	401	415	466	476	530 J	
Biochemical Oxygen Demand (BOD)	BOD5	---	1 J	U	U	2.0	U	
Bromide	24959-67-9	2 GV	1.5	1.7	1.6	1.8	1.7	
Chloride (as Cl)	16887-00-6	250 ST	240	218	212	251	195	
Cod - Chemical Oxygen Demand	COD	---	36.8	43.1	48.2	56.3	64.5	
Color	COLOR	---	5	5	U	5.0	5	
Hardness (as CaCO3)	HARD	---	400	280	460	700	360	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	4.9	5.5 J	4.7	4.0	5.2	
Nitrogen, Kjeldahl, Total	KN	---	6.2	6.2 J	6	24.6	6.2 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.015 J	UJ	3	U	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.004 J	UB	0.0051	0.004 J	UB	
Sulfate (as SO4)	14808-79-8	250 ST	24.9	37.6	37.7	43.3	35	
Total Dissolved Solids	E-10173	---	780	846	863	876	810	
Total Organic Carbon	TOC	---	10.4	8.6	8.2	10.8	8.8	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	10/25/18	12/24/18	02/14/19	08/19/19	10/30/19
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
Units in mg/l								
		NYSDEC CLASS GA GROUNDWATER ST/GV						
Chemical Name	CAS Number							
Alkalinity, Total (as CaCO3)	ALK	---	485	541	551	494	515	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	U	UB	2.3	
Bromide	24959-67-9	2 GV	1.6	1.6	1.8	2	1.6	
Chloride (as Cl)	16887-00-6	250 ST	203	230	U	231	236	
Cod - Chemical Oxygen Demand	COD	---	47.2	45.1	38.9 J	34.5	36.7	
Color	COLOR	---	10	5	10.0	U	5	
Hardness (as CaCO3)	HARD	---	400	500	500	420	440	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	<u>4.6</u>	<u>4.6</u>	<u>4.9</u>	<u>4.7</u>	<u>4.7</u>	
Nitrogen, Kjeldahl, Total	KN	---	6.4	4.5	7.2 J	5.3 J	5.9	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	U	U	UJ	U	0.046 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	<u>0.0110</u>	<u>0.0084</u>	UB	UJ	U	
Sulfate (as SO4)	14808-79-8	250 ST	37.7	37.2	41.1	45.8	37	
Total Dissolved Solids	E-10173	---	872	824	824	770	824	
Total Organic Carbon	TOC	---	10	10.4	10.4	9.8	9.9	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	GM-1I	GM-1I	GM-1I	GM-1I
			Sample_date	08/14/17	02/21/18	02/14/19	08/19/19
			Depth of Well BGS	285'	285'	285'	285'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	261	153	211	201	
Biochemical Oxygen Demand (BOD)	BOD5	---	1 J	U	U	UB	
Bromide	24959-67-9`	2 GV	0.25 J	0.22 J	0.43 J	0.28 J	
Chloride (as Cl)	16887-00-6	250 ST	72.7	64.2	39.5 J	68.7	
Cod - Chemical Oxygen Demand	COD	---	19.2	13.5	10 J	10.2	
Color	COLOR	---		U	U	U	
Hardness (as CaCO3)	HARD	---	193	180	180	200	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.088 J	0.021 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UB	UJ	UJ	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	5.9	6.3 J	0.96 J	7	
Nitrogen, Nitrite	14797-65-0	1 ST	UB	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.002 J	UB	UB	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	31.1	26.9	46.0	31.7	
Total Dissolved Solids	E-10173	---	365	383	351	348	
Total Organic Carbon	TOC	---	1.6	UB	1.0	1.8	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
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			Sample ID	GM-1S	GM-1S	GM-1S	GM-1S
			Sample_date	09/03/15	08/03/16	08/14/17	08/19/19
			Depth of Well BGS	135'	135'	135'	135'
			Depth to bottom screen, relative to MSL	19'	19'	19'	19'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
Chemical Name	CAS Number	GROUNDWATER					
		ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	187 D	192 D	226	228	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	1 J	UB	
Bromide	24959-67-9	2 GV	U	U	0.19 J	0.43 J	
Chloride (as Cl)	16887-00-6	250 ST	84.9 D	58.6 D	62.5	91.2	
Cod - Chemical Oxygen Demand	COD	---	U	13.9	25.5	10.2	
Color	COLOR	---	U	10	5	U	
Hardness (as CaCO3)	HARD	---	60 D	190 D	153	140	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	U	UB	0.055 J	UB	
Nitrogen, Kjeldahl, Total	KN	---	1.7 DJ	U	0.69 J	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	6.54 D	5.55 D	5.5 J	6.9	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	UB	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	0.003 J	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	30.5	23.1	29.5	32.9	
Total Dissolved Solids	E-10173	---	356	367	324	372	
Total Organic Carbon	TOC	---	2.6	2.1	1.7	1.4	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
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 J Estimated detection limit or value
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 NR Not reported
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Sample ID			GM-2D	GM-2D	GM-2D	GM-2D
Sample_date			09/01/15	08/08/16	08/14/17	08/20/19
Depth of Well BGS			396'	398'	398'	398'
Depth to bottom screen, relative to MSL			-248'	-248'	-248'	-248'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	18.4	20.4	23.2	20.6
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	1 J	UBJ
Bromide	24959-67-9	2 GV	U	U	U	0.083 J
Chloride (as Cl)	16887-00-6	250 ST	5.11	3.96 J	4.9	4.2
Cod - Chemical Oxygen Demand	COD	---	U	35.9 J	13	U
Color	COLOR	---	U	5	15	U
Hardness (as CaCO ₃)	HARD	---	22	19	20	12
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.1	0.3 J	0.092 J	UB
Nitrogen, Kjeldahl, Total	KN	---	1.72 D	U	0.64 J	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJ	U	0.11	U
Nitrogen, Nitrite	14797-85-0	1 ST	U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	0.008	0.003 J	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	U	U	3.6 J	3.6 J
Total Dissolved Solids	E-10173	---	21	43	31	54
Total Organic Carbon	TOC	---	U	U	1.5	U

mg/l Milligrams per liter
U Compound was analyzed for but not detected
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			Sample ID	GM-2I	GM-2I	GM-2I	GM-2I
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	298'	298'	298'	298'
			Depth to bottom screen, relative to MSL	-136'	-136'	-136'	-136'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	111	112	122	117	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	1 J	UBJ	
Bromide	24959-67-9	2 GV	U	U	U	UB	
Chloride (as Cl)	16887-00-6	250 ST	20.3	15	17.1	46.5	
Cod - Chemical Oxygen Demand	COD	---	U	U	21.3	U	
Color	COLOR	---	U	5	20	U	
Hardness (as CaCO3)	HARD	---	180 D	150 D	124	130	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	U	0.11	0.099 J	UB	
Nitrogen, Kjeldahl, Total	KN	---	U	U	0.77 J	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	4.75 DJ	5.65 D	4.8	5.7 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	UB	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	0.005	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	11.4	10.2	11.4	17.5	
Total Dissolved Solids	E-10173	---	169	198	175	233	
Total Organic Carbon	TOC	---	U	U	1.7	U	

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Sample ID: Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in mg/l Gradient relative to MSW			GM-2S 09/01/15 149' 12' DOWN	GM-2S 08/08/16 149' 12' DOWN	GM-2S 08/14/17 149' 12' DOWN	GM-2S 08/20/19 149' 12' DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	28.4	27.8	26.2 J	25.8
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UBJ
Bromide	24959-67-9	2 GV	U	U	0.15 J	U
Chloride (as Cl)	16887-00-6	250 ST	15.4	19.3	25.5	34.2
Cod - Chemical Oxygen Demand	COD	---	U	U	17.2	U
Color	COLOR	---	U	5	5	U
Hardness (as CaCO ₃)	HARD	---	48 D	54 D	56	53.3
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.17	0.12	UB	UB
Nitrogen, Kjeldahl, Total	KN	---	U	U	UB	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	3.29 DJ	3.9 D	3.7	6 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	0.008	UB	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	10.7	12.3	14.9	18.4
Total Dissolved Solids	E-10173	---	107	158	123	170
Total Organic Carbon	TOC	---	1.6	U	UBJ	U

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			Sample ID	4G-1	4G-1	4G-1	4G-1
			Sample_date	08/11/17	02/21/18	09/04/18	08/16/19
			Depth of Well BGS	164'	164'	164'	164'
			Depth to bottom screen, relative to MSL	2'	2'	2'	2'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	154 J	216	300	302	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.34 J	0.72	0.61	0.7	
Chloride (as Cl)	16887-00-6	250 ST	86.6	132	149	150	
Cod - Chemical Oxygen Demand	COD	---	31.7	53.7	70.6 J	34.5	
Color	COLOR	---	20	NA	150	75	
Hardness (as CaCO3)	HARD	---	60 J	92.0	104	80	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	3.5	3.8	22.1	28.5	
Nitrogen, Kjeldahl, Total	KN	---	5	4.7 J	22.8 J	26 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.98 J	U	UJ	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	UJ	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	0.024 J	UBJ	
Sulfate (as SO4)	14808-79-8	250 ST	18.7	14.7	14.6	19.6	
Total Dissolved Solids	E-10173	---	374	460	504	446	
Total Organic Carbon	TOC	---	4.4 J	6.9	11.6 J	10.1	

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Sample ID			4G-2	4G-2	4G-2	4G-2
Sample_date			08/11/17	02/16/18	02/11/19	08/16/19
Depth of Well BGS			211'	211'	211'	211'
Depth to bottom screen, relative to MSL			-45'	-45'	-45'	-45'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	172 J	158	178 J	198
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.11 J	U	0.14 J	0.13 J
Chloride (as Cl)	16887-00-6	250 ST	88.9	73.6	90	104
Cod - Chemical Oxygen Demand	COD	---	40	30.4 J	U	10.2
Color	COLOR	---	5	U	5	U
Hardness (as CaCO ₃)	HARD	---	136 J	120	88	110
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.33	0.3	UB
Nitrogen, Kjeldahl, Total	KN	---	0.88	1.8 J	0.7 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJ	UJB	0.88	U
Nitrogen, Nitrite	14797-65-0	1 ST	U	0.14 J	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	U	UB	UBJ
Sulfate (as SO ₄)	14808-79-8	250 ST	48.5	27.6	25.2 J	44.5
Total Dissolved Solids	E-10173	---	413	354	364	398
Total Organic Carbon	TOC	---	2.1 J	UJB	1.2	1.2

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			Sample ID	4M-1	4M-1	4M-1	4M-1
			Sample_date	02/16/18	09/04/18	02/11/19	08/16/19
			Depth of Well BGS	325'	325'	325'	325'
			Depth to bottom screen, relative to MSL	-159'	-159'	-159'	-159'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	1110	1200	1200	1240	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	2.6	U	UB	
Bromide	24959-67-9	2 GV	<u>4.4</u>	<u>4.4</u>	<u>4.9</u>	<u>4.8</u>	
Chloride (as Cl)	16887-00-6	250 ST	<u>412</u>	<u>492</u>	<u>687</u>	<u>479</u>	
Cod - Chemical Oxygen Demand	COD	---	292 J	283 J	260	288	
Color	COLOR	---	200	150	200	125	
Hardness (as CaCO3)	HARD	---	320	267	300	260	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	<u>172</u>	<u>171</u>	<u>173</u>	<u>179</u>	
Nitrogen, Kjeldahl, Total	KN	---	206 J	192 J	178 J	191 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJ	UJ	U	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	UJ	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	<u>0.024</u>	<u>0.047</u>	UB	UBJ	
Sulfate (as SO4)	14808-79-8	250 ST	7.7	UB	9.9 J	10.6	
Total Dissolved Solids	E-10173	---	1580	1350	1600	1530	
Total Organic Carbon	TOC	---	79.6 J	72.5 J	79.9	76.4	

mg/l Milligrams per liter
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			Sample ID	4M-2	4M-2	4M-2	4M-2
			Sample_date	08/11/17	02/26/18	02/11/19	08/16/19
			Depth of Well BGS	486'	486'	486'	486'
			Depth to bottom screen, relative to MSL	-320'	-320'	-320'	-320'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO ₃)	ALK	---	24.8 J	232	276 J	336	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	2.3	U	UB	
Bromide	24959-67-9	2 GV	<u>2.3</u>	<u>2.1</u>	<u>2.5</u>	<u>2.8</u>	
Chloride (as Cl)	16887-00-6	250 ST	<u>286</u>	<u>261</u>	<u>397</u>	<u>311</u>	
Cod - Chemical Oxygen Demand	COD	---	48.4	43.1	30.6	41.1	
Color	COLOR	---	5	U	5	U	
Hardness (as CaCO ₃)	HARD	---	280 J	240	280	240	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	<u>5.6</u>	<u>3.6</u>	<u>4.2</u>	<u>5.5</u>	
Nitrogen, Kjeldahl, Total	KN	---	6.5	4.1 J	5.3 J	8.8 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	3.3 J	0.13 J	U	U	
Nitrogen, Nitrite	14797-65-0	1 ST	0.2	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UBJ	
Sulfate (as SO ₄)	14808-79-8	250 ST	59.1	53.6	56.5 J	56.9	
Total Dissolved Solids	E-10173	---	736	736	700	746	
Total Organic Carbon	TOC	---	9.1 J	7.3	7.7	9.3	

mg/l Milligrams per liter
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 J Estimated detection limit or value
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			Sample ID 6G-1	6G-1	6G-1	6G-1
			Sample_date 08/09/17	02/22/18	02/14/19	08/15/19
			Depth of Well BGS 147'	147'	147'	147'
			Depth to bottom screen, relative to MSL 32'	32'	32'	32'
			Gradient relative to MSW DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	92.8 J	314	57.4	62.6
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.039 J	0.038 J	UB	UB
Chloride (as Cl)	16887-00-6	250 ST	39	34.9	29.5 J	26.1 J
Cod - Chemical Oxygen Demand	COD	---	17.2	15.7	UJ	10.2 J
Color	COLOR	---	U	5	U	U
Hardness (as CaCO ₃)	HARD	---	56	50	30	43.3
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UBJ	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---	UBJ	U	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.2	U	2.8 J	2 J
Nitrogen, Nitrite	14797-65-0	1 ST	UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	UB	U	UBJ
Sulfate (as SO ₄)	14808-79-8	250 ST	14	15.3	27.7	17
Total Dissolved Solids	E-10173	---	190	553	127	151
Total Organic Carbon	TOC	---	0.64 J	0.38 J	0.27 J	UJ

mg/l Milligrams per liter
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Exceeds Class GA Standard/Guidance value

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			Sample ID	6G-2	6G-2	6G-2	6G-2
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			Depth of Well BGS	230'	230'	230'	230'
			Depth to bottom screen, relative to MSL	-53'	-53'	-53'	-53'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	177 J	133	158	170	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.057 J	0.057 J	UB	UB	
Chloride (as Cl)	16887-00-6	250 ST	55.9	57.9	41 J	76.3	
Cod - Chemical Oxygen Demand	COD	---	17.2	U	UJ	UJ	
Color	COLOR	---	U	U	U	U	
Hardness (as CaCO3)	HARD	---	104	84	80	100	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UBJ	0.098 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UBJ	UJ	UBJ	UJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1	UB	2.8 J	3 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	U	UB	
Sulfate (as SO4)	14808-79-8	250 ST	20	21.6	29.6	52.6	
Total Dissolved Solids	E-10173	---	286	297	312	364	
Total Organic Carbon	TOC	---	1.4	0.72 J	0.76 J	0.72 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	6G-3	6G-3	6G-3	6G-3
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			Depth of Well BGS	315'	315'	315'	315'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	207 J	204	220	214	
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	
Bromide	24959-67-9	2 GV	0.29 J	0.32 J	0.58	0.38 J	
Chloride (as Cl)	16887-00-6	250 ST	48.8	42.1	88.3 J	86.7	
Cod - Chemical Oxygen Demand	COD	---	33.8	24.1	20.3 J	25.6 J	
Color	COLOR	---	10	5	10	5	
Hardness (as CaCO3)	HARD	---	196	172	160	160	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	6.4 J	7.5	6.9	7.7	
Nitrogen, Kjeldahl, Total	KN	---	9.4 J	7.3 J	8.4 J	7.1 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.21	U	UJ	U	
Nitrogen, Nitrite	14797-65-0	1 ST	UB	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	21.3	22.6	41.9	22.7	
Total Dissolved Solids	E-10173	---	330	311	338	370 J	
Total Organic Carbon	TOC	---	5.5	4.9	4.3	3.9 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 --- Not analyzed or no ST or GV
 BGS Below Ground Surface
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			Sample ID	6M-1	6M-1	6M-1	6M-1
			Sample_date	09/02/15	08/11/16	08/09/17	08/15/19
			Depth of Well BGS	545'	545'	545'	545'
			Depth to bottom screen, relative to MSL	-368'	-368'	-368'	-368'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO ₃)	ALK	---	76.1	72.7	89.2 J	84.9	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UB	
Bromide	24959-67-9	2 GV	U	U	0.11 J	UB	
Chloride (as Cl)	16887-00-6	250 ST	32.7	22.7	28.1	37.8	
Cod - Chemical Oxygen Demand	COD	---	U	U	6.8 J	10.2 J	
Color	COLOR	---	U	U	10	U	
Hardness (as CaCO ₃)	HARD	---	64 D	64 D	66 J	66.7	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	1.46	1.44	0.96	1.1	
Nitrogen, Kjeldahl, Total	KN	---	1.43 J	1.21	1.2 J	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	U	U	0.29 J	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	U	UB	
Sulfate (as SO ₄)	14808-79-8	250 ST	6.27	5.86	9.7	7	
Total Dissolved Solids	E-10173	---	109	124	130	191 J	
Total Organic Carbon	TOC	---	1.7	1.4 J	1.4	0.86 J	

mg/l Milligrams per liter
U Compound was analyzed for but not detected
UB Qualified as non detect (U) based on blank results
J Estimated detection limit or value
D Result was reported from a secondary dilution
NR Not reported
-- Not analyzed or no ST or GV
BGS Below Ground Surface
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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			7M-1 08/10/17 214' -152' CROSS	7M-1 02/23/18 214' -152' CROSS	7M-1 02/12/19 214' -152' CROSS	7M-1 08/20/19 214' -152' CROSS
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	39.4 J	29	26.5	25.5
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.037 J	0.035 J	0.059 J	UB
Chloride (as Cl)	16887-00-6	250 ST	29.2	30.1	37.7	38
Cod - Chemical Oxygen Demand	COD	---	U	U	U	U
Color	COLOR	---	10	U	U	U
Hardness (as CaCO ₃)	HARD	---	68 J	60	54	26.7
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.36	0.49	0.64
Nitrogen, Kjeldahl, Total	KN	---	UJ	U	UB	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.4 J	2.3	1.6 J	2.5 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	U	UB	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	28.6	28.9	34.3 J	34.9
Total Dissolved Solids	E-10173	---	148	157	116 J	152
Total Organic Carbon	TOC	---	0.89 J	0.77 J	0.59 J	0.57 J

mg/l Milligrams per liter
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Exceeds Class GA Standard/Guidance value

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Sample ID			8G-1	8G-1	8G-1	8G-1
Sample_date			08/14/17	02/27/18	02/15/19	08/19/19
Depth of Well BGS			114'	114'	114'	114'
Depth to bottom screen, relative to MSL			20'	20'	20'	20'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	91 J	23.2	17.4	16.8
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.11 J	0.17 J	0.21 J	0.28 J
Chloride (as Cl)	16887-00-6	250 ST	360	425	U	1120
Cod - Chemical Oxygen Demand	COD	---	38	28.3	36.8 J	43.3
Color	COLOR	---	20	U	U	U
Hardness (as CaCO ₃)	HARD	---	213 J	180	260	400
Nitrogen, Ammonia (as N)	7864-41-7	2 ST	UB	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---	UB	U	U	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.2	2.7 J	3.4 J	3.3
Nitrogen, Nitrite	14797-85-0	1 ST	UB	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ
Sulfate (as SO ₄)	14808-79-6	250 ST	18.9	24.6	17.6	20.7
Total Dissolved Solids	E-10173	---	825	882	996	1440
Total Organic Carbon	TOC	---	2.9 J	0.59 J	0.28 J	U

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			Sample ID	8M-1	9M-1	8M-1	8M-1
			Sample_date	06/14/17	02/27/18	02/15/19	08/19/19
			Depth of Well BGS	270'	270'	270'	270'
			Depth to bottom screen, relative to MSL	-134'	-134'	-134'	-134'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	248 J	210	209	264	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	U	UB	
Bromide	24959-67-9	2 GV	0.27 J	0.31 J	0.32 J	0.53	
Chloride (as Cl)	16887-00-6	250 ST	76.9	81.7	U	99.8	
Cod - Chemical Oxygen Demand	COD	---	44.2	15.7	12.1 J	12.4	
Color	COLOR	---	80	U	U	U	
Hardness (as CaCO3)	HARD	---	207 J	173	170	200	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	5.3	8.8	4.8	4.9	
Nitrogen, Kjeldahl, Total	KN	---	6.4 J	9 J	4.1 J	4.2 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.39	5.2 J	8.9 J	6.2	
Nitrogen, Nitrite	14797-65-0	1 ST	0.022 J	UJ	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	40.6	25.8	30	31.9	
Total Dissolved Solids	E-10173	---	453	378	326	394	
Total Organic Carbon	TOC	---	8.8 J	2.9	1.8	2.9	

mg/l Milligrams per liter
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			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			Depth of Well BGS	383'	383'	383'	383'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
		GROUNDWATER					
Chemical Name	CAS Number	ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	50.2	36	42.2		43.4
Biochemical Oxygen Demand (BOD)	BOD5	---	1 J	U	U		UB
Bromide	24959-67-9	2 GV	0.074 J	0.066 J	U		0.14 J
Chloride (as Cl)	16887-00-6	250 ST	48.6	19.6	UBJ		28.7
Cod - Chemical Oxygen Demand	COD	---	27.6	U	10 J		U
Color	COLOR	---	5	U	U		U
Hardness (as CaCO3)	HARD	---	56	44	52		46.7
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.18	0.35	0.29		UB
Nitrogen, Kjeldahl, Total	KN	---	0.86 J	0.21 J	UBJ		UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.1	0.52 J	1.2 J		0.82
Nitrogen, Nitrite	14797-65-0	1 ST	UB	UJ	U		U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.009	UB	UB		UJ
Sulfate (as SO4)	14808-79-8	250 ST	6.6	4.2 J	U		5.4
Total Dissolved Solids	E-10173	---	126	100	87		106
Total Organic Carbon	TOC	---	0.96 J	0.4 J	0.32 J		U

mg/l Milligrams per liter
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			Sample ID	9G-1	9G-1	9G-1	9G-1
			Sample_date	08/09/16	08/08/17	09/07/18	08/20/19
			Depth of Well BGS	68'	68'	68'	68'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	UP	UP	UP	UP
Units in mg/l							
		NYSDEC CLASS					
		GA					
		GROUNDWATER					
Chemical Name	CAS Number	ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	3.4	21.8 J	6.8 J	4.6	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	UB	U	UBJ	
Bromide	24959-67-9	2 GV	U	U	U	U	
Chloride (as Cl)	16887-00-6	250 ST	26.1	5.6	6.1	6.1	
Cod - Chemical Oxygen Demand	COD	---	U	40	21.6	U	
Color	COLOR	---	5	U	30	U	
Hardness (as CaCO3)	HARD	---	16	22.7	4 J	4 J	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	U	UBJ	UB	UB	
Nitrogen, Kjeldahl, Total	KN	---	0.11	UBJ	0.71 J	UB	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.11	0.19	0.24	0.096 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	UB	UB	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	U	3.8 J	UB	5.8	
Total Dissolved Solids	E-10173	---	63	45	34	52	
Total Organic Carbon	TOC	---	U	1.1	UB	U	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
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Blydenburgh Road Landfill Complex
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Sample ID			10G-1	10G-1	10G-1	10G-1
Sample_date			08/14/15	08/10/16	08/10/17	08/21/19
Depth of Well BGS			69'	69'	69'	69'
Depth to bottom screen, relative to MSL			20'	20'	20'	20'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	9.15	11 D	28.8 J	10.7
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UB
Bromide	24959-67-9	2 GV	U	U	0.037 J	UB
Chloride (as Cl)	16887-00-6	250 ST	148 D	136 D	77	76.1
Cod - Chemical Oxygen Demand	COD	---	U	U	10.9	32.2
Color	COLOR	---	U	5	5	U
Hardness (as CaCO ₃)	HARD	---	48 D	54 D	32 J	25
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	U	0.15	UB	UB
Nitrogen, Kjeldahl, Total	KN	---	U	U	UBJ	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.11 D	2.53 D	1.1 J	1.4 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	UB	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	13.1	14.8	6.8	24.5
Total Dissolved Solids	E-10173	---	288	273	166	256
Total Organic Carbon	TOC	---	1.8 J	1.1 J	1.6	U

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
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			Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	10M-1 08/10/17 256 -167 DOWN	10M-1 02/15/18 256 -167 DOWN	10M-1 02/12/19 256 -167 DOWN	10M-1 08/21/19 256 -167 DOWN
Units in mg/l							
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO ₃)	ALK	---	92.4 J	270	317	334	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	U	UB	
Bromide	24959-67-9	2 GV	0.064 J	0.13 J	0.69	0.7	
Chloride (as Cl)	16887-00-6	250 ST	26	75.1	115	120	
Cod - Chemical Oxygen Demand	COD	---	10.9	17.8 J	12.1	10.2	
Color	COLOR	---	40	U	U	U	
Hardness (as CaCO ₃)	HARD	---	72 J	350	300	320	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.51	0.43	0.61	
Nitrogen, Kjeldahl, Total	KN	---	1 J	0.76 J	0.96 J	UB	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.3 J	UJB	3.3 J	4.2 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ	
Sulfate (as SO ₄)	14808-79-8	250 ST	6.1	25	32.2 J	32.7	
Total Dissolved Solids	E-10173	---	149	480	460 J	478	
Total Organic Carbon	TOC	---	3.4	2	2.5	2.4	

mg/l Milligrams per liter
U Compound was analyzed for but not detected
UB Qualified as non detect (U) based on blank results
J Estimated detection limit or value
D Result was reported from a secondary dilution
NR Not reported
-- Not analyzed or no ST or GV
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard

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Blydenburgh Road Landfill Complex
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Monitoring Well Sample Results
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			Sample ID	11G-1	11G-1	11G-1	11G-1
			Sample_date	02/26/18	08/31/18	02/13/19	08/14/19
			Depth of Well BGS	145'	145'	145'	145'
			Depth to bottom screen, relative to MSL	22'	22'	22'	22'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
		GROUNDWATER					
Chemical Name	CAS Number	ST/GV					
Alkalinity, Total (as CaCO ₃)	ALK	---	731	1170	733	741	
Biochemical Oxygen Demand (BOD)	BOD5	---	4.3	3.8	3.1	UB	
Bromide	24959-67-9	2 GV	1.7	U	1.8	2	
Chloride (as Cl)	16887-00-8	250 ST	113	498	U	277	
Cod - Chemical Oxygen Demand	COD	---	163	156	150	151	
Color	COLOR	---	100	100	150	125	
Hardness (as CaCO ₃)	HARD	---	28	34	34	30	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	120	119	127	125	
Nitrogen, Kjeldahl, Total	KN	---	123 J	104 J	132 J	135 J	
Nitrogen, Nitrate (as N)	14797-55-9	10 ST	UJ	U	UB	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.042	0.05	UB	UB	
Sulfate (as SO ₄)	14808-79-8	250 ST	0.73 J	UB	U	U	
Total Dissolved Solids	E-10173	---	756	1150	804 J	864	
Total Organic Carbon	TOC	---	43.3	45 J	43.9	46.2	

mg/l Milligrams per liter

U Compound was analyzed for but not detected

UB Qualified as non detect (U) based on blank results

J Estimated detection limit or value

D Result was reported from a secondary dilution

NR Not reported

--- Not analyzed or no ST or GV

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	02/26/18	08/31/18	02/13/19	08/14/19
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-51	-51	-51	-51
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
Chemical Name	CAS Number	GROUNDWATER					
		ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	961	1120	992	871	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	3.4	4.9	UB	
Bromide	24959-67-9	2 GV	<u>4.2</u>	U	<u>4</u>	<u>3.5</u>	
Chloride (as Cl)	16887-00-6	250 ST	<u>406</u>	<u>479</u>	42.6	<u>385</u>	
Cod - Chemical Oxygen Demand	COD	---	240	244	221	149	
Color	COLOR	---	100	100	150	125	
Hardness (as CaCO3)	HARD	---	133	100	108	100	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	<u>169</u>	<u>176</u>	<u>153</u>	<u>119</u>	
Nitrogen, Kjeldahl, Total	KN	---	195 J	204 J	178 J	132 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJ	U	UB	U	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UJB	<u>0.025 J</u>	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	2.9 J	UB	4.1 J	5.5	
Total Dissolved Solids	E-10173	---	1420	762	552 J	1030	
Total Organic Carbon	TOC	---	62.4	61.8 J	56.6	42	

mg/l Milligrams per liter
U Compound was analyzed for but not detected
UB Qualified as non detect (U) based on blank results
J Estimated detection limit or value
D Result was reported from a secondary dilution
NR Not reported
-- Not analyzed or no ST or GV
BGS Below Ground Surface
MSL Mean Sea Level
MSW Municipal Solid Waste
GV Guidance Value
ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	11M-1	11M-1	11M-1	11M-1
			Sample_date	08/19/15	08/09/16	08/03/17	08/14/19
			Depth of Well BGS	320'	320'	320'	320'
			Depth to bottom screen, relative to MSL	-154'	-154'	-154'	-154'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	135 D	160 D	120	157	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UB	
Bromide	24959-67-9	2 GV	U	0.59 J	0.51	0.73	
Chloride (as Cl)	16887-00-6	250 ST	99.7 D	85.4 D	71.7	96.7	
Cod - Chemical Oxygen Demand	COD	---	U	U	13	U	
Color	COLOR	---	U	5	15	U	
Hardness (as CaCO3)	HARD	---	160 D	184 D	156	220	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.68	0.66	UBJ	UB	
Nitrogen, Kjeldahl, Total	KN	---	0.5	2.74	UBJ	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.19 J	0.11	0.13	0.021 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	26.1	24.7	21.7	25.2	
Total Dissolved Solids	E-10173	---	286	333	275	348	
Total Organic Carbon	TOC	---	4.7	3.7	2.5	2.6	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	08/09/17	02/22/18	02/14/19	03/15/19
			Depth of Well BGS	338'	338'	338'	338'
			Depth to bottom screen, relative to MSL	-163'	-163'	-163'	-163'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS					
		GA					
Chemical Name	CAS Number	GROUNDWATER					
		ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	320 J	105	372	375	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.58	0.037 J	1.4	0.89	
Chloride (as Cl)	16887-00-6	250 ST	81.6	34.8	60.4 J	108	
Cod - Chemical Oxygen Demand	COD	---	31.7	24.1	22.4 J	25.6	
Color	COLOR	---	U	U	15	5	
Hardness (as CaCO3)	HARD	---	340	280	380	320	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UBJ	2.1	1.2	1.4	
Nitrogen, Kjeldahl, Total	KN	---	1.6 J	2 J	2.1 J	1.9 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.1	2.1	3.3 J	0.45 J	
Nitrogen, Nitrite	14797-85-0	1 ST	UB	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UBJ	
Sulfate (as SO4)	14808-79-8	250 ST	36.6	15.3	28.7	38.3	
Total Dissolved Solids	E-10173	---	521	205	516	506	
Total Organic Carbon	TOC	---	4.6	35.2	5.2	5.6 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	13G-1	13G-1	13G-1	13G-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			Depth of Well BGS	93'	93'	93'	93'
			Depth to bottom screen, relative to MSL	17'	17'	17'	17'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
			Units in mg/l				
		NYSDEC CLASS					
		GA					
		GROUNDWATER					
Chemical Name	CAS Number	ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	15.4 J	20	22.8	24.1	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.077 J	U	0.078 J	UB	
Chloride (as Cl)	16887-00-6	250 ST	35.5	43.3	49.1	42.2	
Cod - Chemical Oxygen Demand	COD	---	13	11.4 J	U	UJ	
Color	COLOR	---	10	U	U	U	
Hardness (as CaCO3)	HARD	---	54 J	76	65	40	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.78	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UB	UJ	UJ	UJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.2	UJB	2.8	1.7 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	0.044 J	
Sulfate (as SO4)	14808-79-8	250 ST	24.3	29	26 J	19	
Total Dissolved Solids	E-10173	---	150	168	143 J	135	
Total Organic Carbon	TOC	---	UBJ	UB	0.33 J	UJ	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
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 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	13M-1	13M-1	13M-1	13M-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			Depth of Well BGS	265'	265'	265'	265'
			Depth to bottom screen, relative to MSL	-155	-155	-155	-155
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO ₃)	ALK	---	131 J	473	484	483	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	U	0.29 J	0.9	0.88	
Chloride (as Cl)	16887-00-6	250 ST	21	97	U	108	
Cod - Chemical Oxygen Demand	COD	---	132	30.4 J	22.4	23.4 J	
Color	COLOR	---	500	U	15	U	
Hardness (as CaCO ₃)	HARD	---	140 J	500	500	460	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	1.7	0.82	1.4	
Nitrogen, Kjeldahl, Total	KN	---	4.4	1.7 J	2.1 J	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.3	UJ	UB	U	
Nitrogen, Nitrite	14797-65-0	1 ST	0.37	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.018	UB	UB	UB	
Sulfate (as SO ₄)	14808-79-8	250 ST	11	11.3	16.1 J	17	
Total Dissolved Solids	E-10173	---	305	651	612 J	572	
Total Organic Carbon	TOC	---	40.7 J	5.5	5.5	4.6 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-58	-58	-58	-58
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	498	169	222	242	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.19 J	U	0.36 J	0.43 J	
Chloride (as Cl)	16887-00-6	250 ST	58.2	55.1	85.8	96.7	
Cod - Chemical Oxygen Demand	COD	---	38	13.5 J	U	U	
Color	COLOR	---		U	U	U	
Hardness (as CaCO3)	HARD	---	150	190	200	210	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.028 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UBJ	0.13 J	UB	UJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	5.7	5.5 J	7 J	6.8	
Nitrogen, Nitrite	14797-65-0	1 ST	UJ	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	U	UB	
Sulfate (as SO4)	14808-79-8	250 ST	24.9	31.5	30.9 J	31.6	
Total Dissolved Solids	E-10173	---	364	357	378	404	
Total Organic Carbon	TOC	---	2.5	1.7	1.5	1.4	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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			Sample ID	14G-2	14G-2	14G-2	14G-2
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			Depth of Well BGS	264'	264'	264'	264'
			Depth to bottom screen, relative to MSL	-103	-103	-103	-103
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	263	172	200	207	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	7.4 J	U	UB	
Bromide	24959-67-9	2 GV	0.14 J	U	0.3 J	0.33 J	
Chloride (as Cl)	16887-00-6	250 ST	48.3	50.6	70.2	76.7	
Cod - Chemical Oxygen Demand	COD	---	23.4	UJ	U	U	
Color	COLOR	---		U	U	U	
Hardness (as CaCO3)	HARD	---	190	200	190	200	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.072 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UBJ	UJ	UB	UJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	5.9	6.9 J	6 J	5.9	
Nitrogen, Nitrite	14797-65-0	1 ST	UJ	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	U	UB	
Sulfate (as SO4)	14808-79-8	250 ST	24.2	24	29.7 J	31.9	
Total Dissolved Solids	E-10173	---	316	353	372	326	
Total Organic Carbon	TOC	---	1.6	UB	1.2	0.94 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
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Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

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			Sample ID	14M-1	14M-1	14M-1	14M-1
			Sample_date	02/14/18	09/05/18	02/11/19	08/13/19
			Depth of Well BGS	355'	355'	355'	355'
			Depth to bottom screen, relative to MSL	-194'	-194'	-194'	-194'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
Chemical Name	CAS Number	GROUNDWATER					
		ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---	735	810 J	857	841	
Biochemical Oxygen Demand (BOD)	BOD5	---	UJ	U	U	21.8	
Bromide	24959-67-9	2 GV	<u>3.7</u>	<u>3.5</u>	<u>4</u>	<u>4</u>	
Chloride (as Cl)	16887-00-6	250 ST	<u>320</u>	<u>432</u>	24.7	<u>441</u>	
Cod - Chemical Oxygen Demand	COD	---	134 J	134 J	132	114	
Color	COLOR	---	30	40	75	50	
Hardness (as CaCO3)	HARD	---	480	320	440	300	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	<u>60.1</u>	<u>62.7</u>	<u>64.6</u>	<u>63.9</u>	
Nitrogen, Kjeldahl, Total	KN	---	60 J	65.4 J	69.7 J	69.3 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJ	U	U	U	
Nitrogen, Nitrite	14797-85-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	<u>0.028</u>	<u>0.035</u>	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	15.3	17.2	18.9 J	19.2	
Total Dissolved Solids	E-10173	---	1330	1120	1300	1200	
Total Organic Carbon	TOC	---	32.1	32.2 J	33.5	2.6	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

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			Sample ID	15G-1	15G-1	15G-1	15G-1
			Sample_date	08/19/15	08/03/16	08/14/17	08/15/19
			Depth of Well BGS	160'	160'	160'	160'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	42.9	48.8	76.2 J	55.3	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UB	
Bromide	24959-67-9	2 GV	U	U	0.067 J	0.11 J	
Chloride (as Cl)	16887-00-6	250 ST	11.2	11.8	10.4	12.9	
Cod - Chemical Oxygen Demand	COD	---	U	U	38	U	
Color	COLOR	---	U	5	10	U	
Hardness (as CaCO3)	HARD	---	68 D	76 D	80 J	80	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	U	U	UB	UB	
Nitrogen, Kjeldahl, Total	KN	---	0.28	0.16	0.91	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.6 D	1.05	1.3	3.4 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	UB	UBJ	
Sulfate (as SO4)	14808-79-8	250 ST	24.3	29.1	29.3	34.4	
Total Dissolved Solids	E-10173	---	113 J	160	129	134	
Total Organic Carbon	TOC	---	5.3	1.9	1.7 J	0.79 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 --- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in mg/l Gradient relative to MSW			16G-1 08/14/15 57' 20' DOWN	16G-1 08/10/16 57' 20' DOWN	16G-1 08/10/17 57' 20' DOWN	16G-1 08/21/19 57' 20' DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	11.2	14.4 D	13.4 J	14.3
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	UB	UB
Bromide	24959-67-9	2 GV	U	U	0.033 J	UB
Chloride (as Cl)	16887-00-6	250 ST	6.91	9.57	10.3	14.4
Cod - Chemical Oxygen Demand	COD	---	U	U	U	U
Color	COLOR	---	U	U	10 J	U
Hardness (as CaCO ₃)	HARD	---	21	30 D	30 J	16
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.22	U	UB	UB
Nitrogen, Kjeldahl, Total	KN	---	U	U	UBJ	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.73 D	1.96 D	1.3 J	1.5 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	UB	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	5.79	5.8	7.5	11.6
Total Dissolved Solids	E-10173	---	54	60	53	58
Total Organic Carbon	TOC	---	UJ	UJ	1.2	U

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

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			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-163	-163	-163	-163
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	256 J	240	219	223	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.29 J	0.27 J	0.34 J	UB	
Chloride (as Cl)	16887-00-6	250 ST	71	57.4	104	160	
Cod - Chemical Oxygen Demand	COD	---	6.8 J	13.5 J	U	U	
Color	COLOR	---	5	U	U	U	
Hardness (as CaCO3)	HARD	---	187 J	260	240	220	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.029 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UBJ	UJ	UB	U	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	4.2 J	UJB	4.4 J	5.9 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	30.2	25.2	32 J	31.5	
Total Dissolved Solids	E-10173	---	399	378	356 J	360	
Total Organic Carbon	TOC	---	2.1	UB	1.1	0.92 J	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 --- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

Appendix B-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	18G-1	18G-1	18G-1	18G-1
			Sample_date	08/02/17	02/16/18	02/13/19	08/13/19
			Depth of Well BGS	157'	157'	157'	157'
			Depth to bottom screen, relative to MSL	11'	11'	11'	11'
Units in mg/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
		NYSDEC CLASS					
		GA					
		GROUNDWATER					
		ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO ₃)	ALK	---	473	277	194	158	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.37 J	U	0.22 J	0.39 J	
Chloride (as Cl)	16887-00-6	250 ST	104	99.1	U	181	
Cod - Chemical Oxygen Demand	COD	---	65	57.9 J	38.9	21.2	
Color	COLOR	---		15	20	10	
Hardness (as CaCO ₃)	HARD	---	76	64	42	85	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	42.2 J	41.9	26.1	20.1	
Nitrogen, Kjeldahl, Total	KN	---	51.5 J	40.2 J	23.9 J	19.5 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	0.48	UJB	1.6	3.5	
Nitrogen, Nitrite	14797-65-0	1 ST	UJ	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.009	UB	UB	UB	
Sulfate (as SO ₄)	14808-79-8	250 ST	15.2	17	28.5 J	34.7	
Total Dissolved Solids	E-10173	---	394	421	270 J	396	
Total Organic Carbon	TOC	---	8.5	7.2	4.4	4.4	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

Appendix B-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	02/16/18	09/06/18	02/13/19	08/13/19
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	127	188 J	176	183	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	U	UB	
Bromide	24959-67-9	2 GV	0.15 J	0.11 J	0.28 J	0.29 J	
Chloride (as Cl)	16887-00-6	250 ST	64.6	80.7	91.2	98.1	
Cod - Chemical Oxygen Demand	COD	---	22 J	25.7	22.4	U	
Color	COLOR	---	U	5	U	U	
Hardness (as CaCO3)	HARD	---	90	92	96	95	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	2	1.8	2.5	3.1	
Nitrogen, Kjeldahl, Total	KN	---	2.2 J	2 J	3 J	3.8 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	UJB	3.2	6.1	8.6	
Nitrogen, Nitrite	14797-65-0	1 ST	U	UJ	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	21.2	26	25.5 J	21.2	
Total Dissolved Solids	E-10173	---	334	341	342 J	456	
Total Organic Carbon	TOC	---	1.6	1.7	2.3	2	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

Appendix B-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

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			Sample ID	22M-1	22M-1	22M-1	22M-1
			Sample_date	02/26/18	09/05/18	02/12/19	08/16/19
			Depth of Well BGS	222'	222'	222'	222'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
Units in mg/l			Gradient relative to MSW	UP	UP	UP	UP
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	30.6	31.4 J	32.8	31.8	
Biochemical Oxygen Demand (BOD)	BOD5	---	U	U	U	UB	
Bromide	24959-67-9	2 GV	0.04 J	0.038 J	0.055 J	0.099 J	
Chloride (as Cl)	16887-00-6	250 ST	31.3	44.4	43.9	46.8	
Cod - Chemical Oxygen Demand	COD	---	17.8	15.5 J	U	U	
Color	COLOR	---	U	U	U	U	
Hardness (as CaCO3)	HARD	---	54	62	56	53.3	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.75	1.2	0.69	0.74	
Nitrogen, Kjeldahl, Total	KN	---	0.22 J	2.1 J	0.67 J	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	1.3 J	2	1.4 J	2 J	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ	
Sulfate (as SO4)	14808-79-8	250 ST	20.7	21.5	23.1 J	23	
Total Dissolved Solids	E-10173	---	142	134	110 J	160	
Total Organic Carbon	TOC	---	0.67 J	UB	0.76 J	0.76 J	

mg/l Milligrams per liter

U Compound was analyzed for but not detected

UB Qualified as non detect (U) based on blank results

J Estimated detection limit or value

D Result was reported from a secondary dilution

NR Not reported

-- Not analyzed or no ST or GV

BGS Below Ground Surface

MSL Mean Sea Level

MSW Municipal Solid Waste

GV Guidance Value

ST Standard

Exceeds Class GA Standard/Guidance value

* Collected under pumping conditions

Appendix B-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

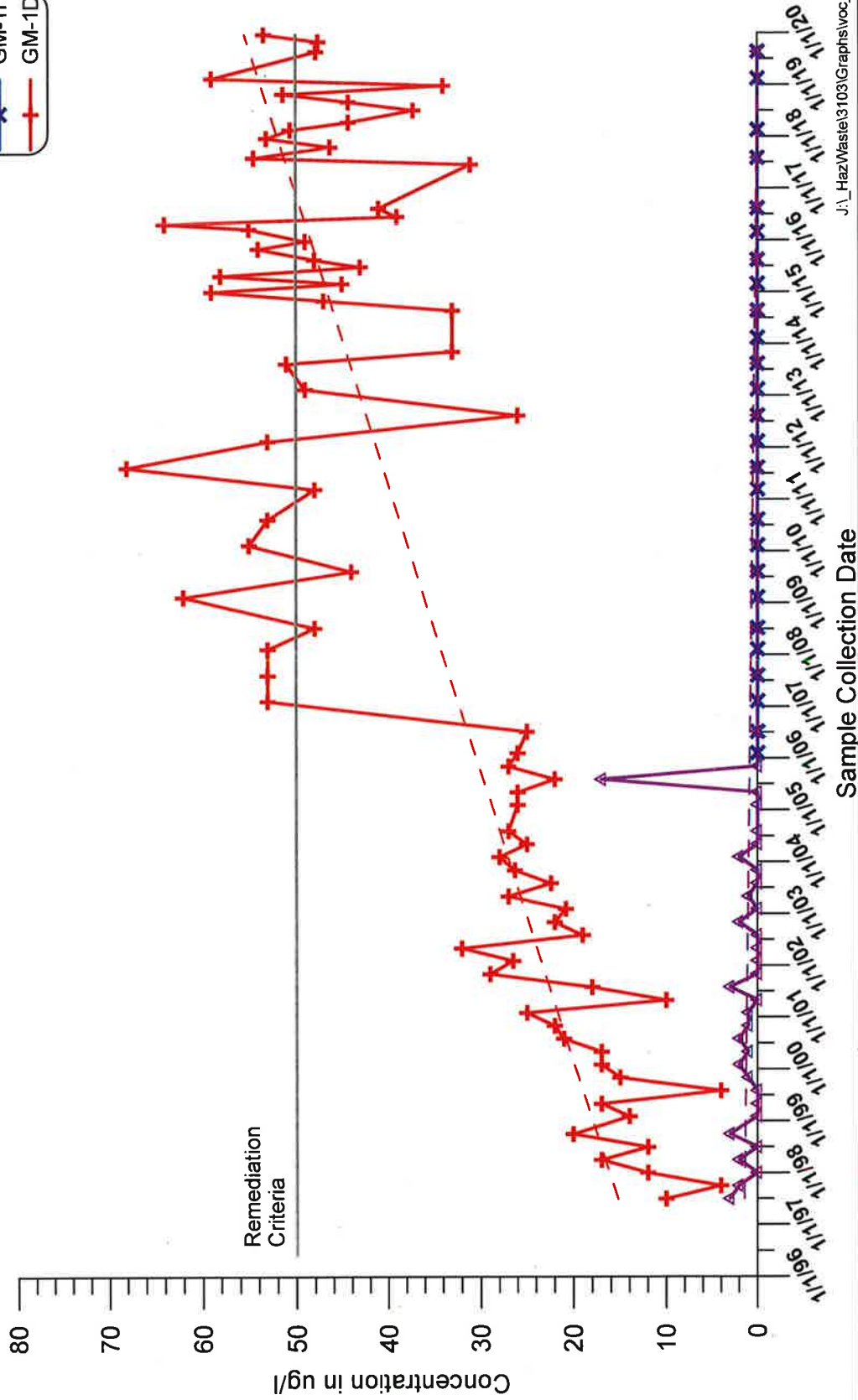
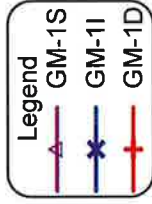
Page 39 of 39

			Sample ID	23M-1	23M-1	23M-1	23M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/14/19
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	146 J	112	128	125	
Biochemical Oxygen Demand (BOD)	BOD5	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.12 J	U	0.17 J	UB	
Chloride (as Cl)	16887-00-6	250 ST	42.5	39.3	47.8	42.9	
Cod - Chemical Oxygen Demand	COD	---	17.2	32.5 J	U	U	
Color	COLOR	---	5	U	U	U	
Hardness (as CaCO3)	HARD	---	133 J	180	150	140	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	0.083 J	U	UB	
Nitrogen, Kjeldahl, Total	KN	---	UBJ	UJ	UB	UBJ	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.6 J	UJB	3.1 J	U	
Nitrogen, Nitrite	14797-85-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	39.8	41	82 J	45.3	
Total Dissolved Solids	E-10173	---	238	282	262 J	298	
Total Organic Carbon	TOC	---	3.3	2.9	2.8	3.3	

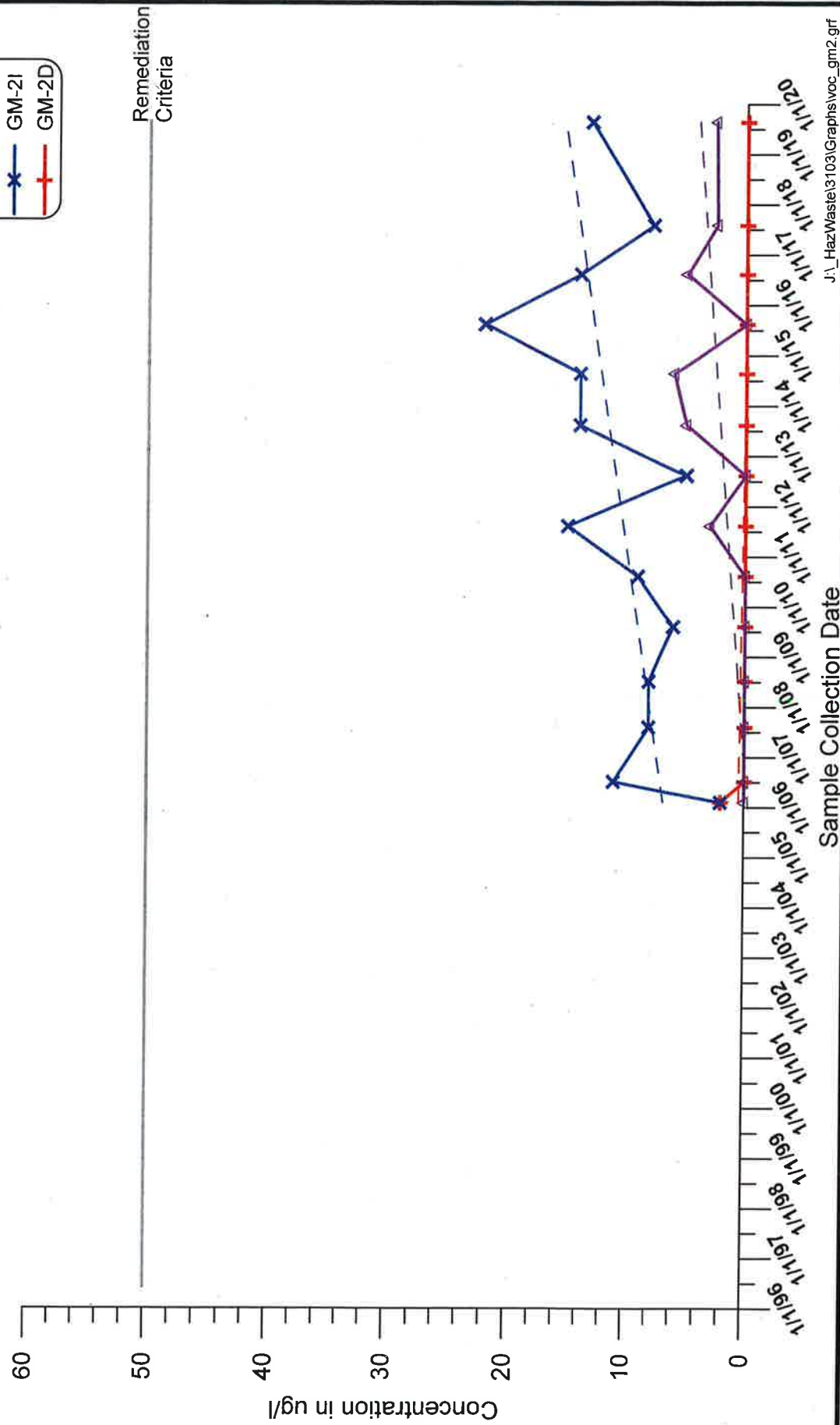
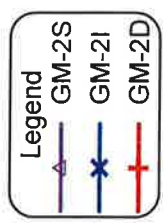
mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 UB Qualified as non detect (U) based on blank results
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 NR Not reported
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 * Collected under pumping conditions

APPENDIX C-1

HISTORICAL TREND GRAPHS FOR MONITORING WELLS - TOTAL VOLATILE ORGANIC COMPOUNDS



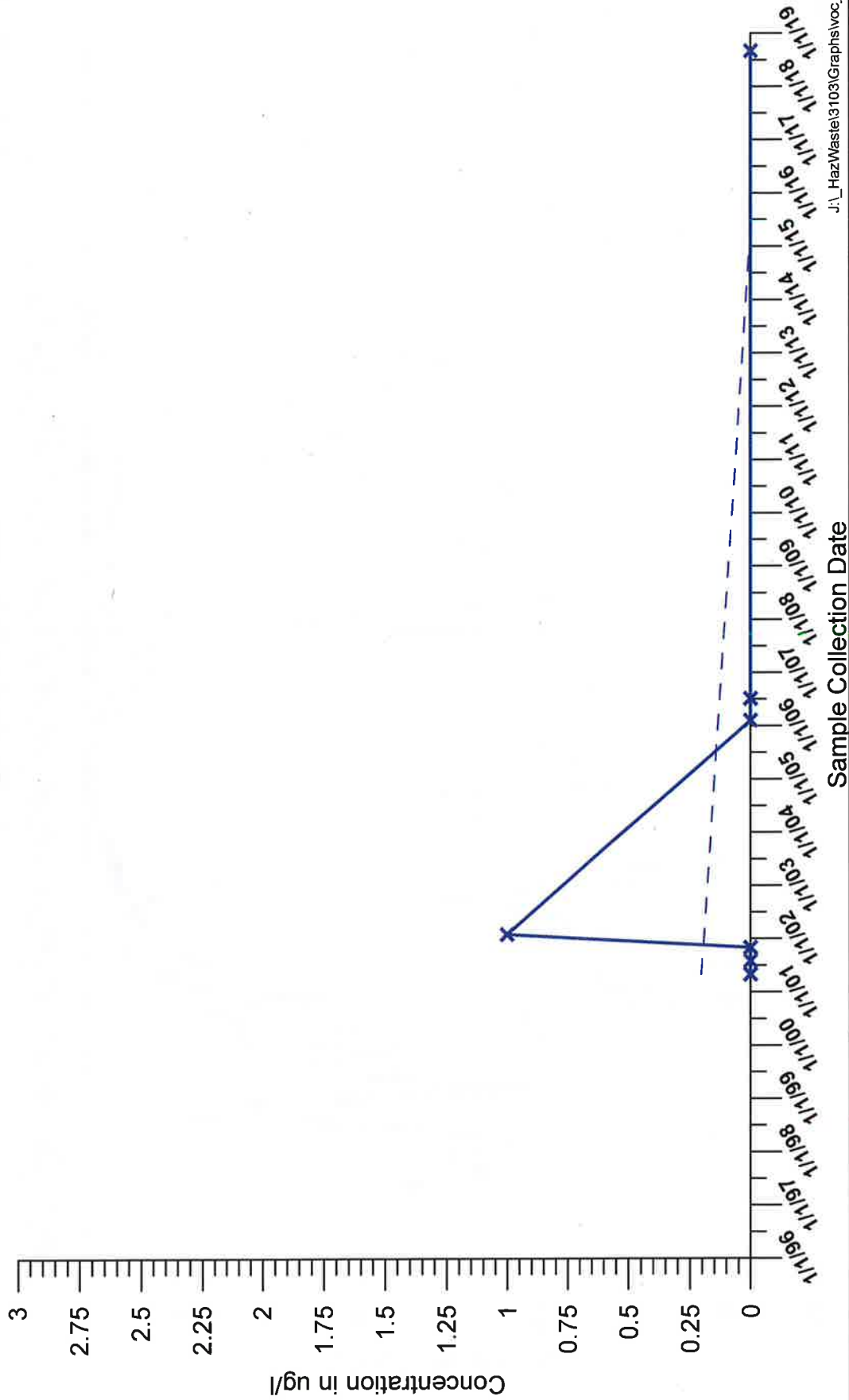
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J:_HazWaste\3103\Graphs\loc_gm2.grf

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Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster GM-2



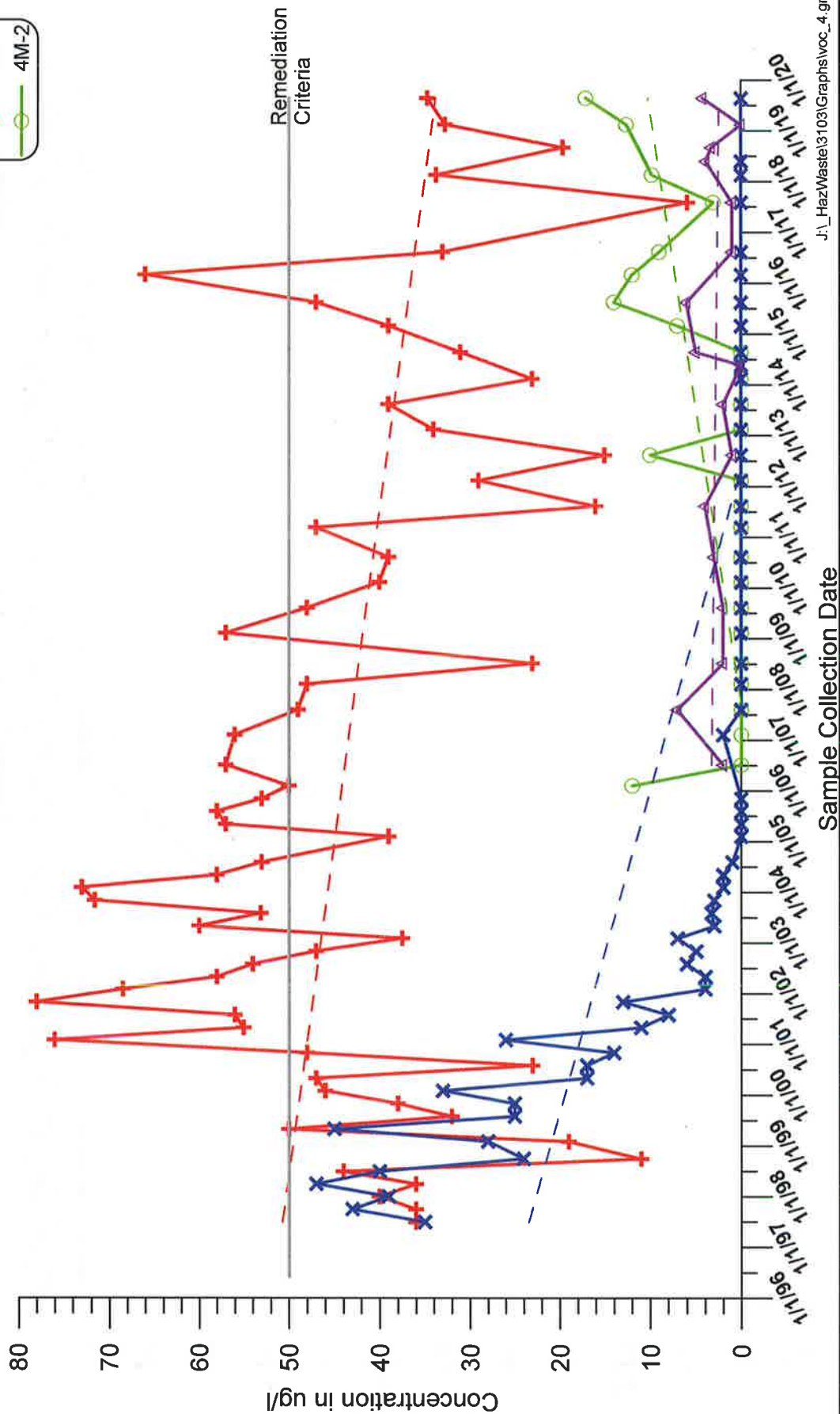


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**Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 4**

**Appendix
C-1**

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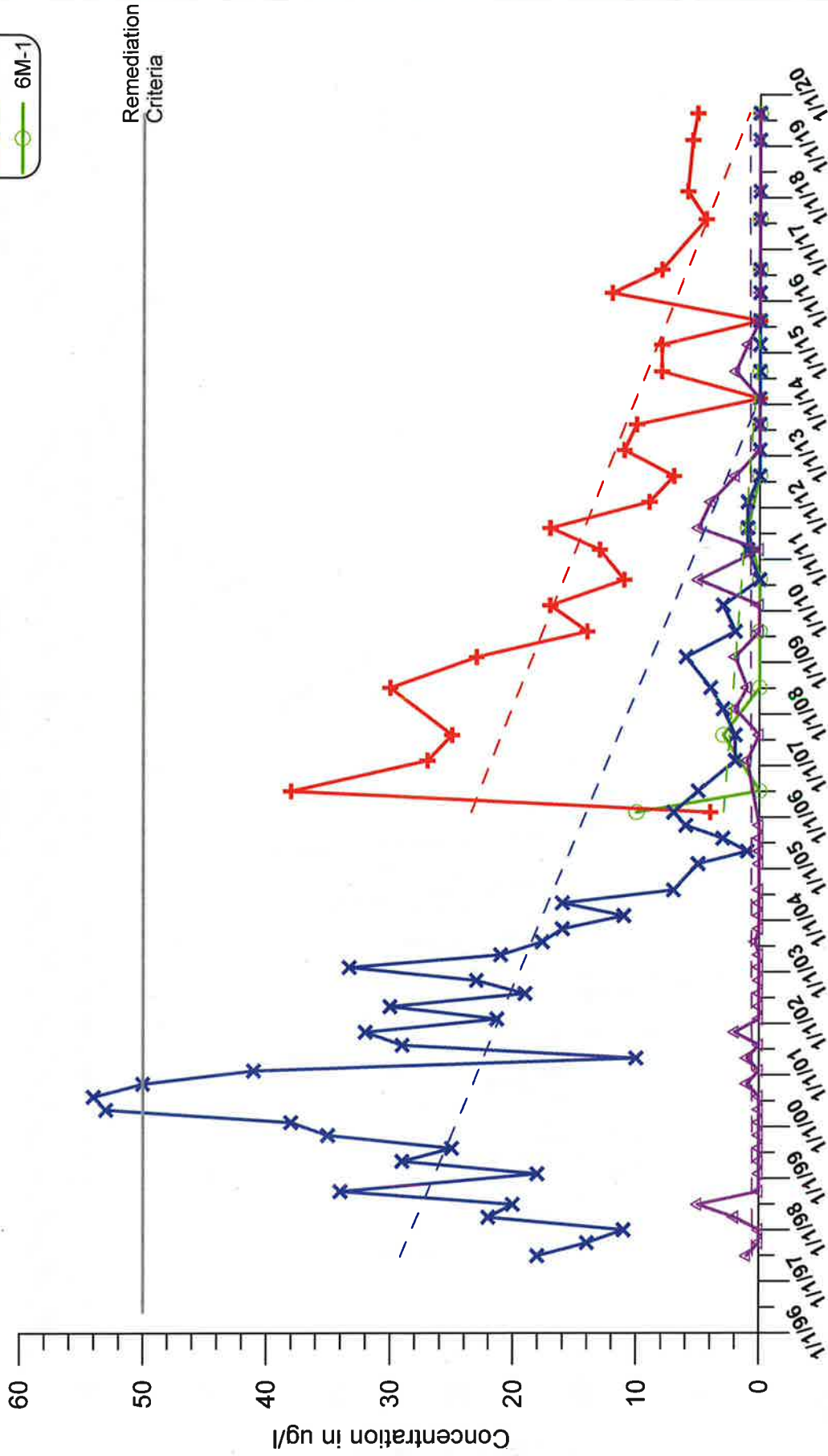
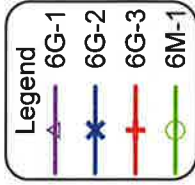


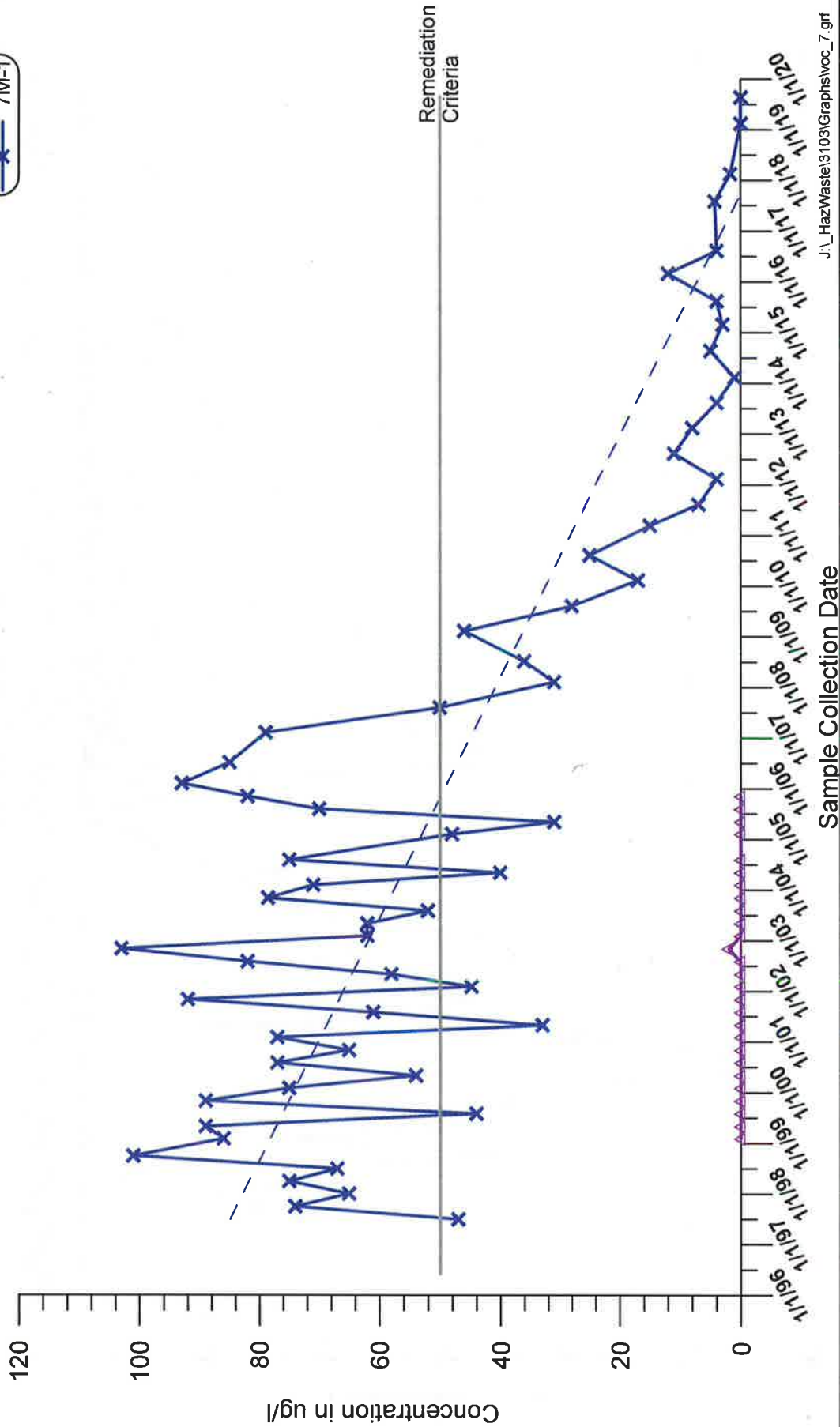
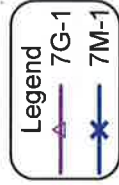
**Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 6**

**Appendix
C-1**

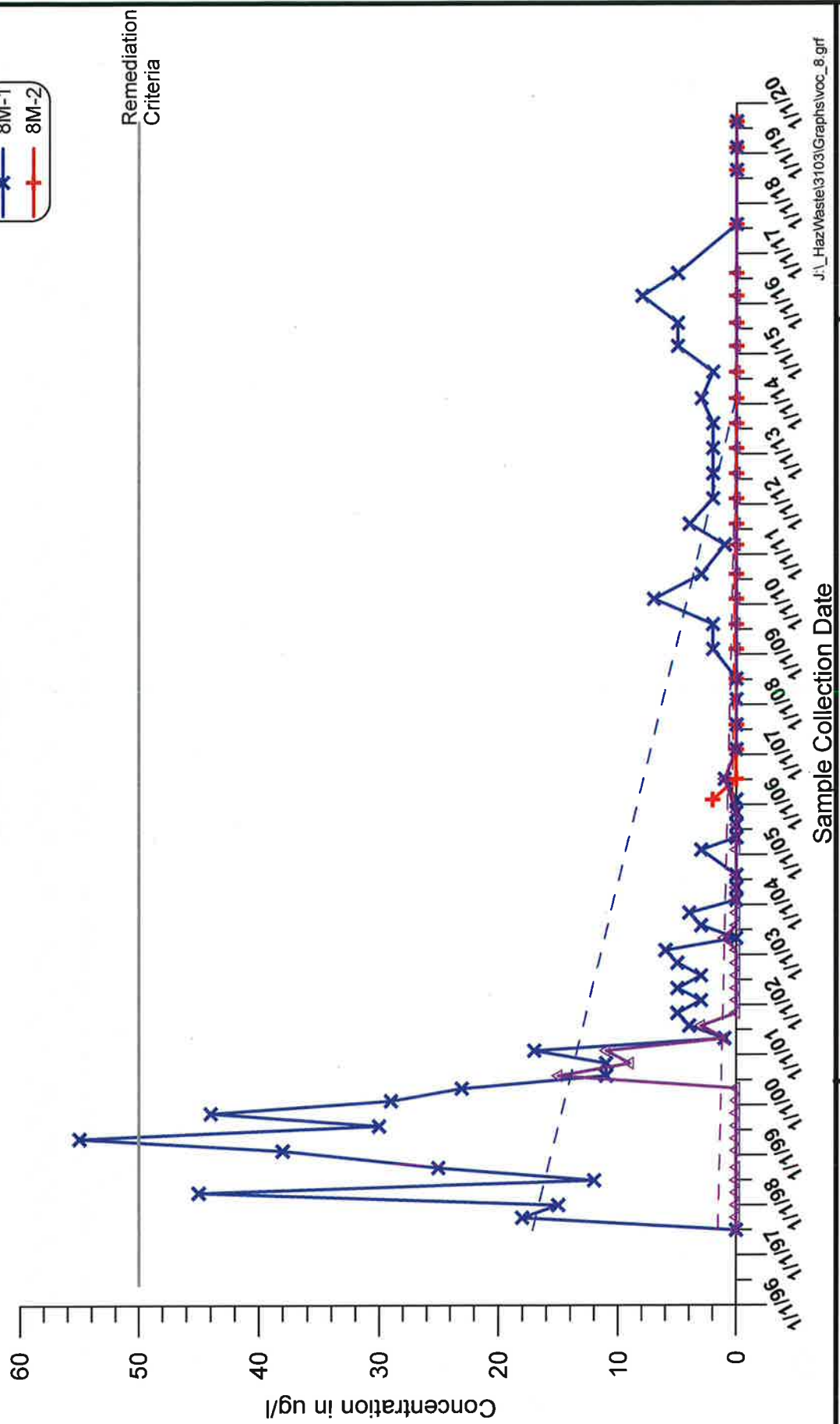
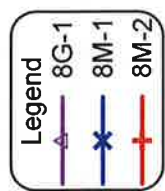
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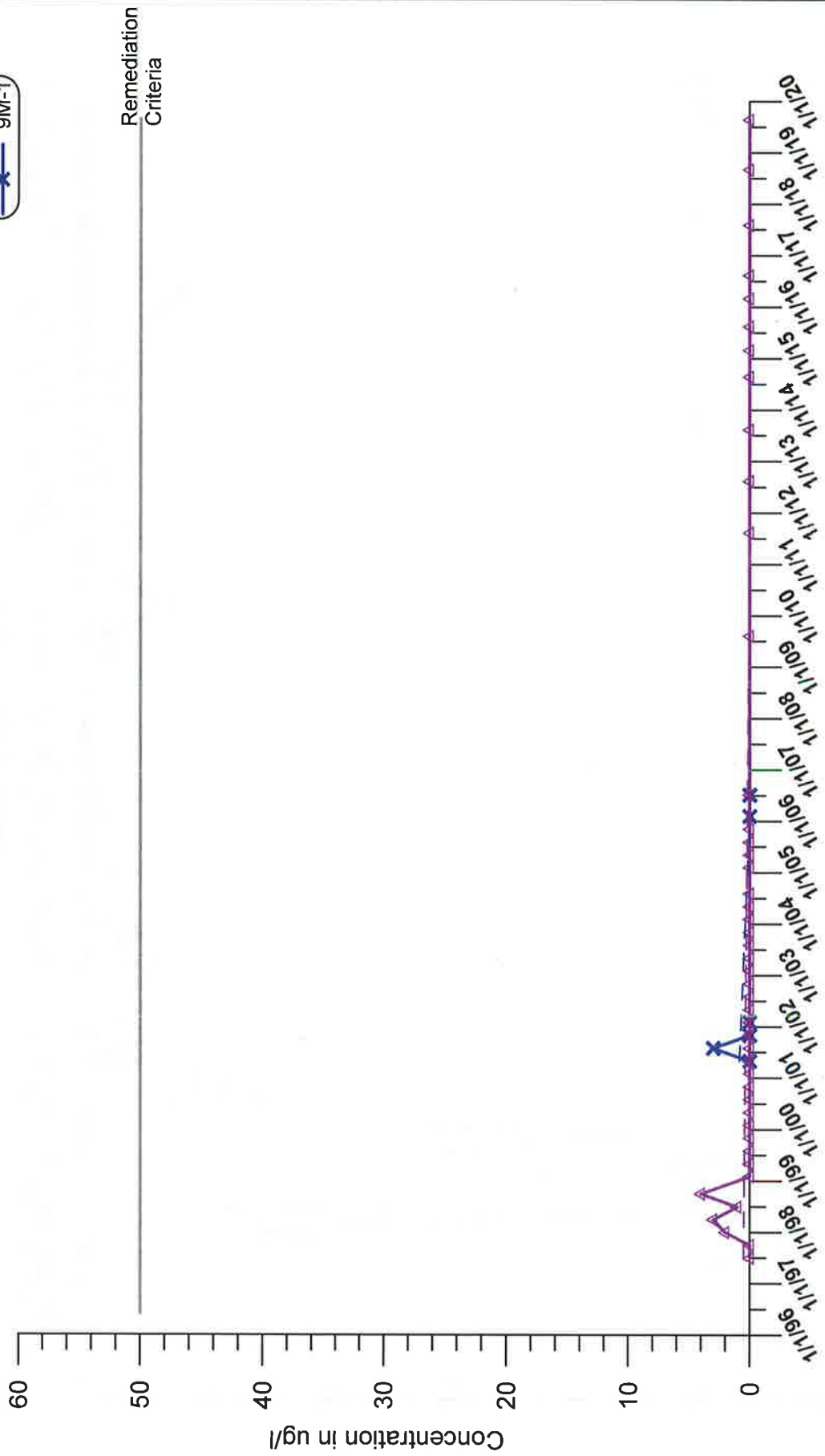
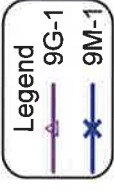




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Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 8



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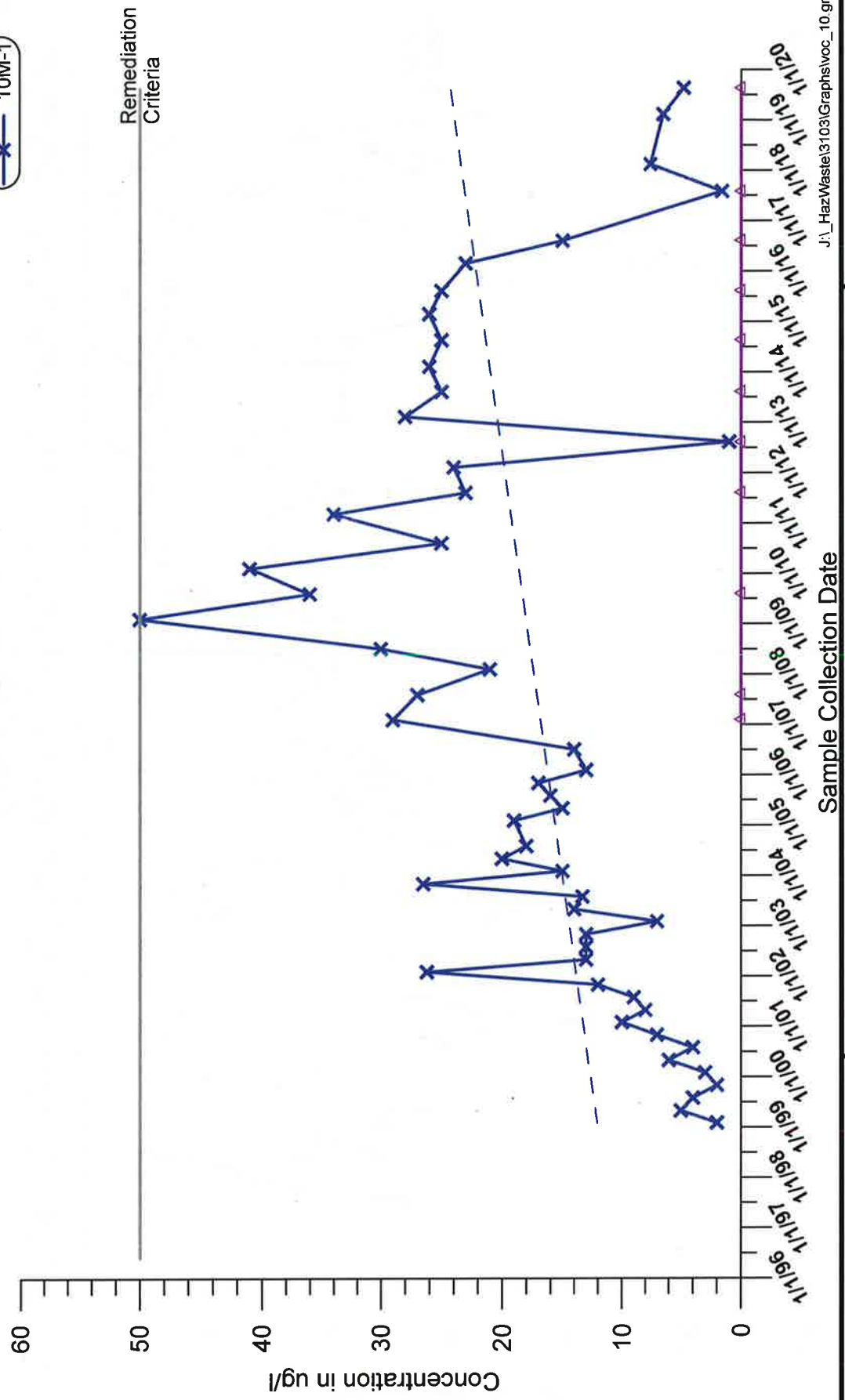
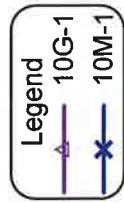
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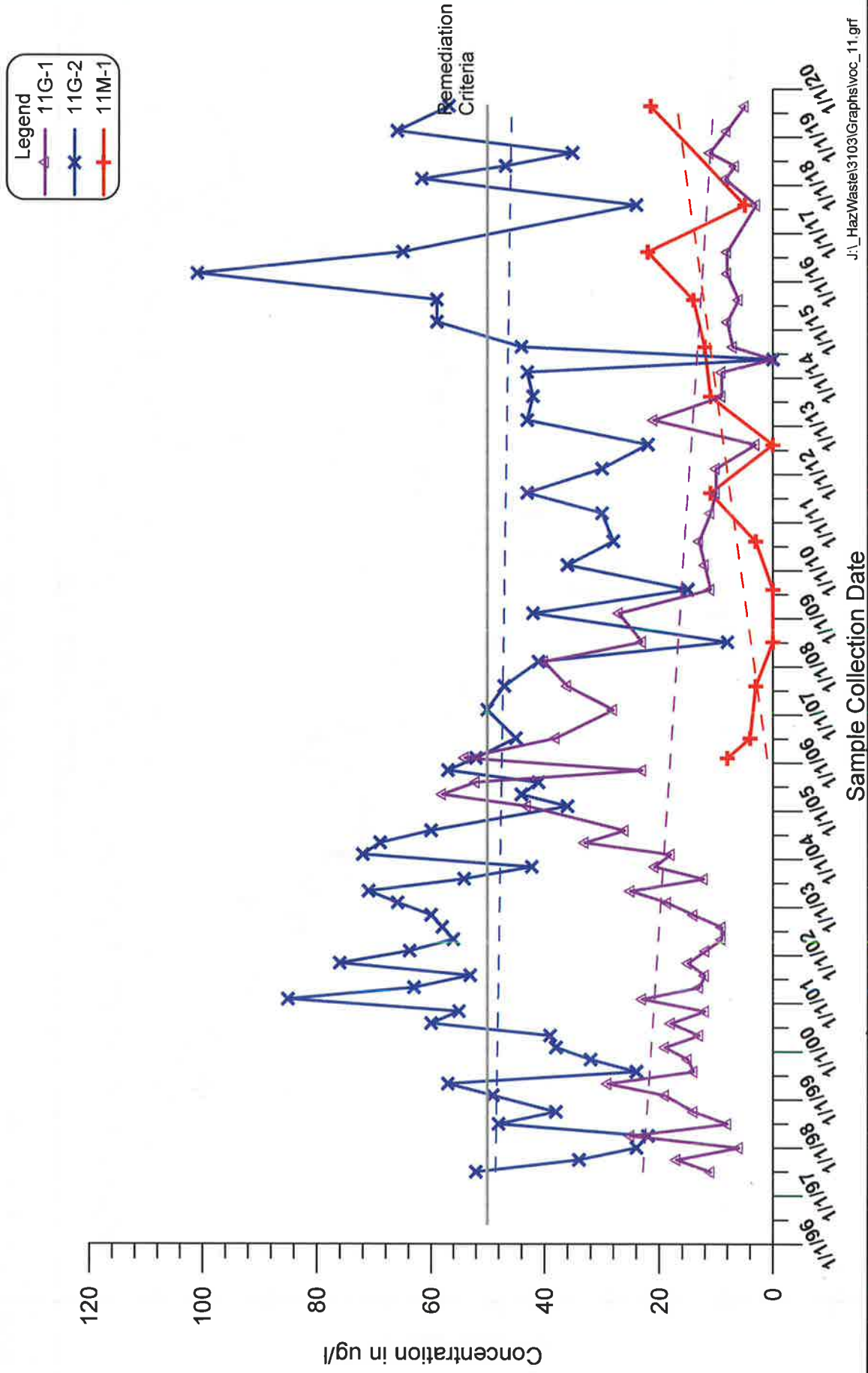


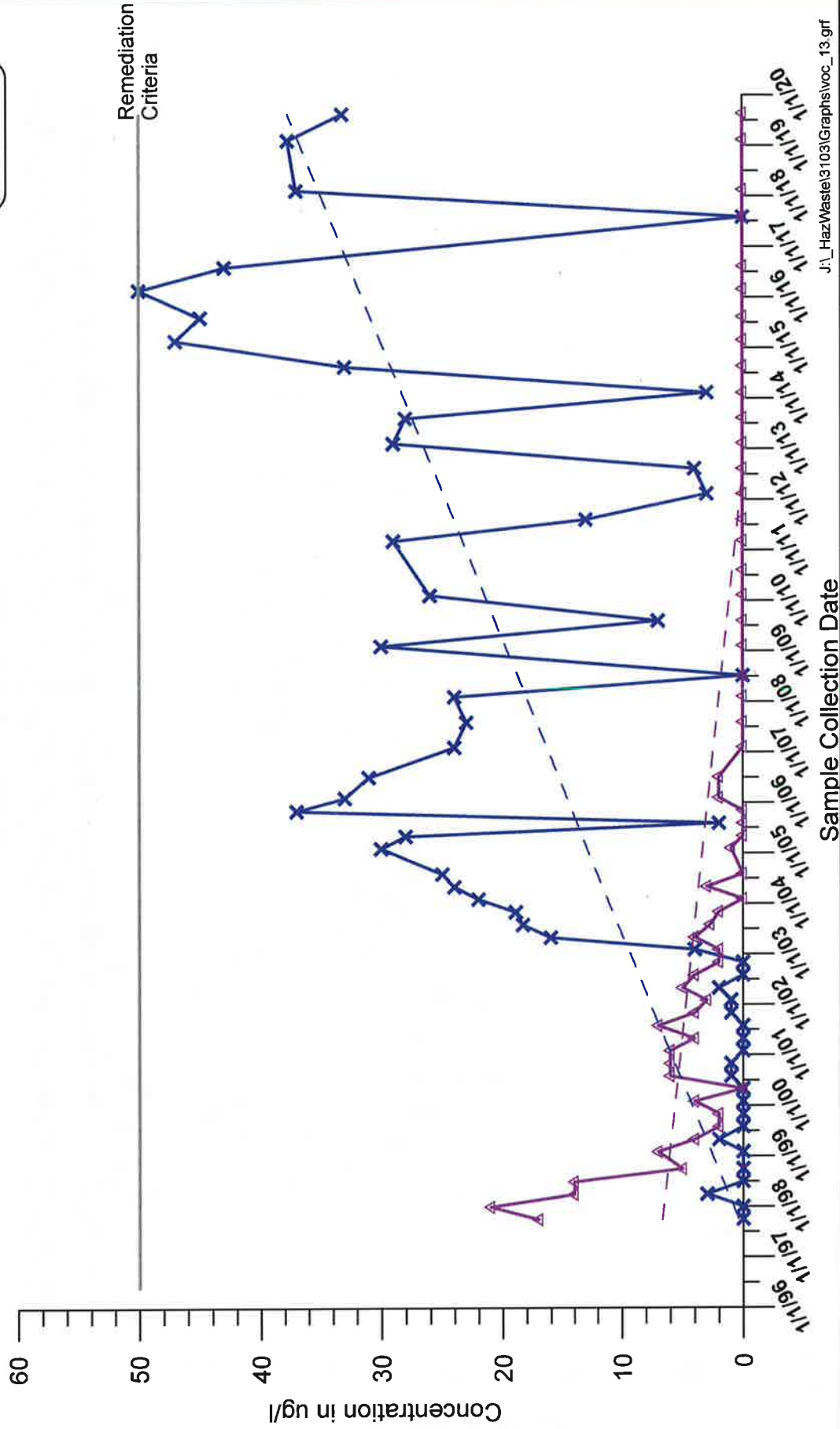
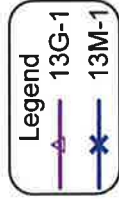
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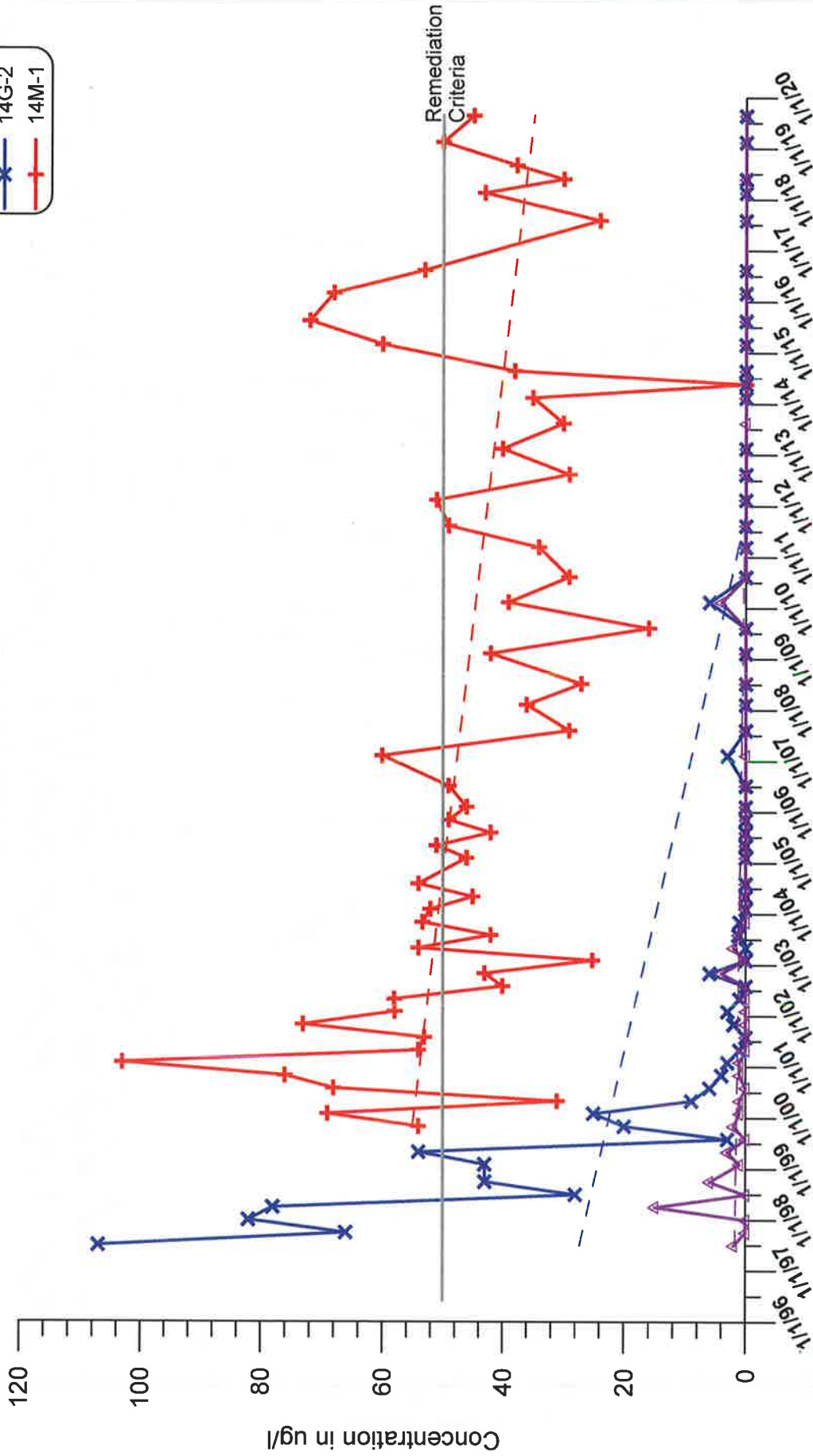
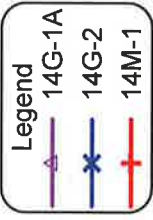
Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 9

Appendix
C-1









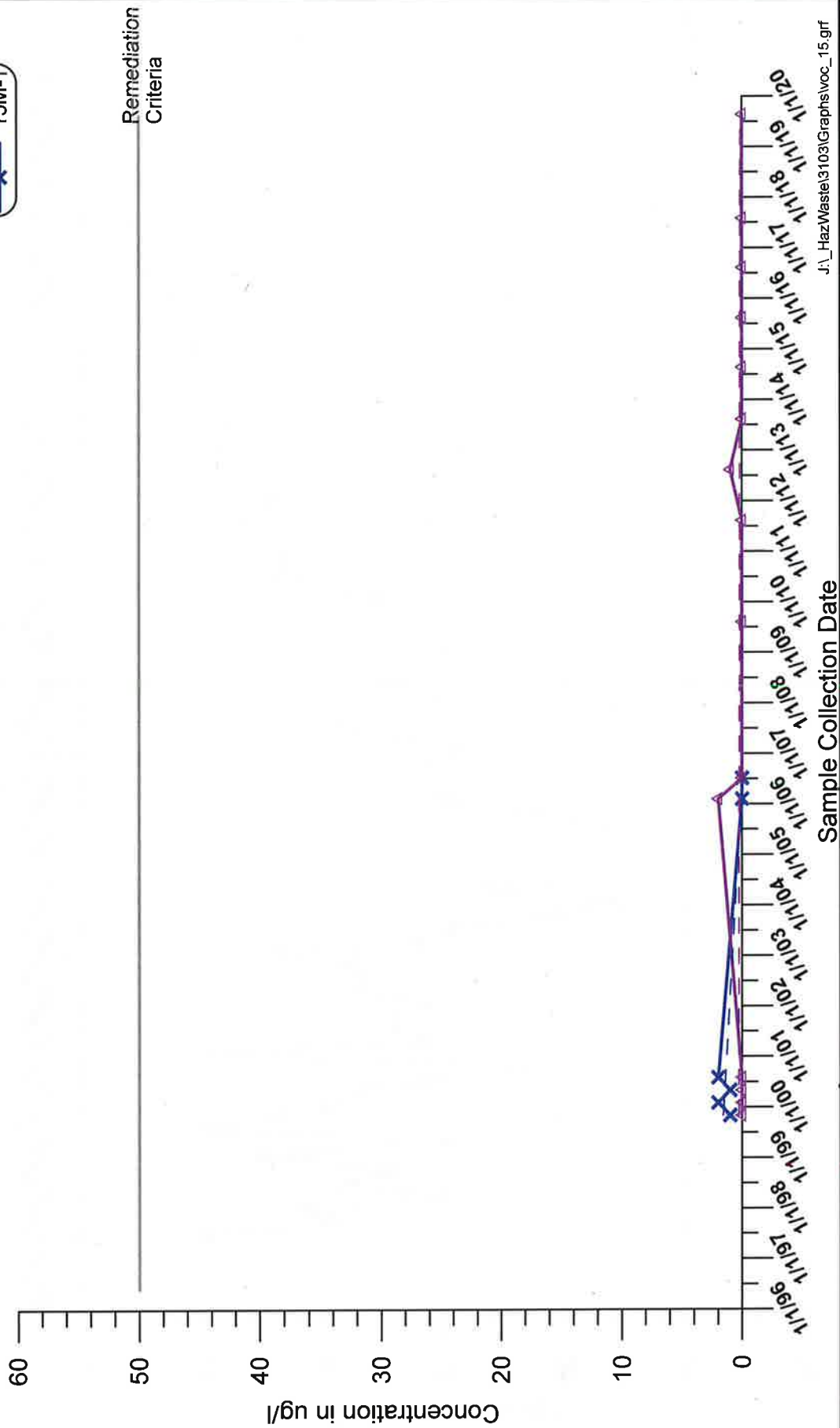
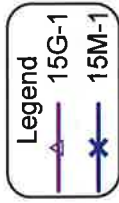
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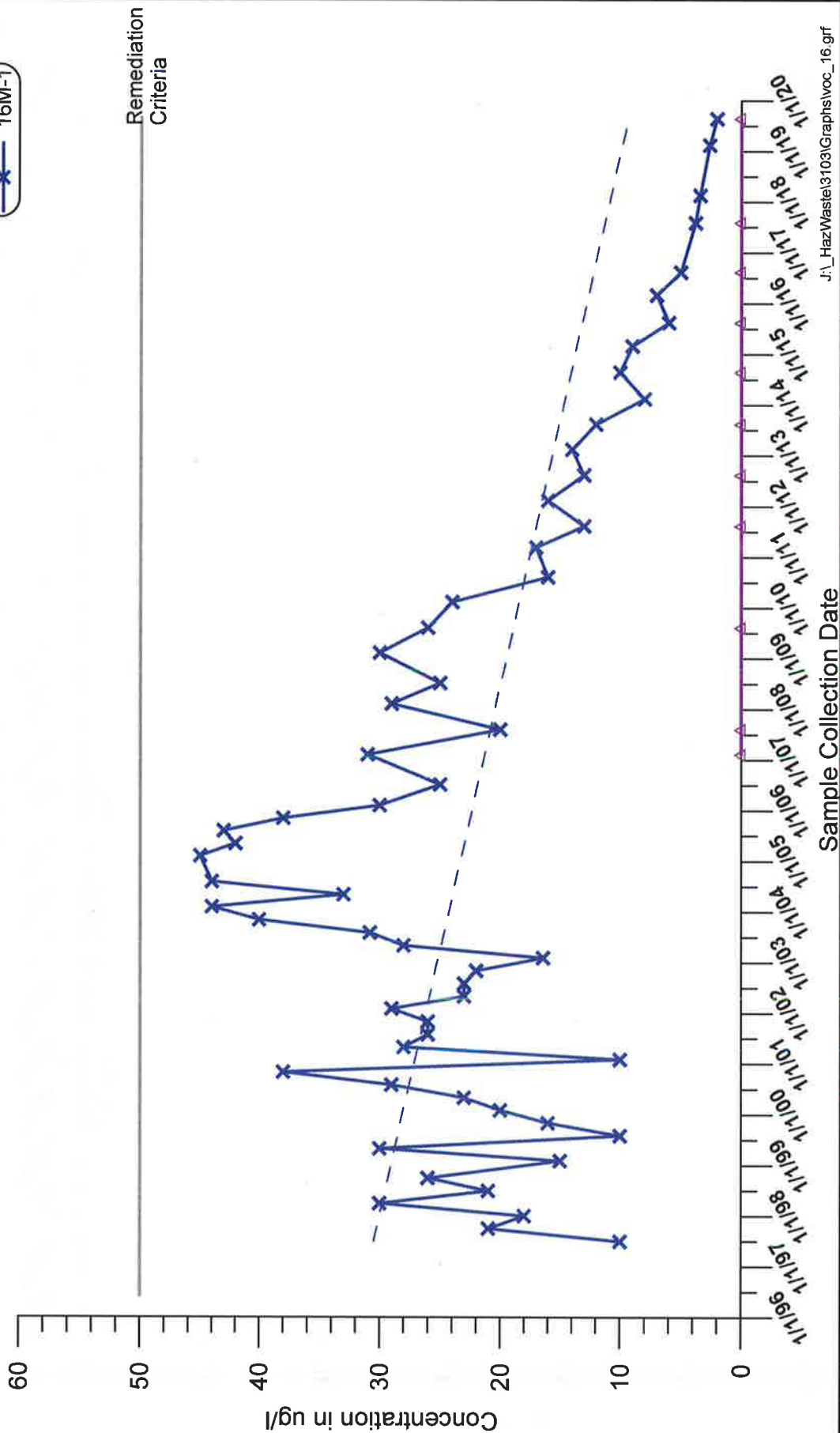
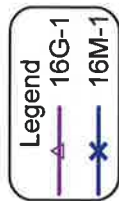
Sample Collection Date



Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 14

Appendix
C-1



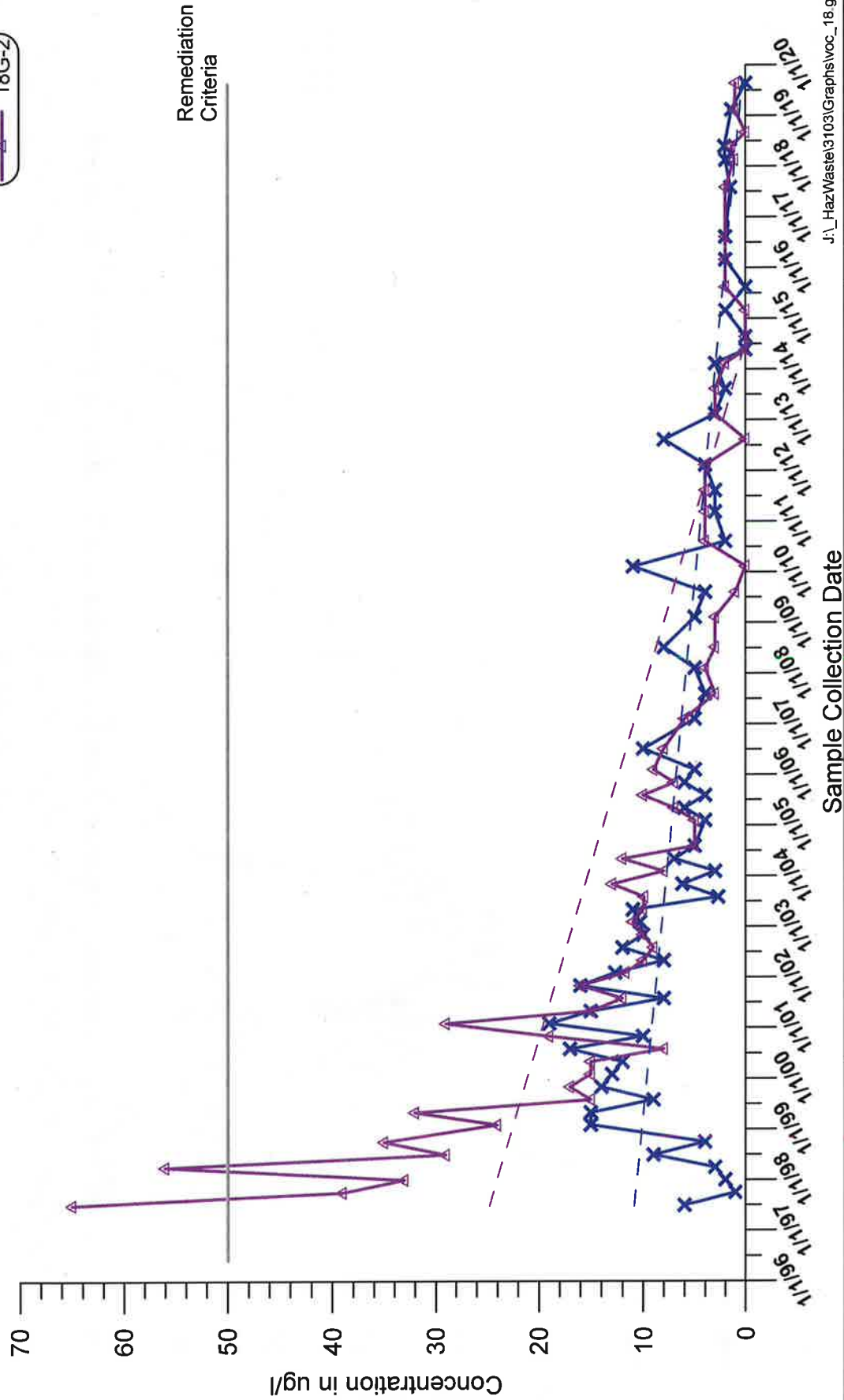
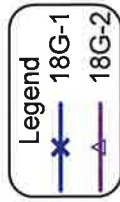


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Sample Collection Date



Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Monitoring Well Cluster 16





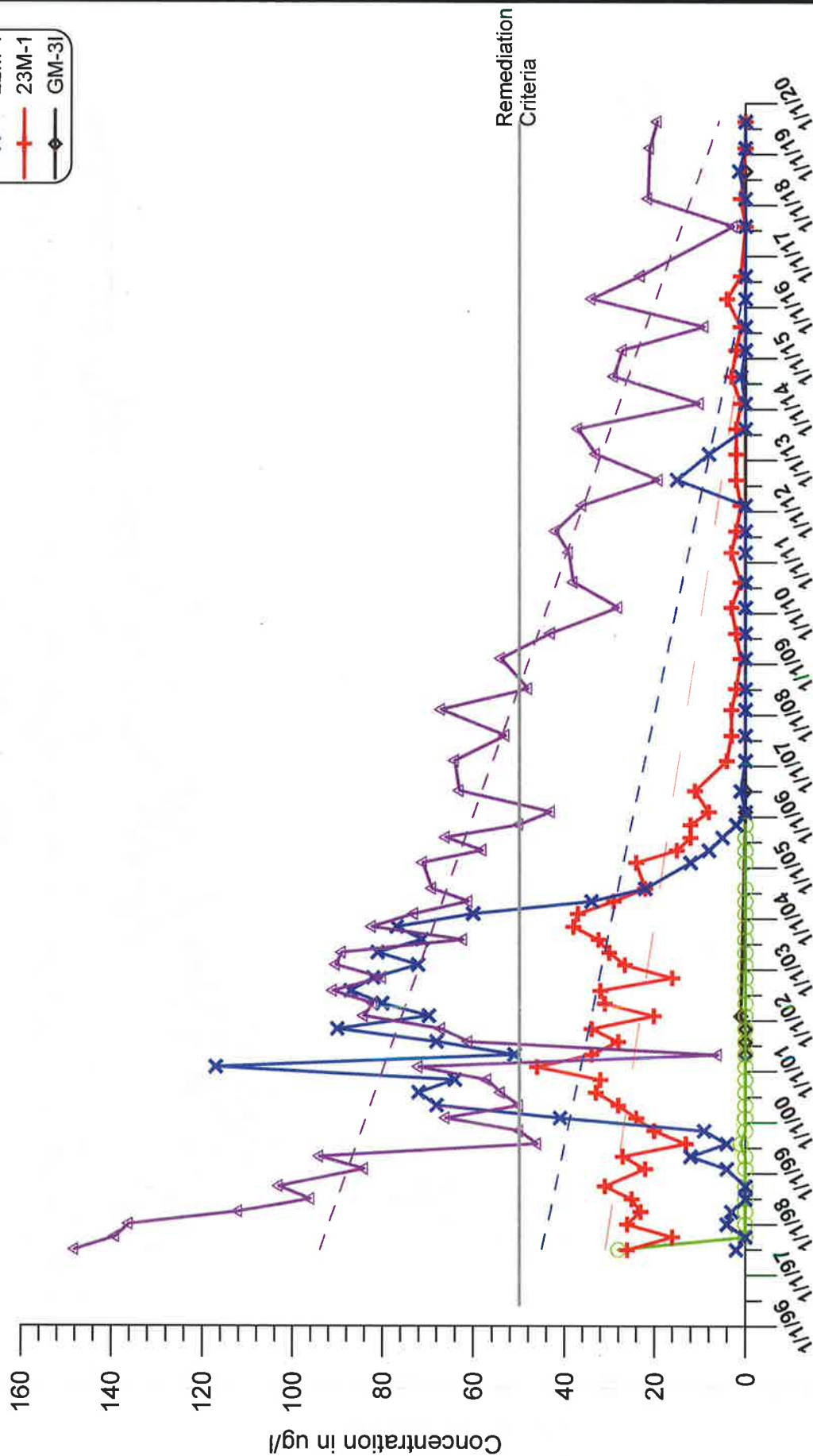
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Blydenburgh Road Landfill Complex
Historical Volatile Organic Compound Data for
Select Monitoring Wells

Appendix
C-1

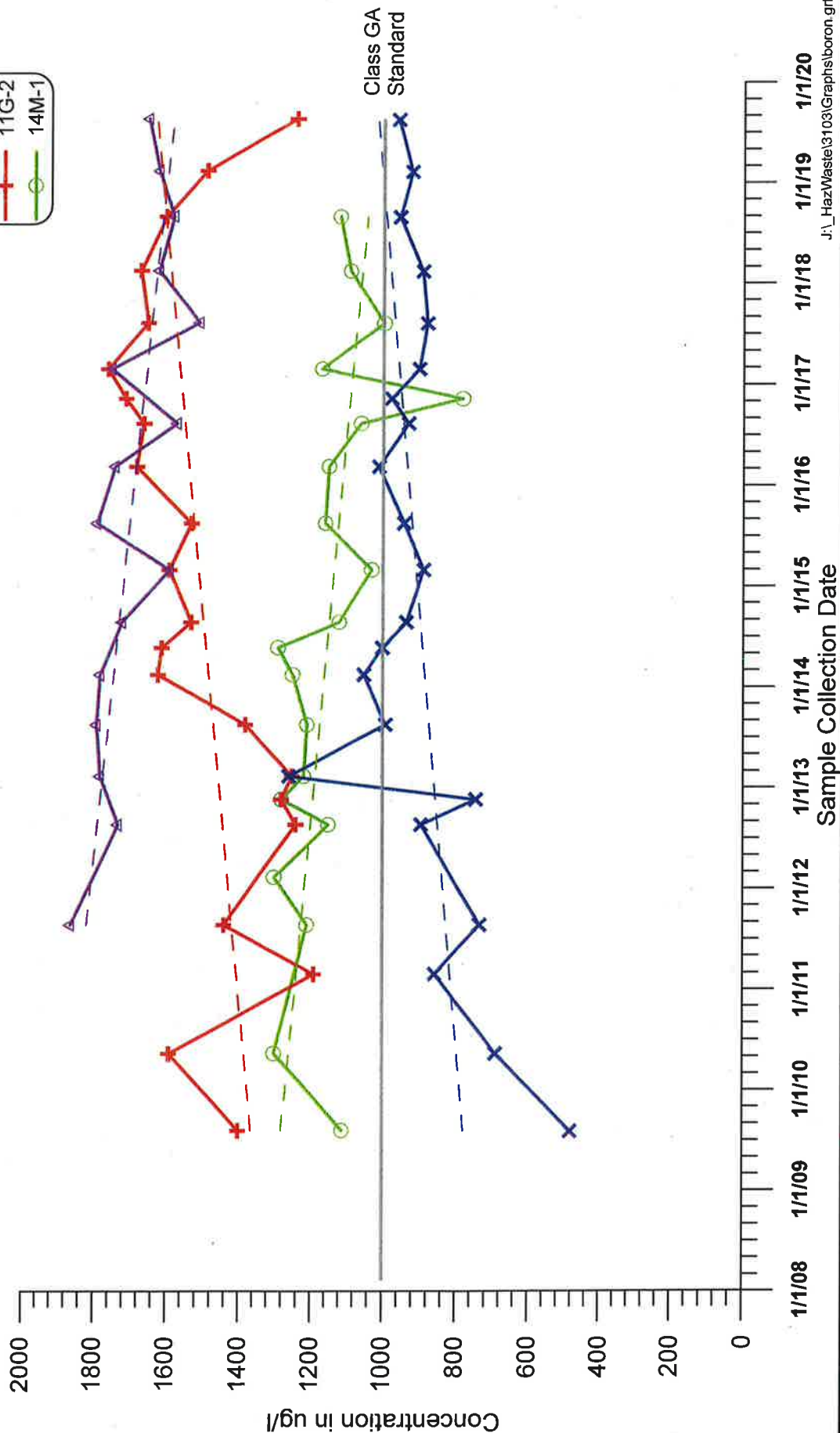
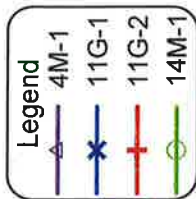
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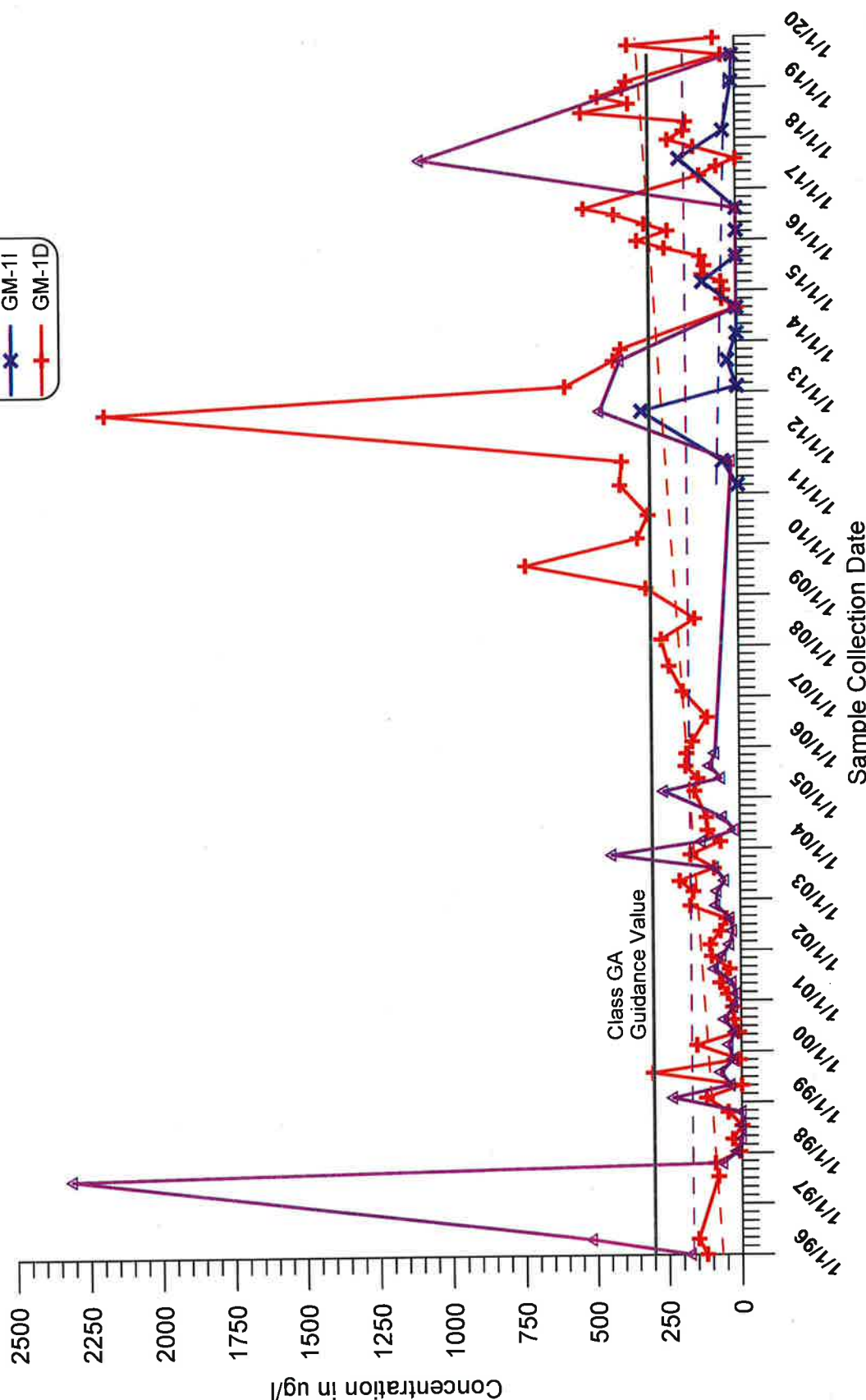
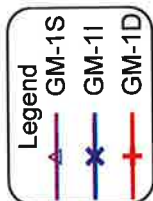
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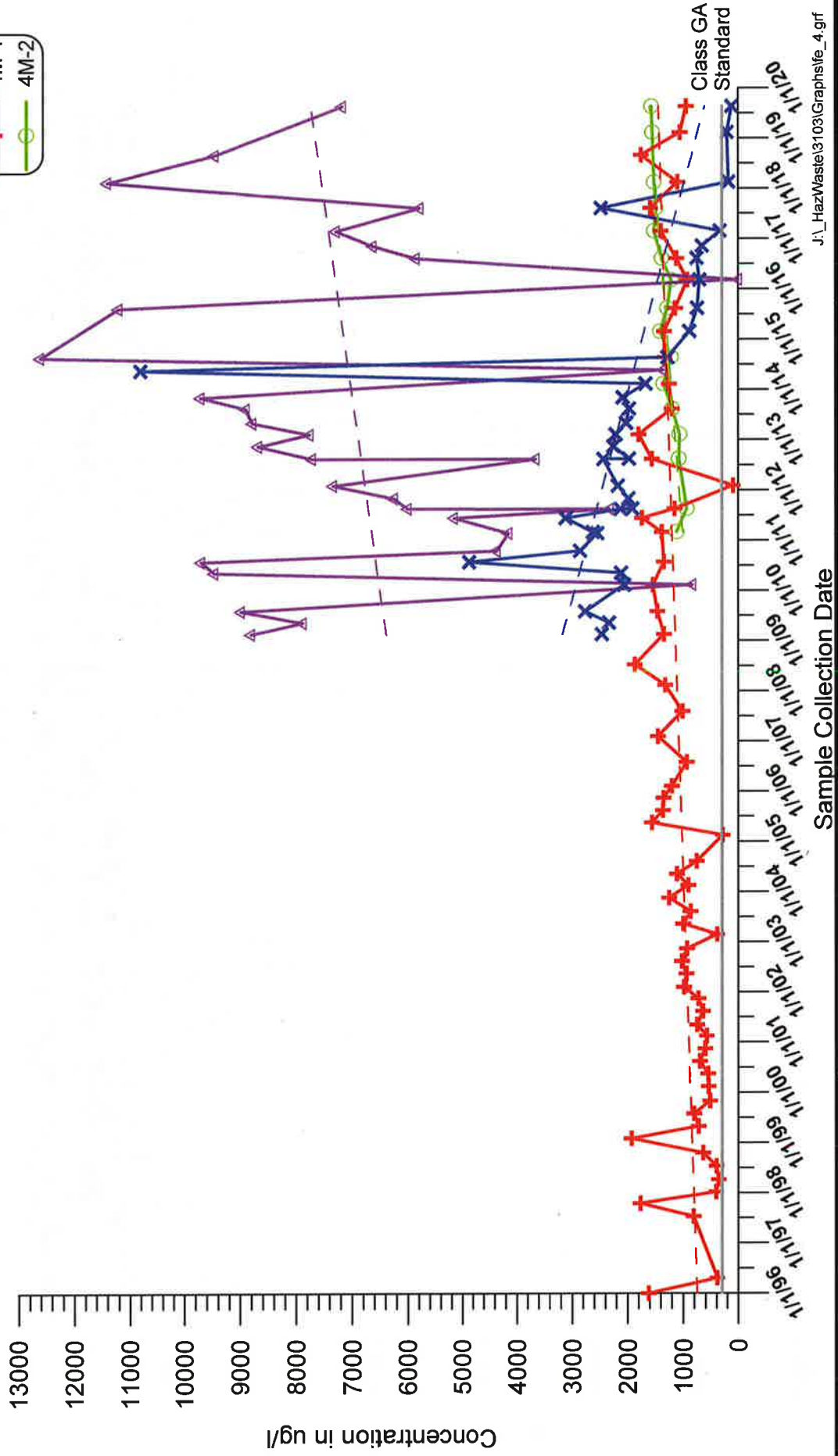
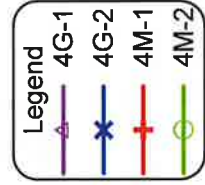
APPENDIX C-2

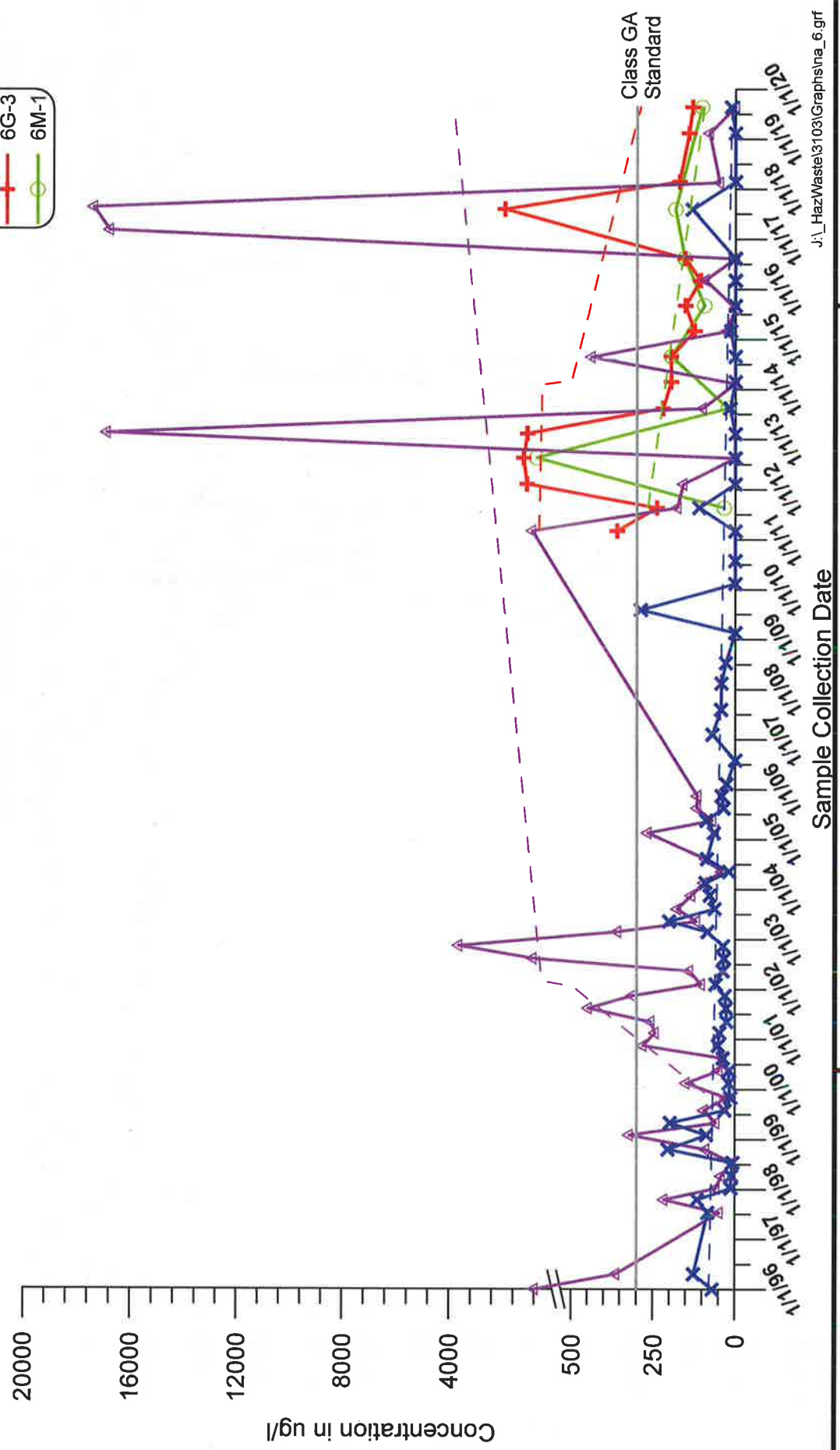
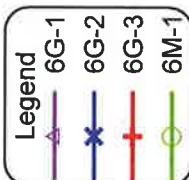
HISTORICAL TREND GRAPHS FOR MONITORING WELLS - INORGANIC PARAMETERS

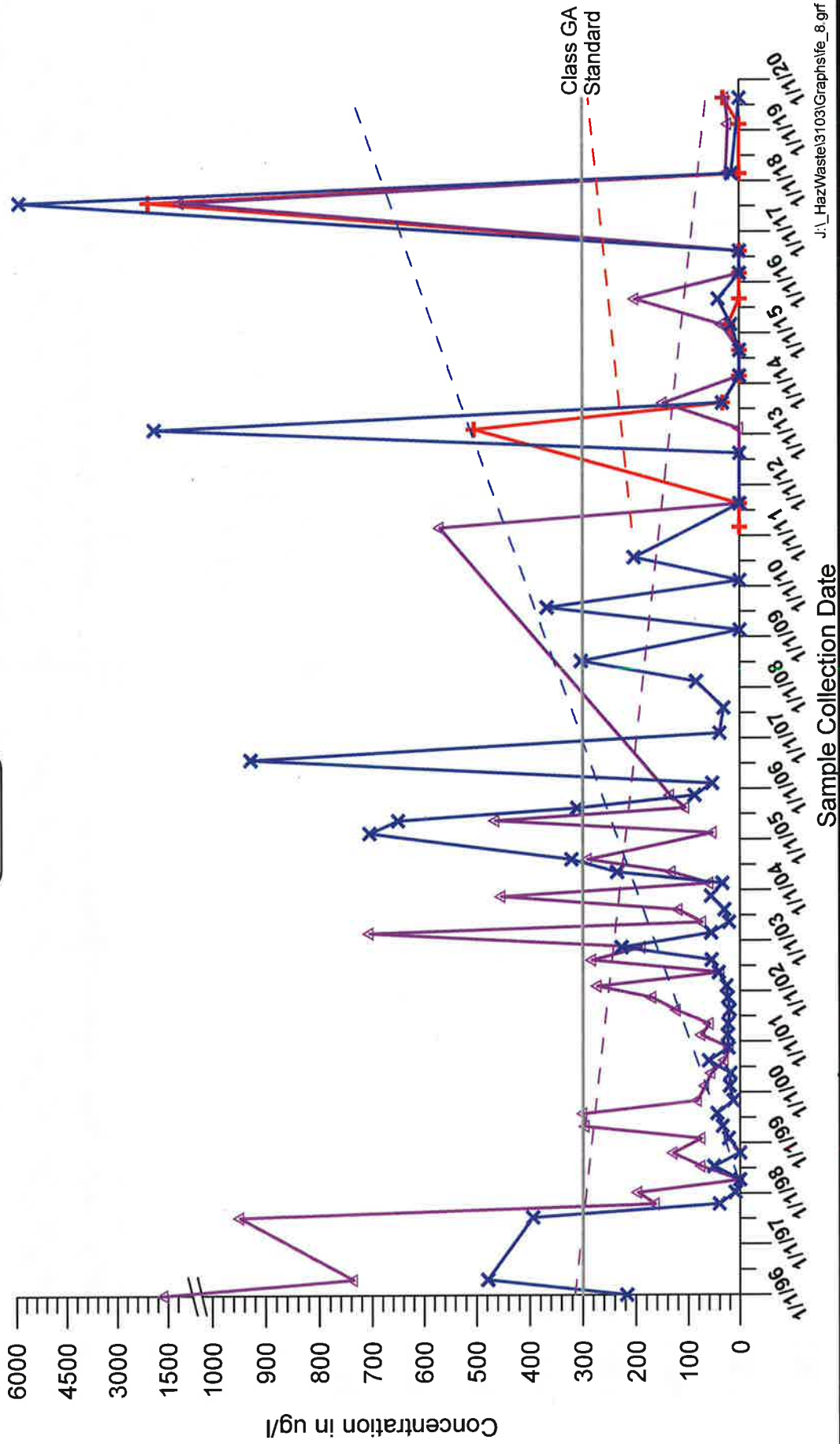
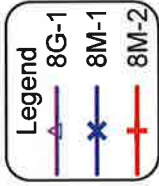


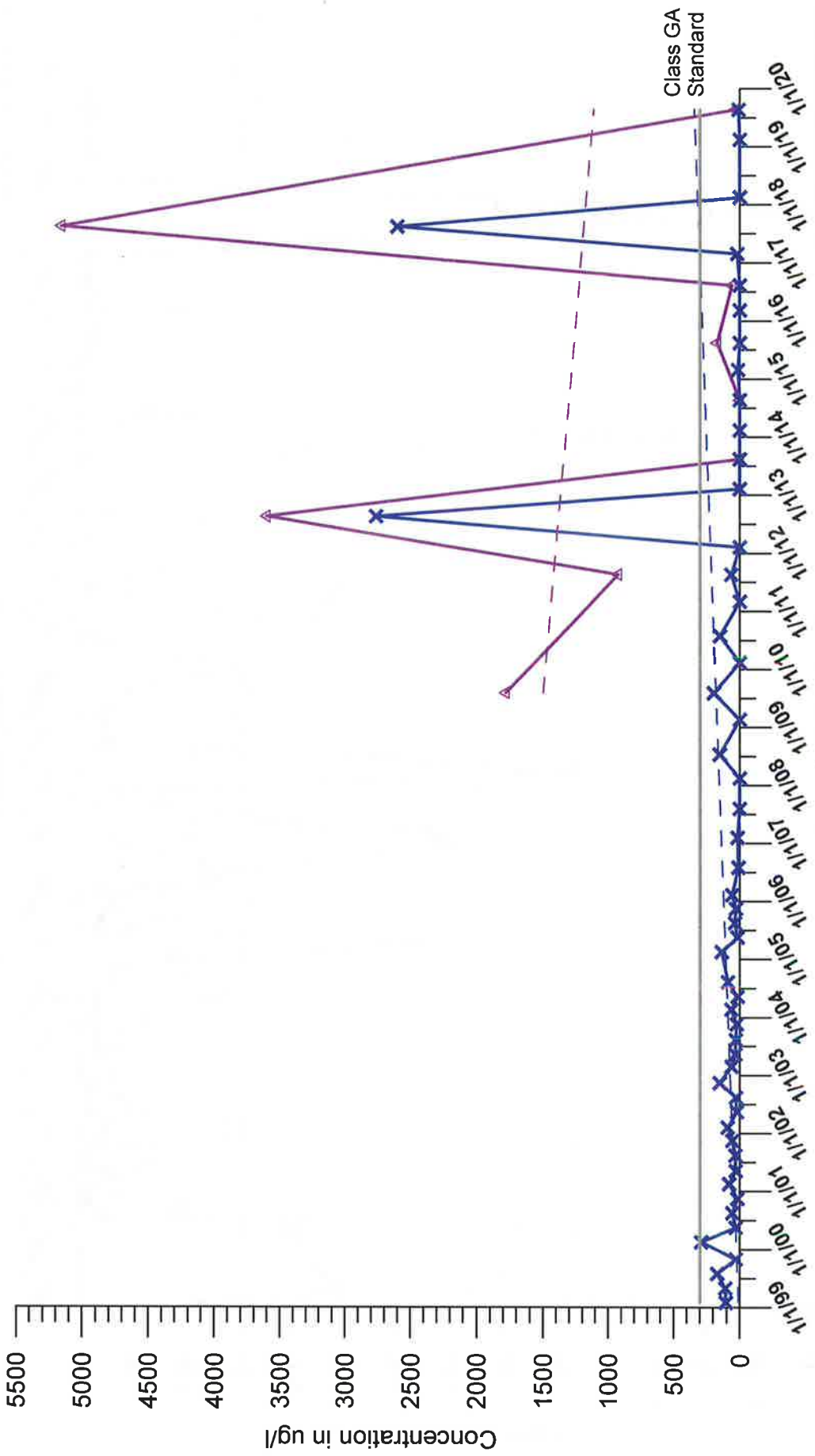
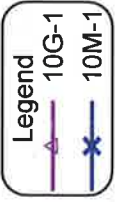


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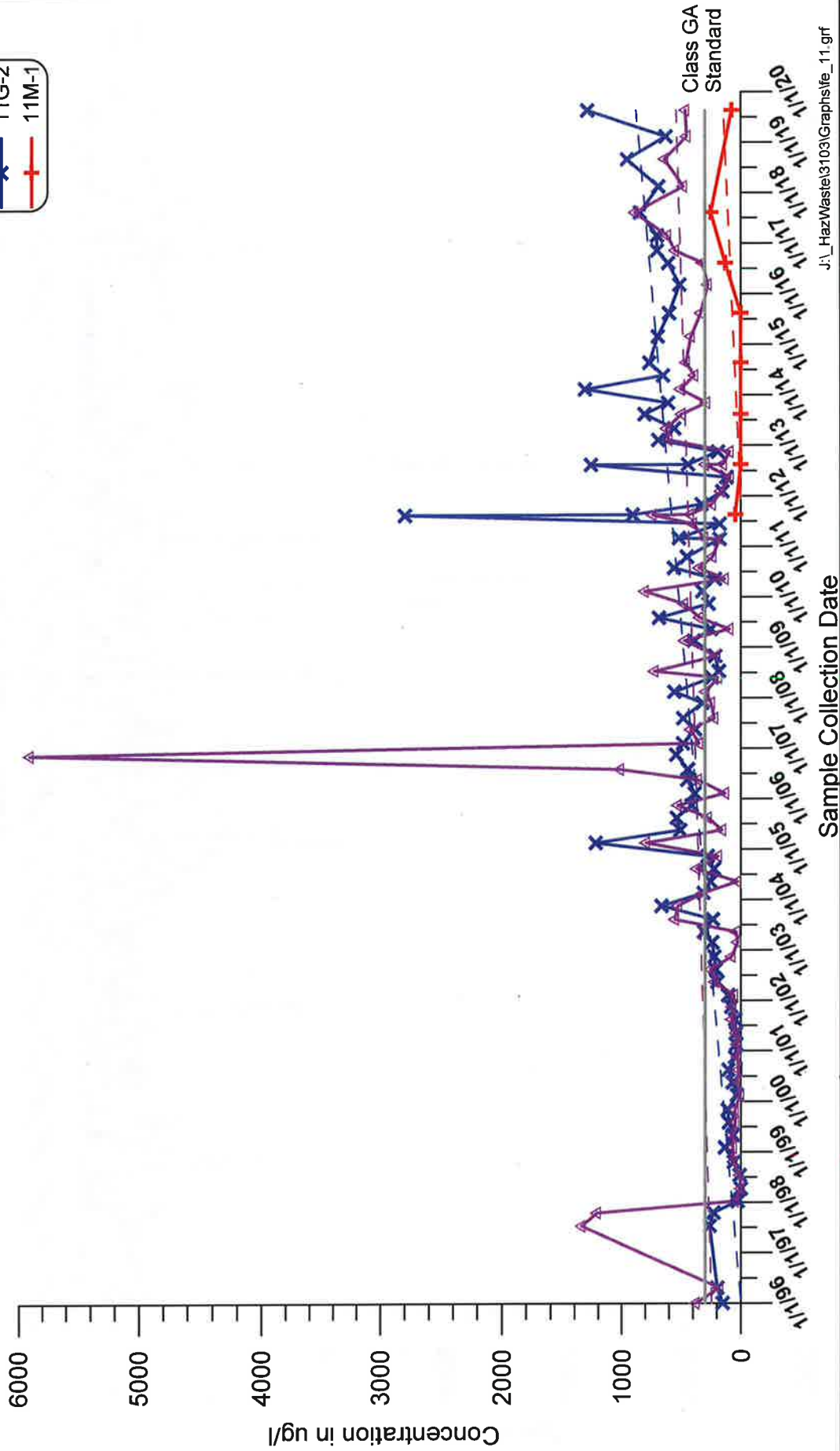
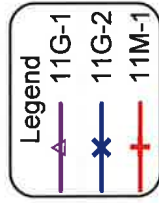


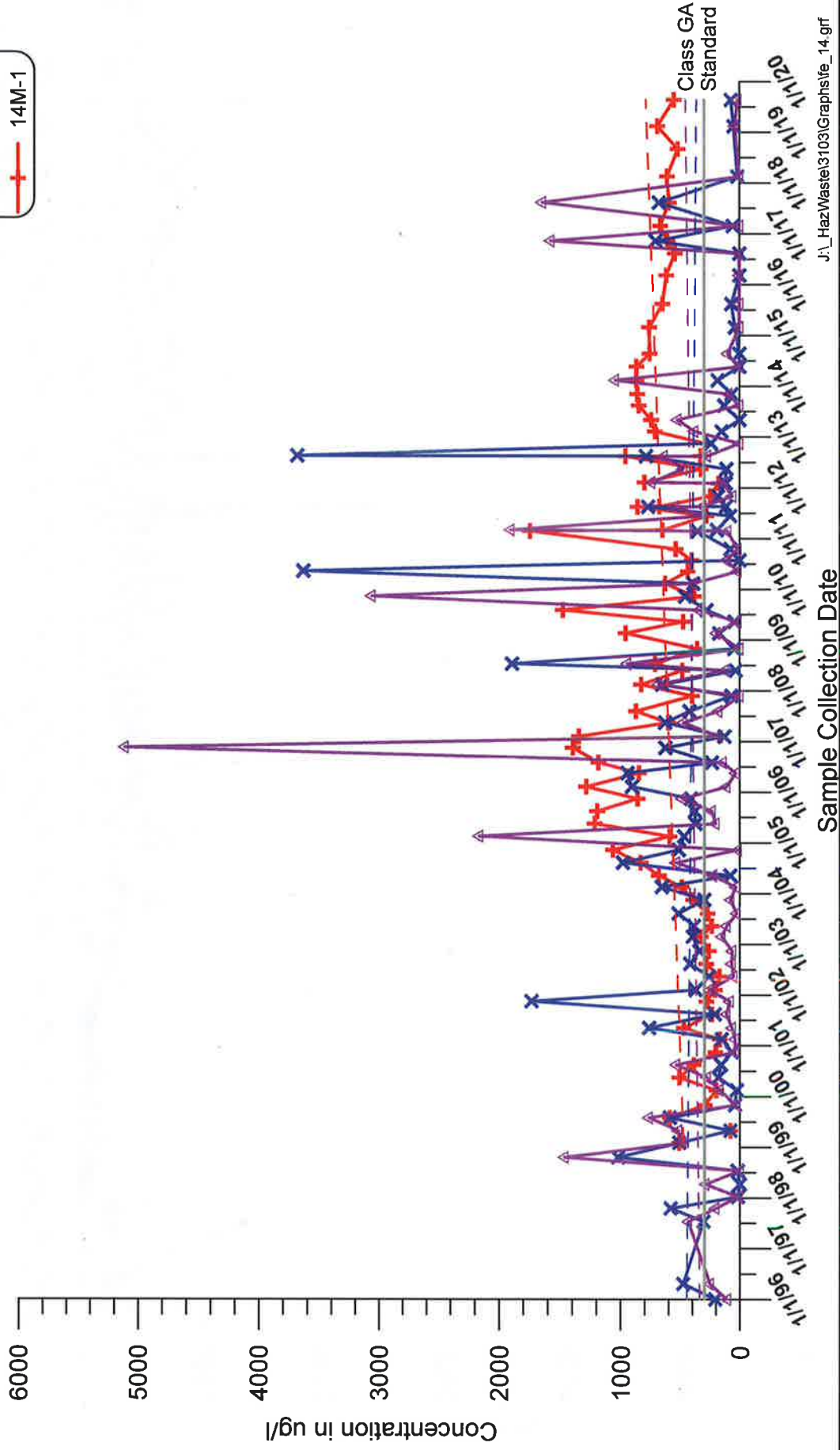
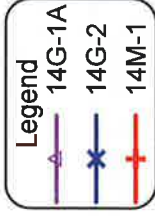


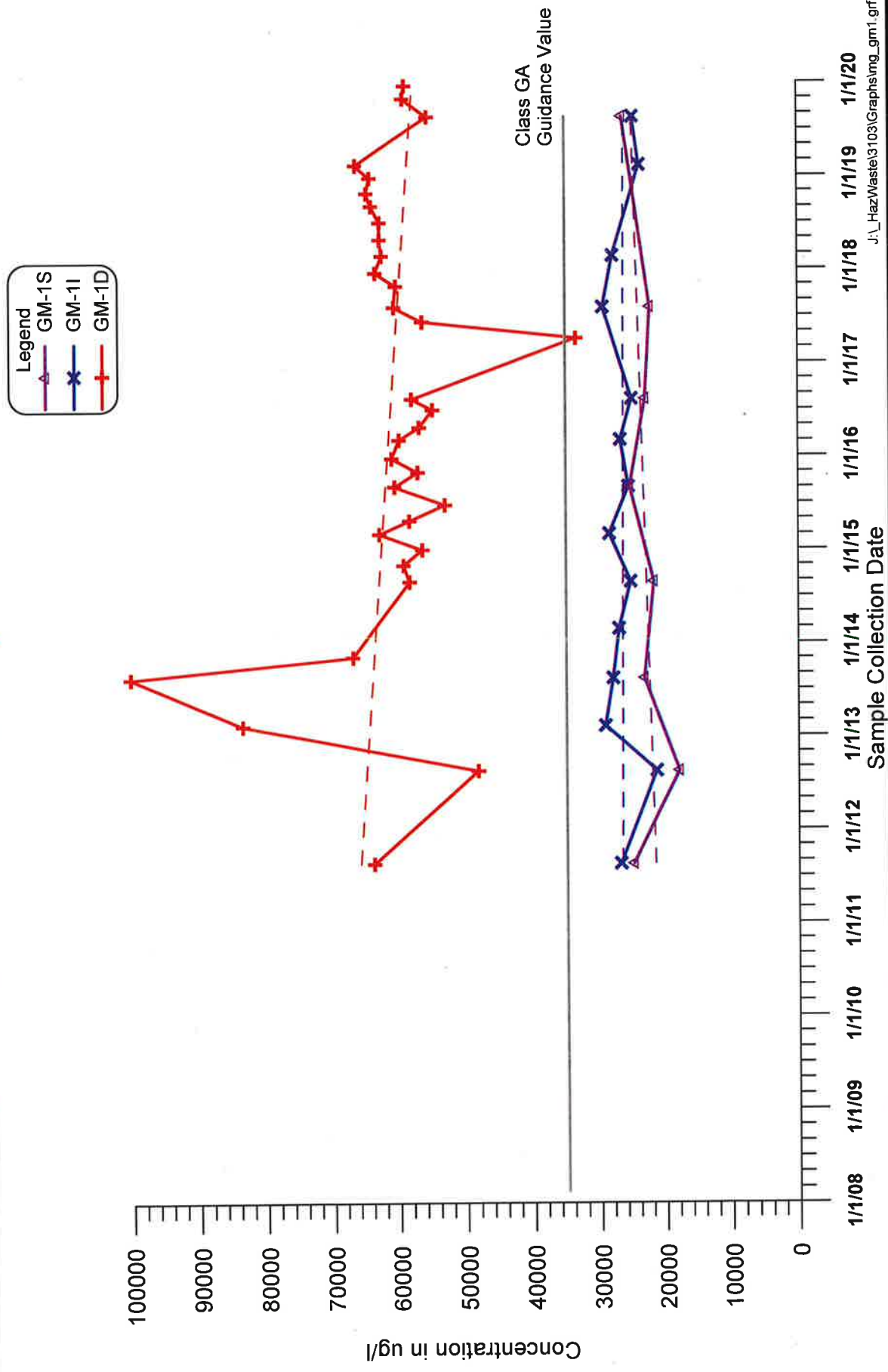




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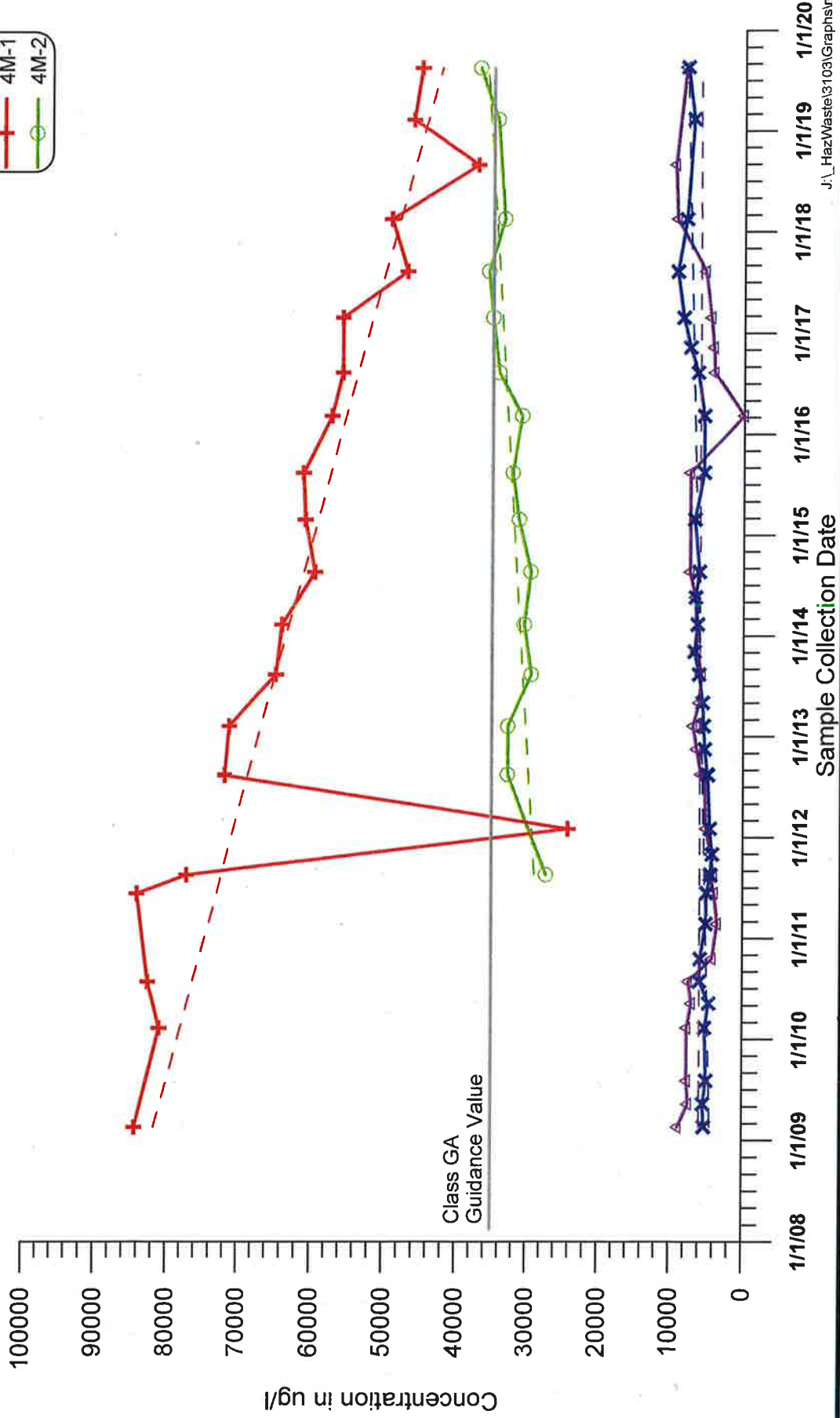
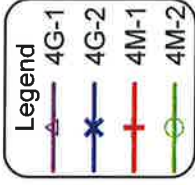






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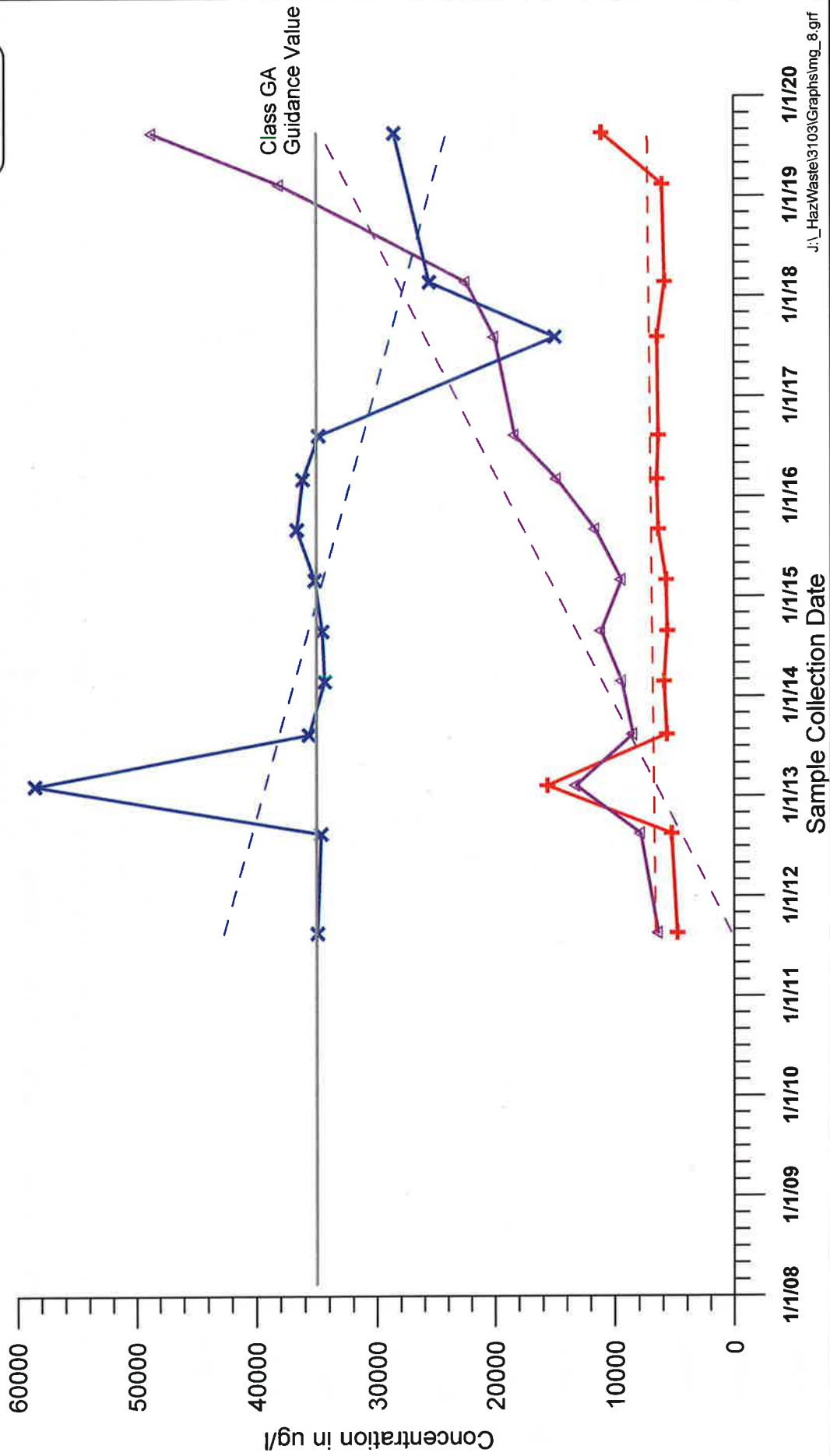
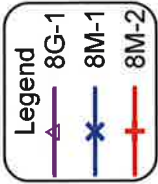
**Blydenburgh Road Landfill Complex
Historical Magnesium Data for Monitoring Well Cluster GM-1**

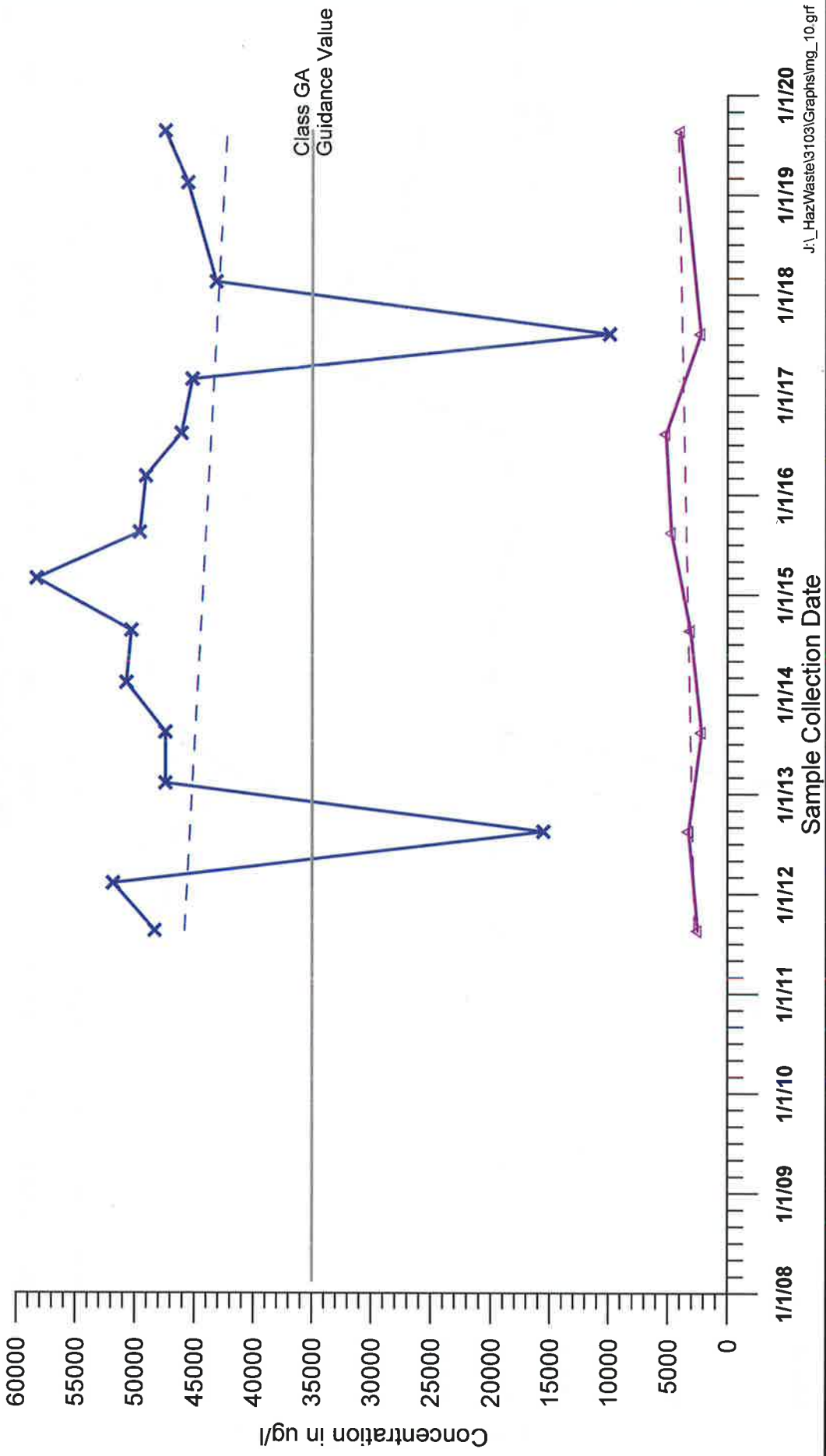
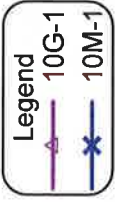


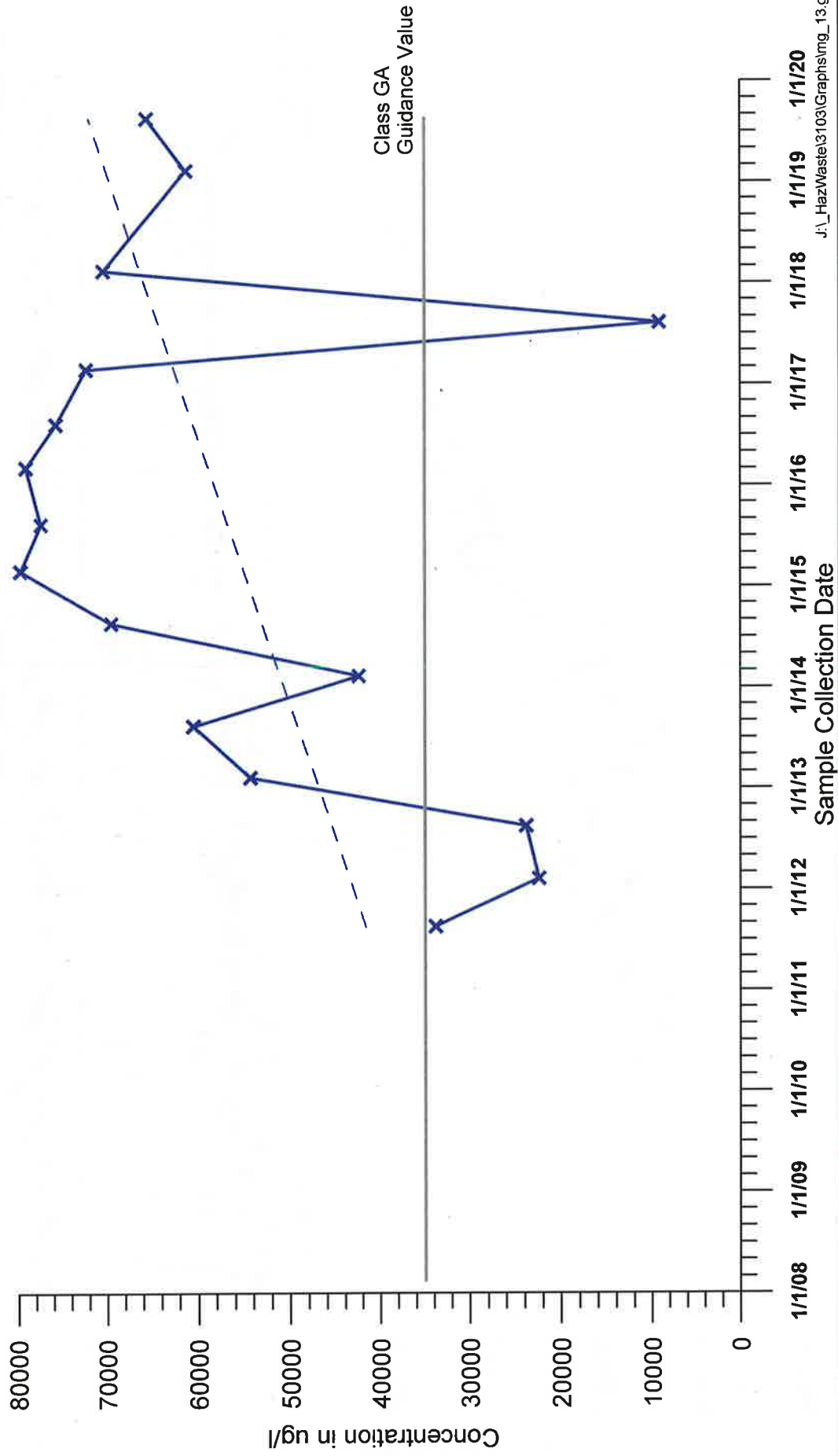
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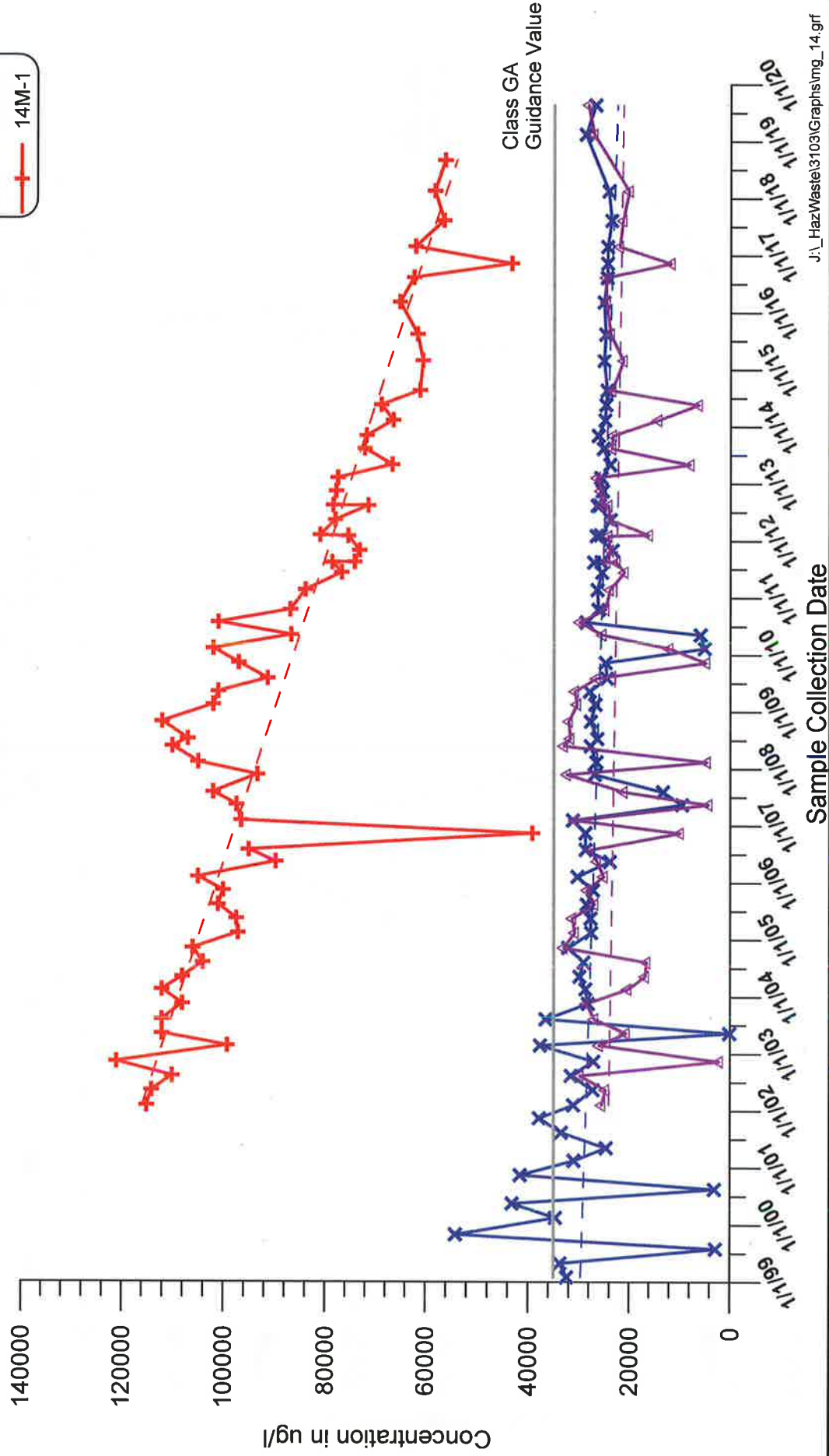
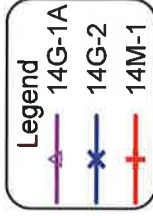


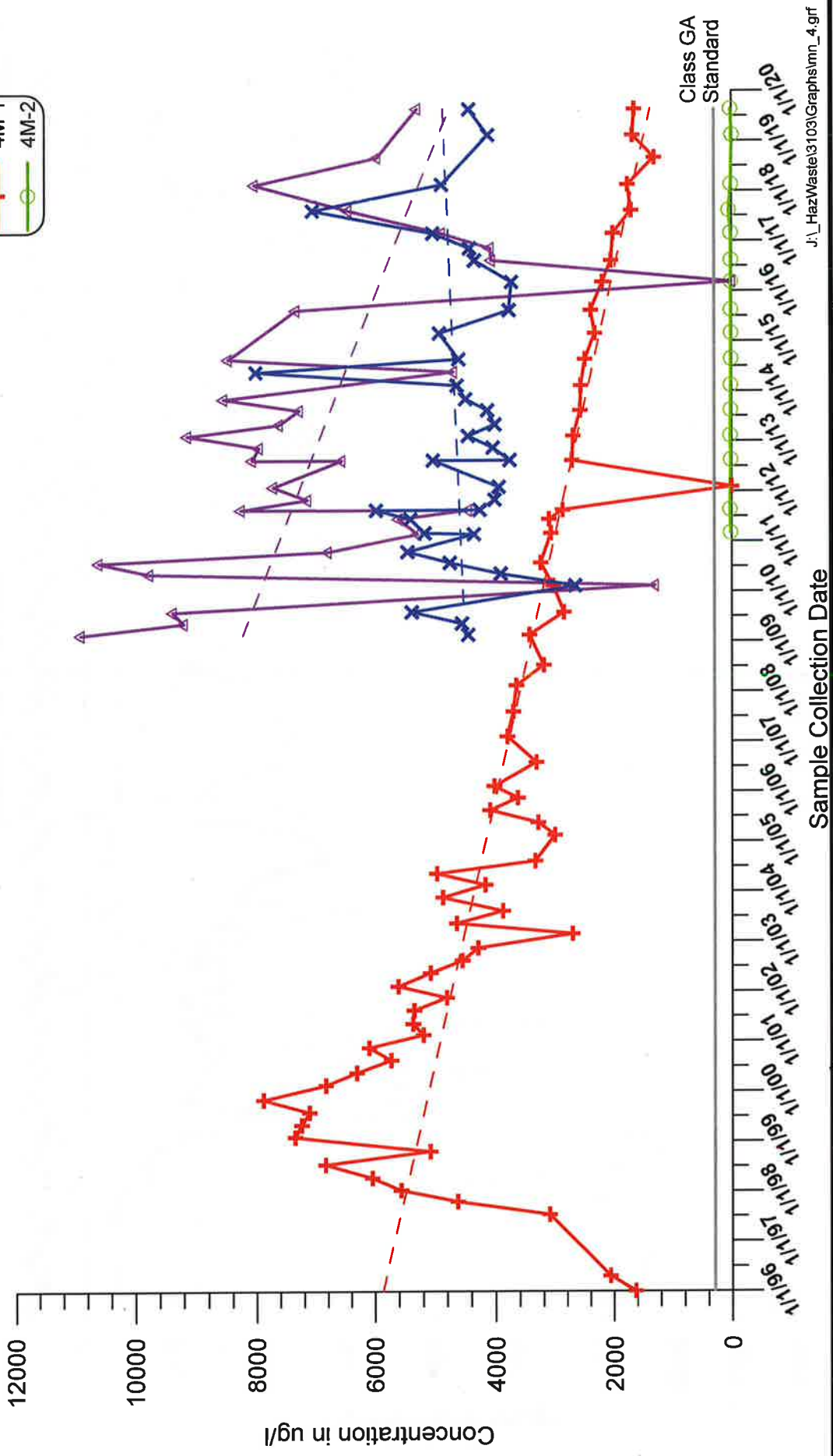
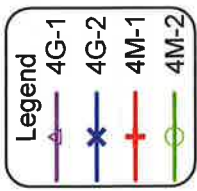
Blydenburgh Road Landfill Complex
Historical Magnesium Data for Monitoring Well 4 Cluster

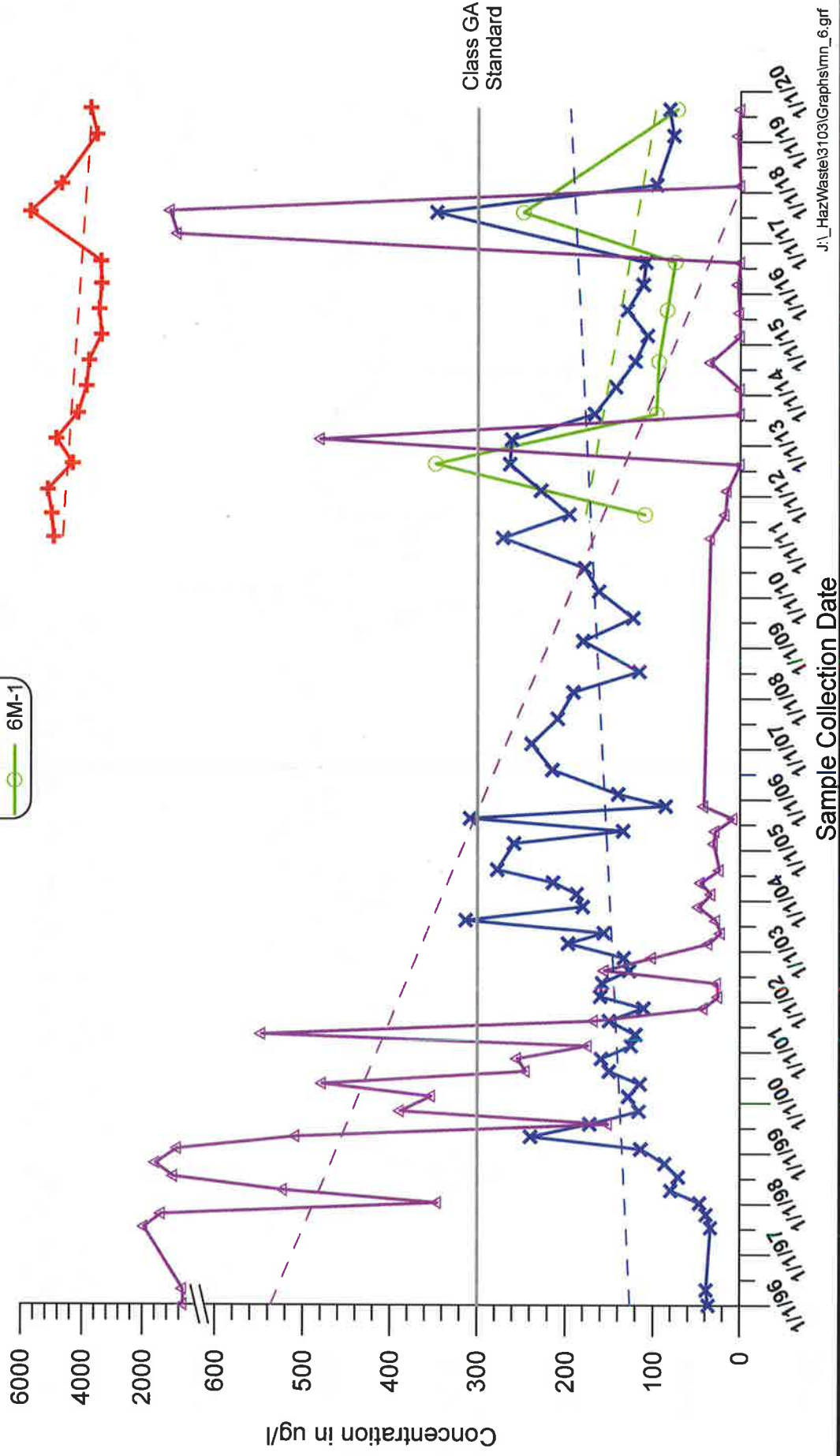
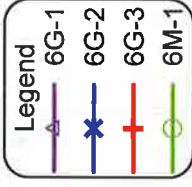


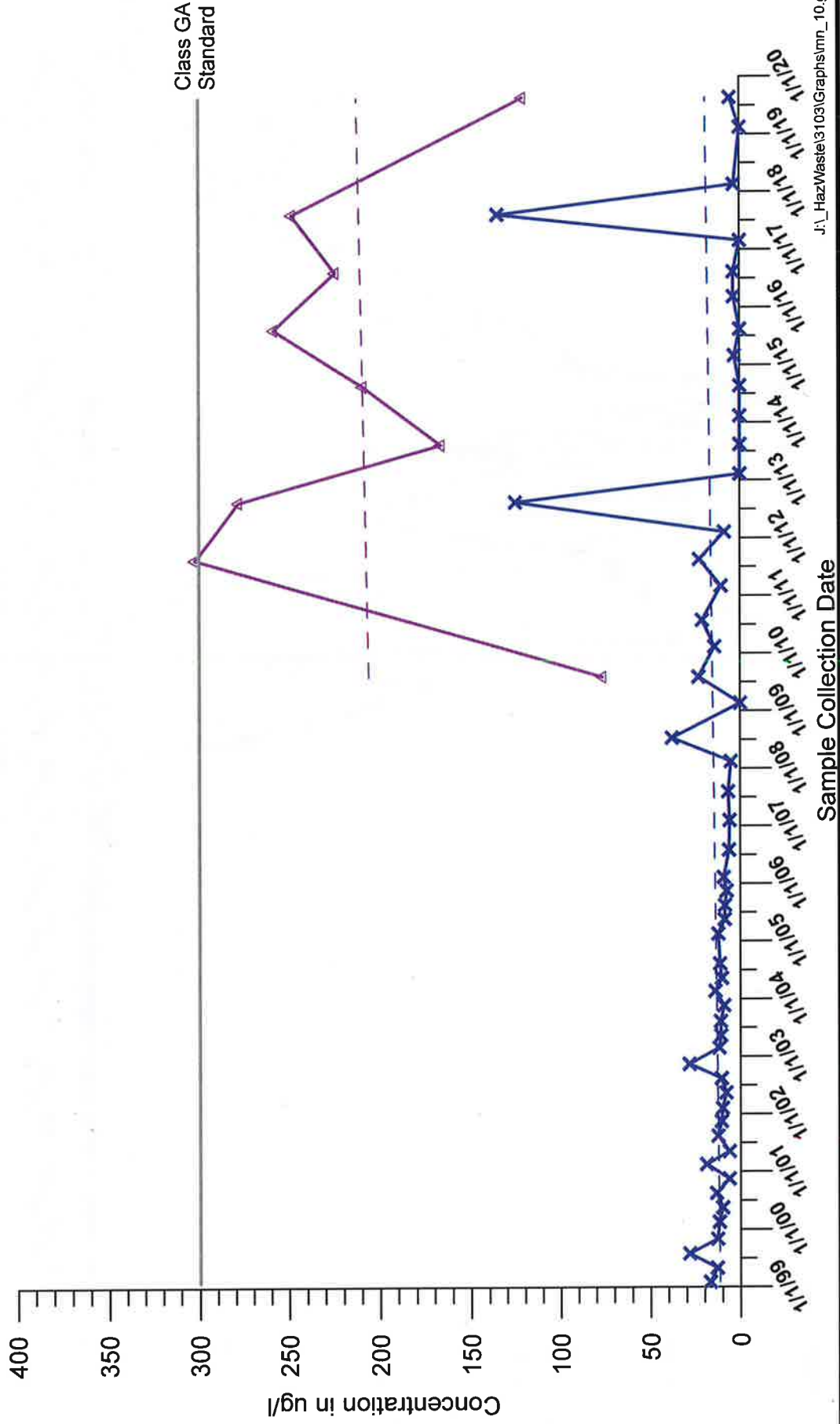
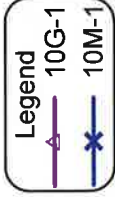












J:_HazWaste\3103\Graphs\mn_10.grf



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**Blydenburgh Road Landfill Complex
Historical Manganese Data for Monitoring Well Cluster 10**

**Appendix
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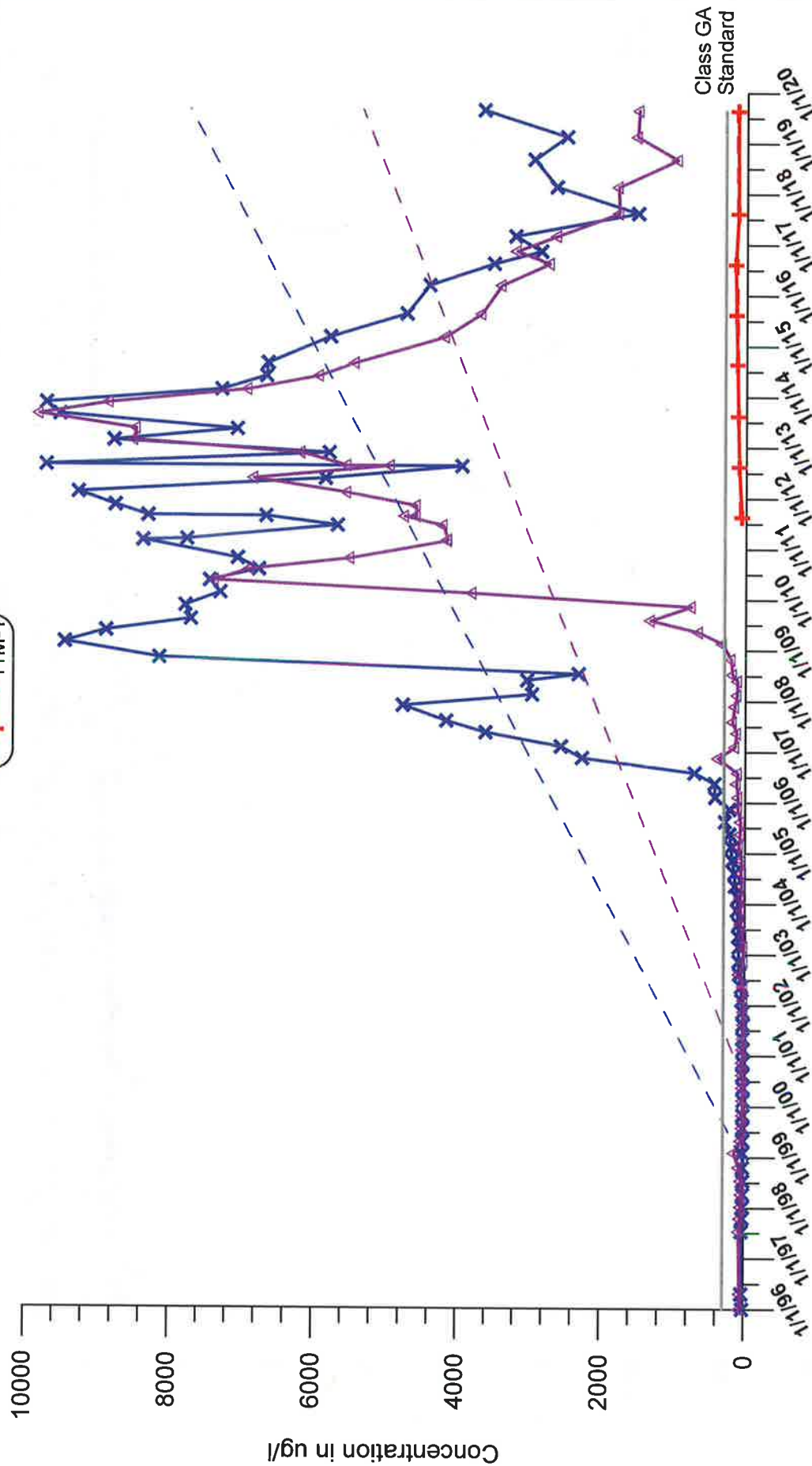
**Blydenburgh Road Landfill Complex
Historical Manganese Data for Monitoring Well Cluster 11**

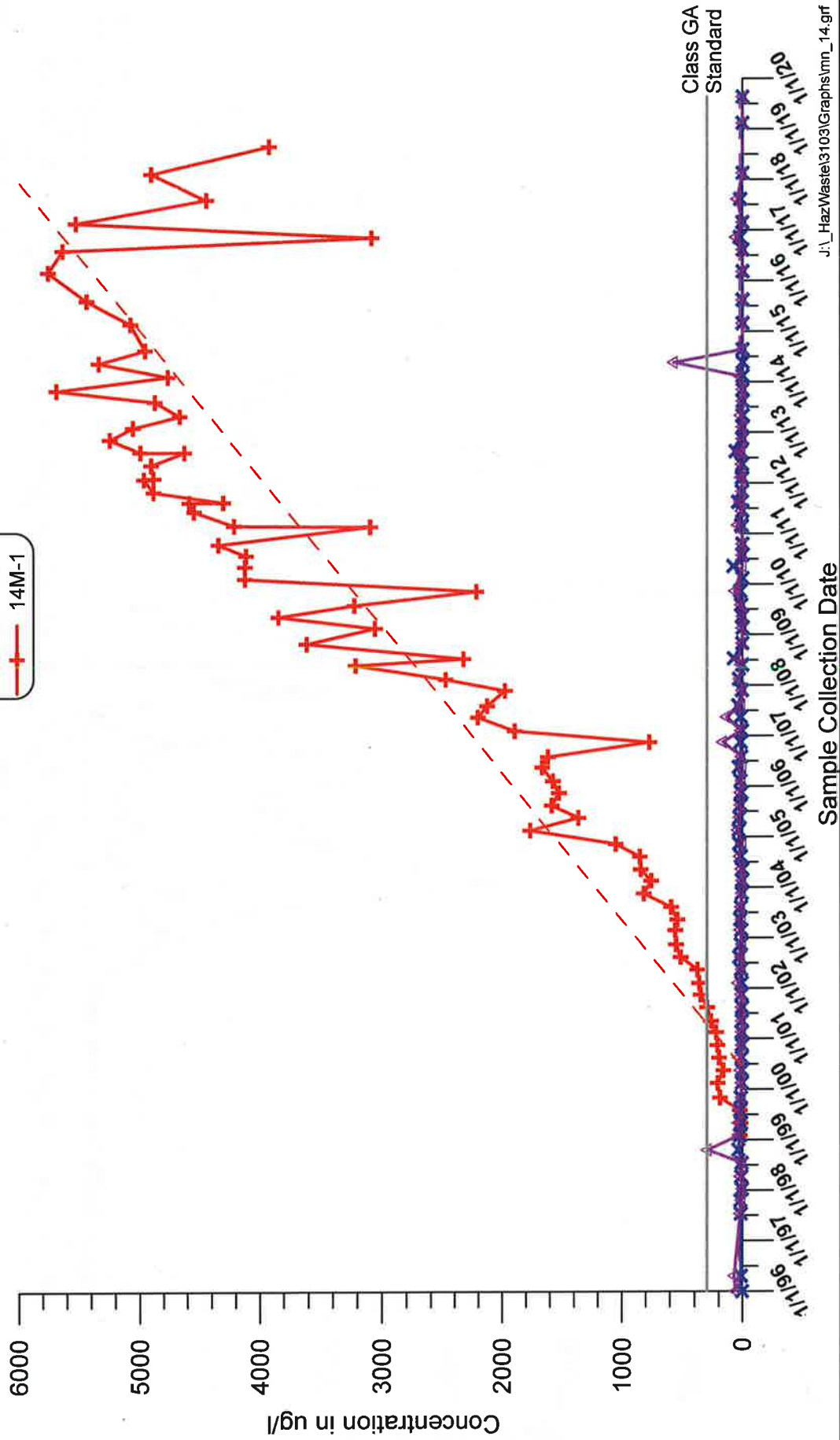
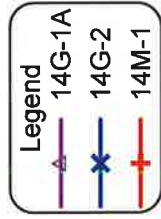
**Appendix
C-2**

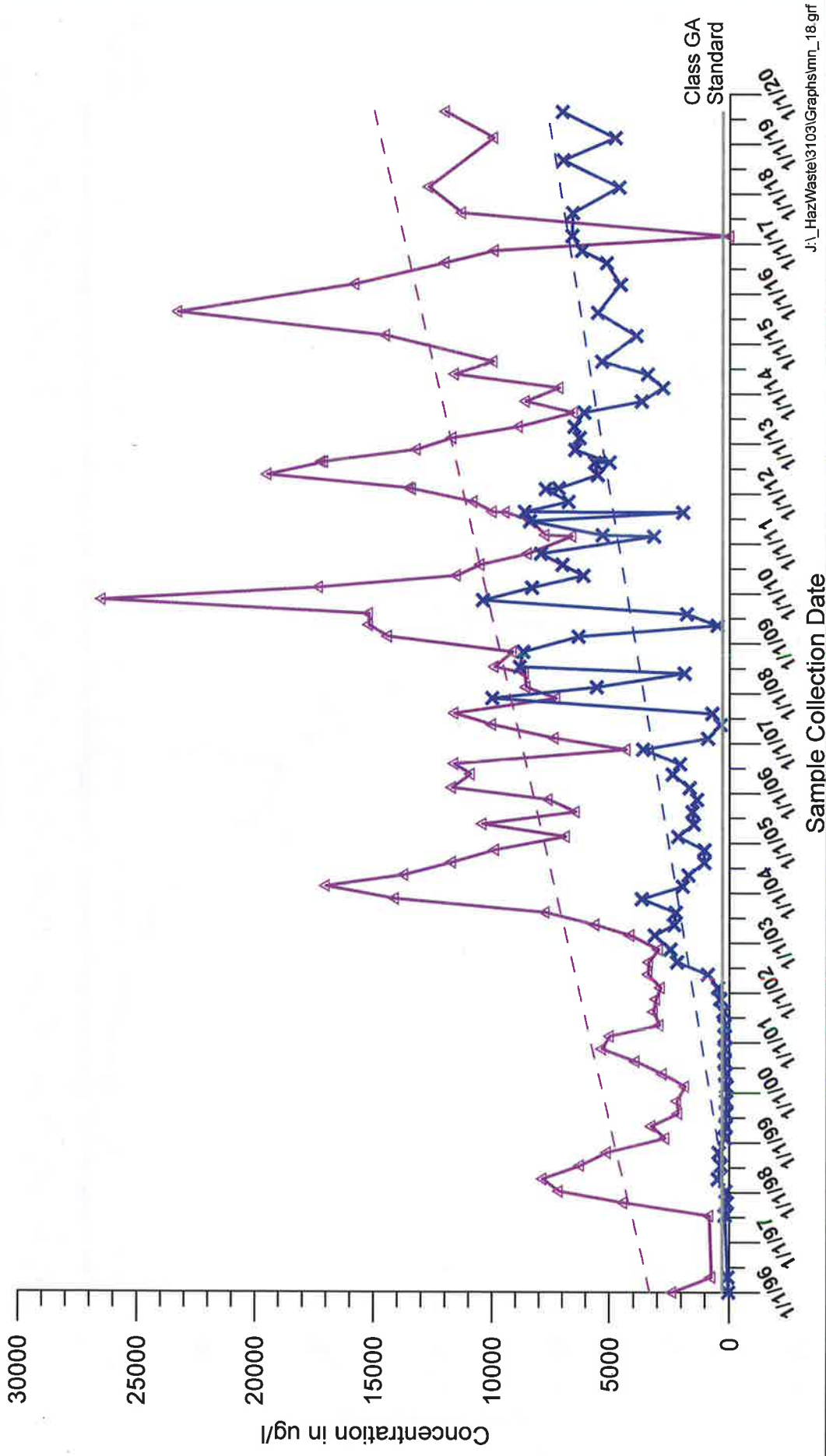
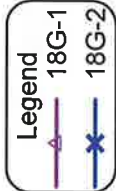
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Sample Collection Date

Class GA
Standard





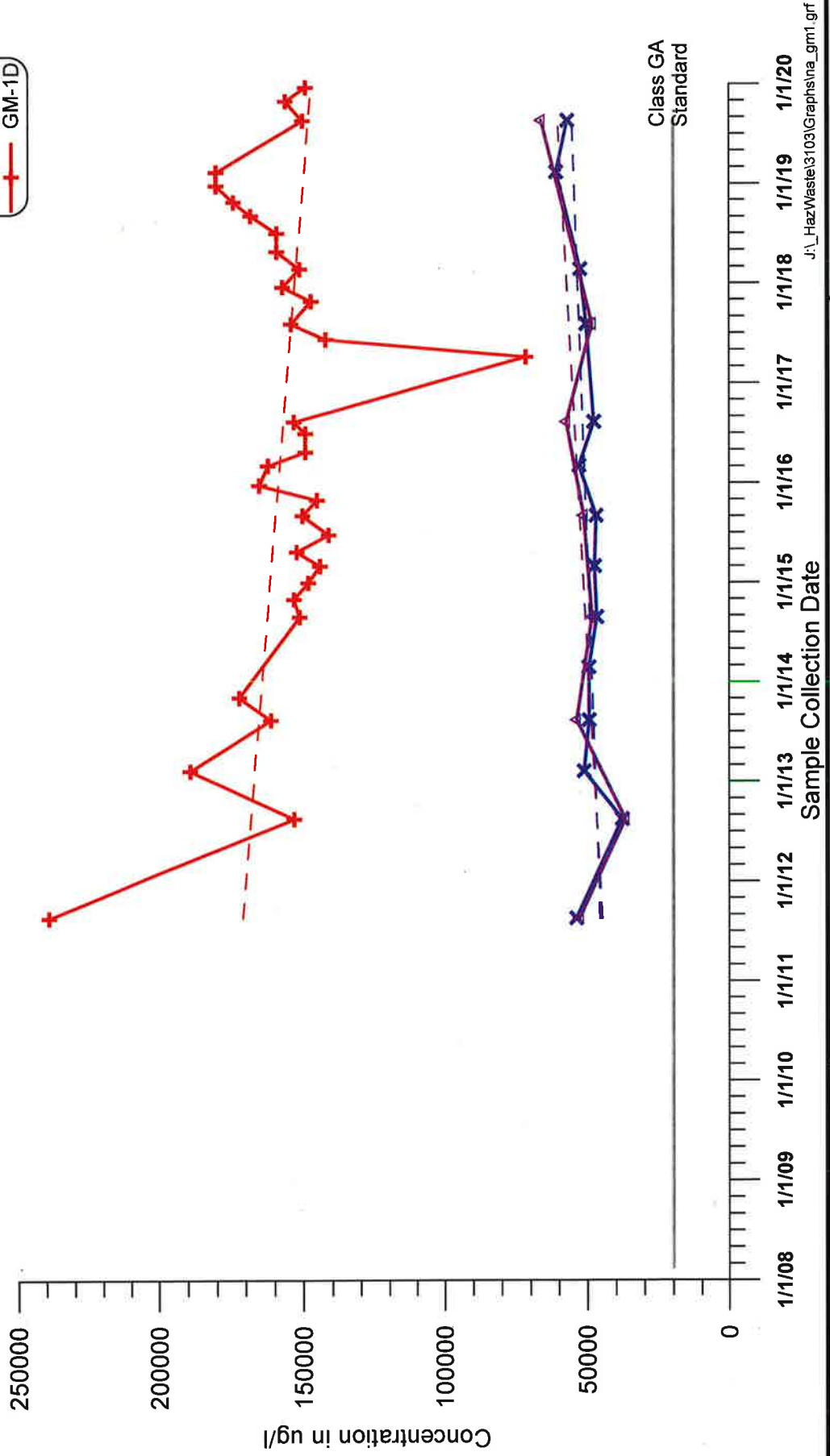
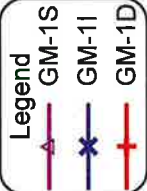


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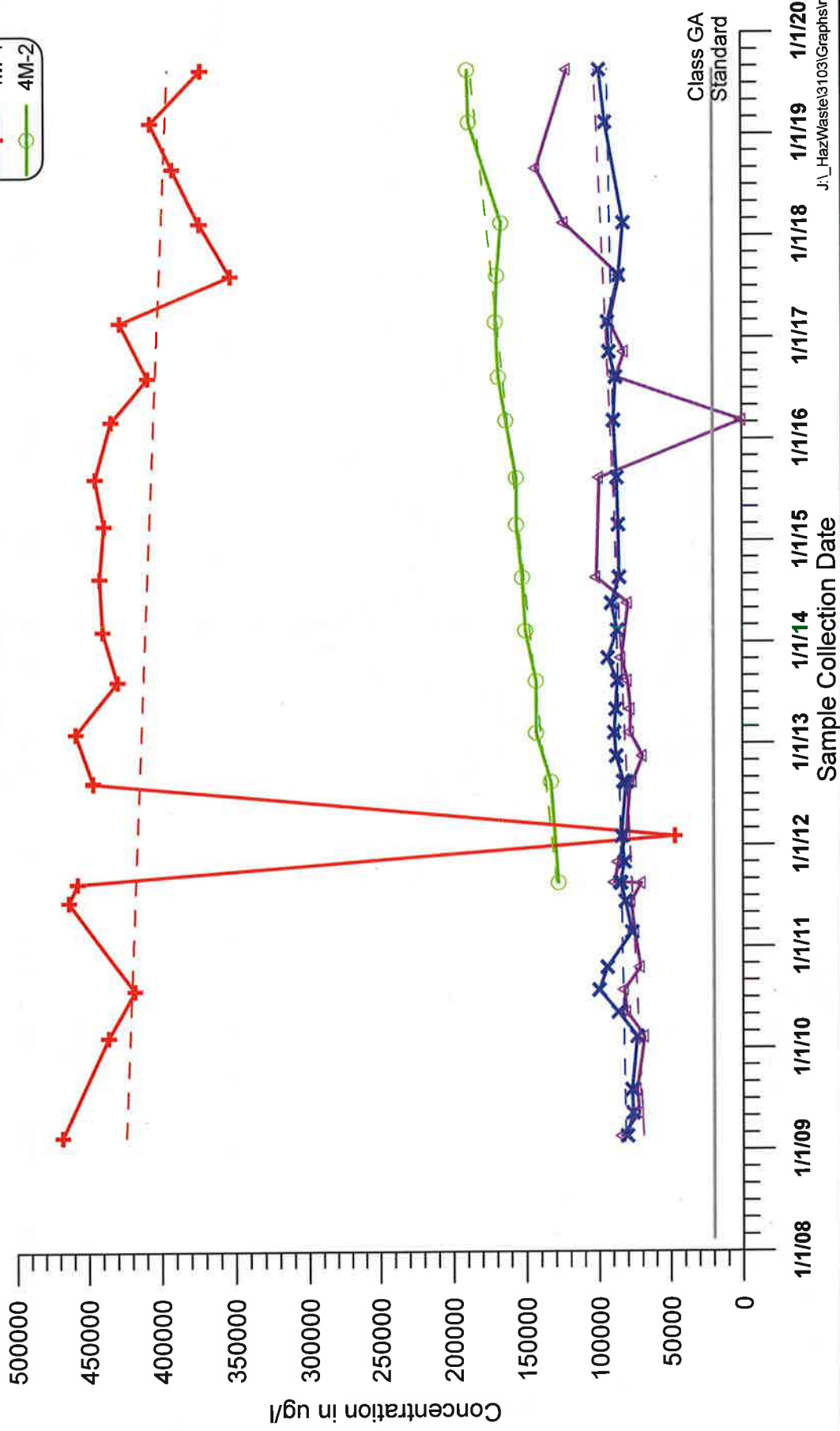
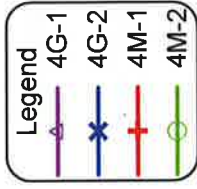
Blydenburgh Road Landfill Complex
Historical Manganese Data for Monitoring Well Cluster 18

Appendix C-2



Blydenburgh Road Landfill Complex
Historical Sodium Data for Monitoring Well Cluster GM-1

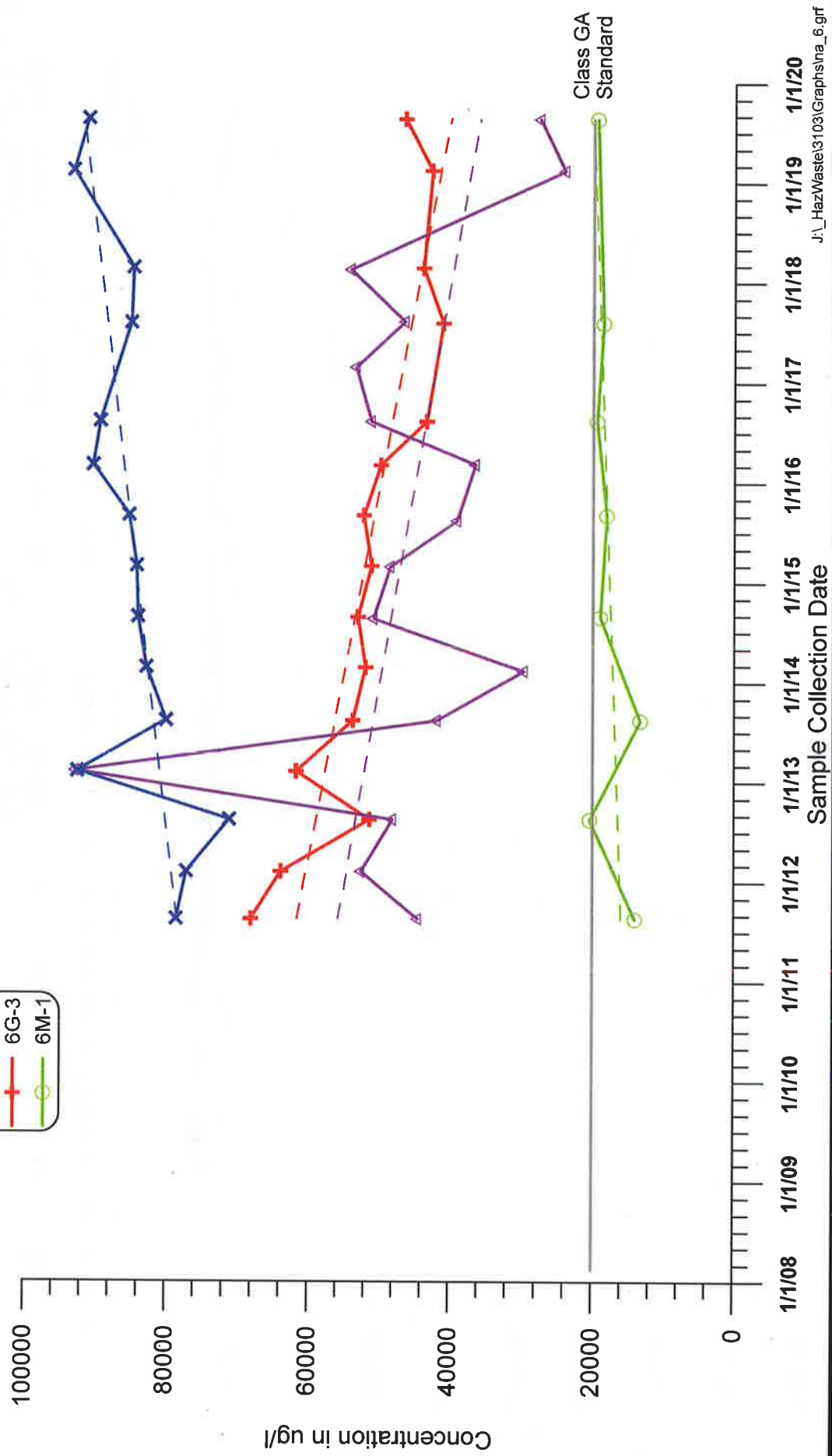
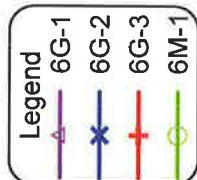
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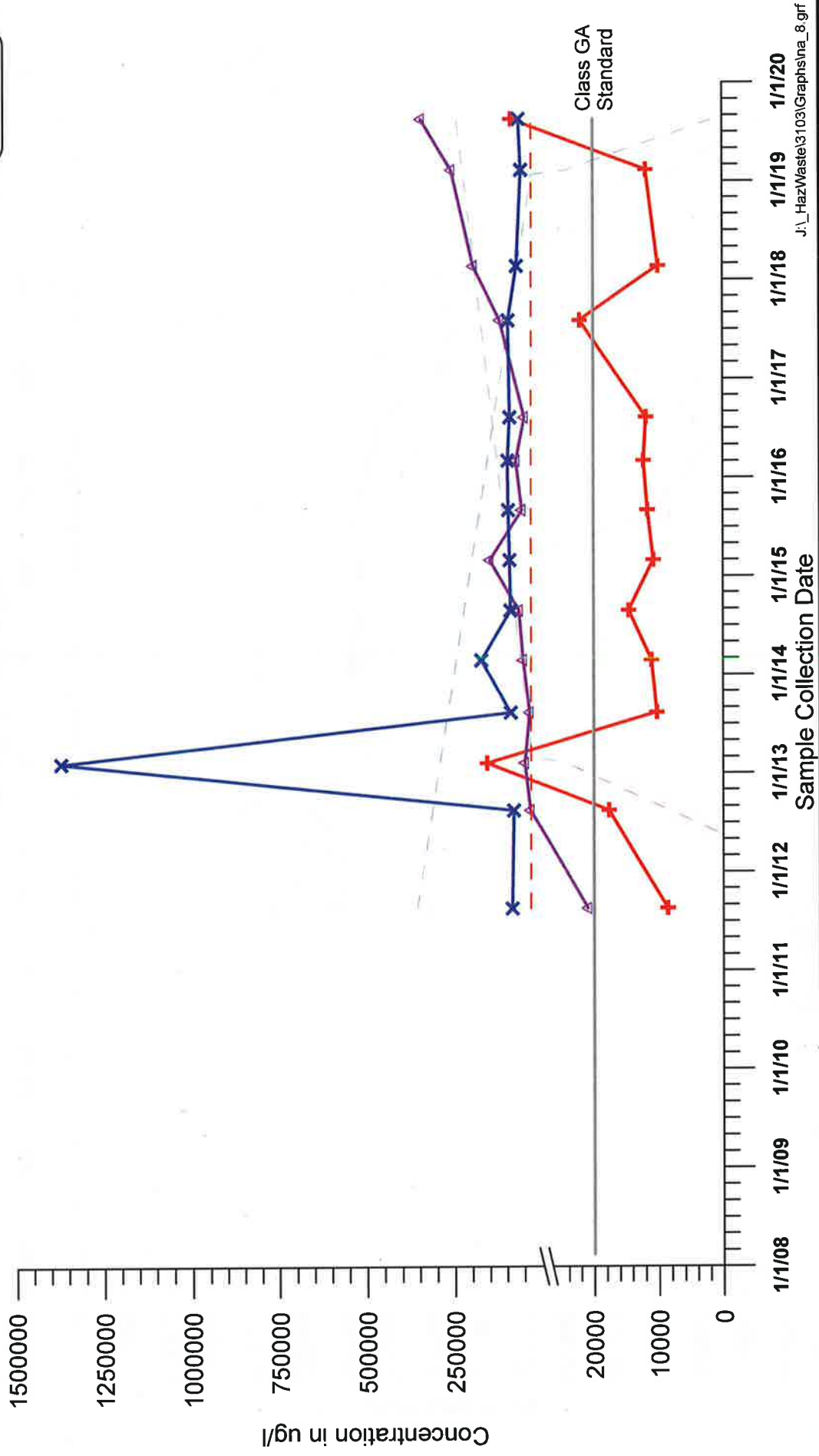
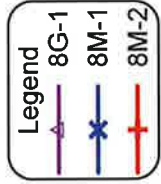
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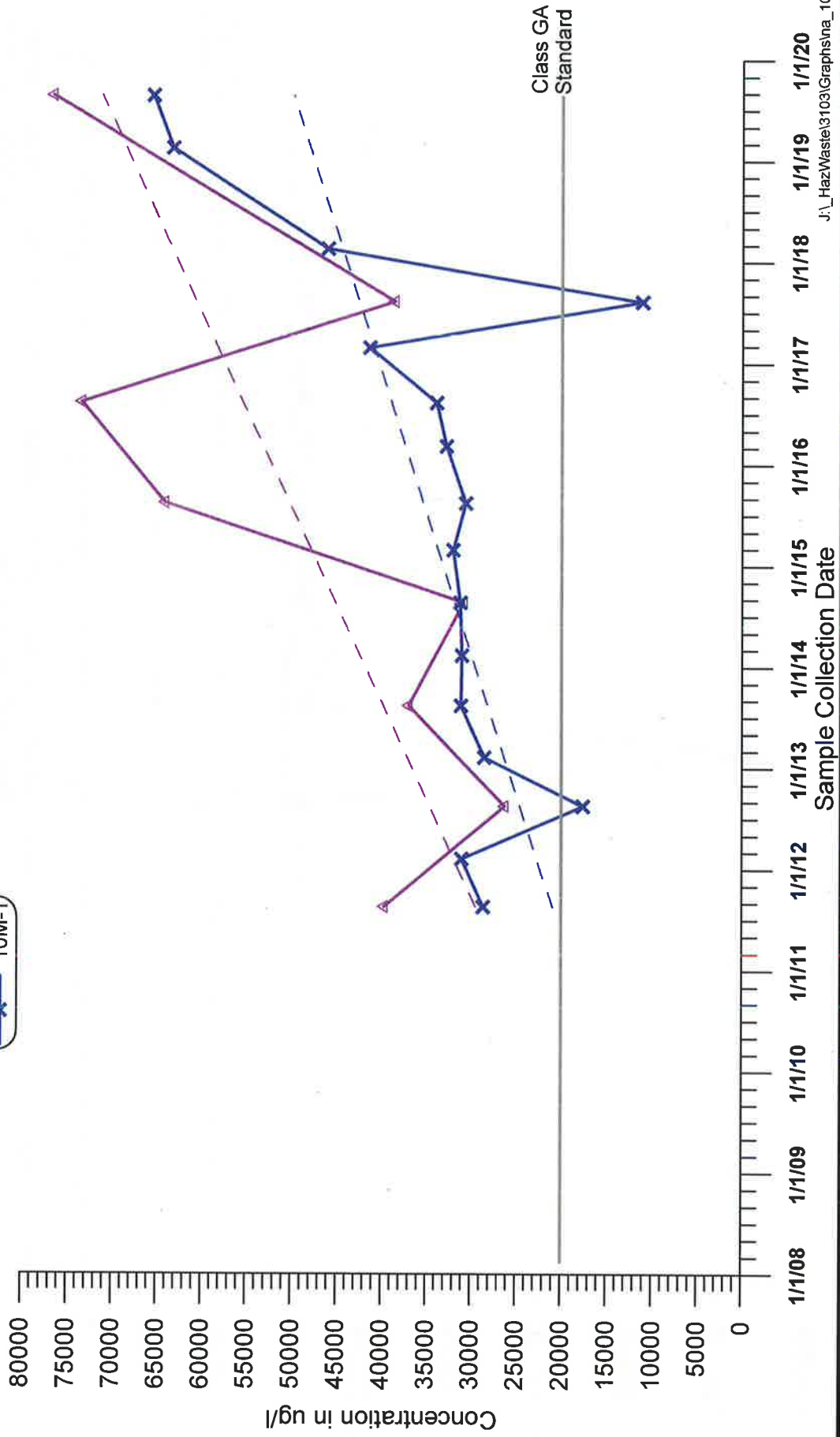
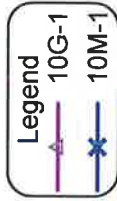


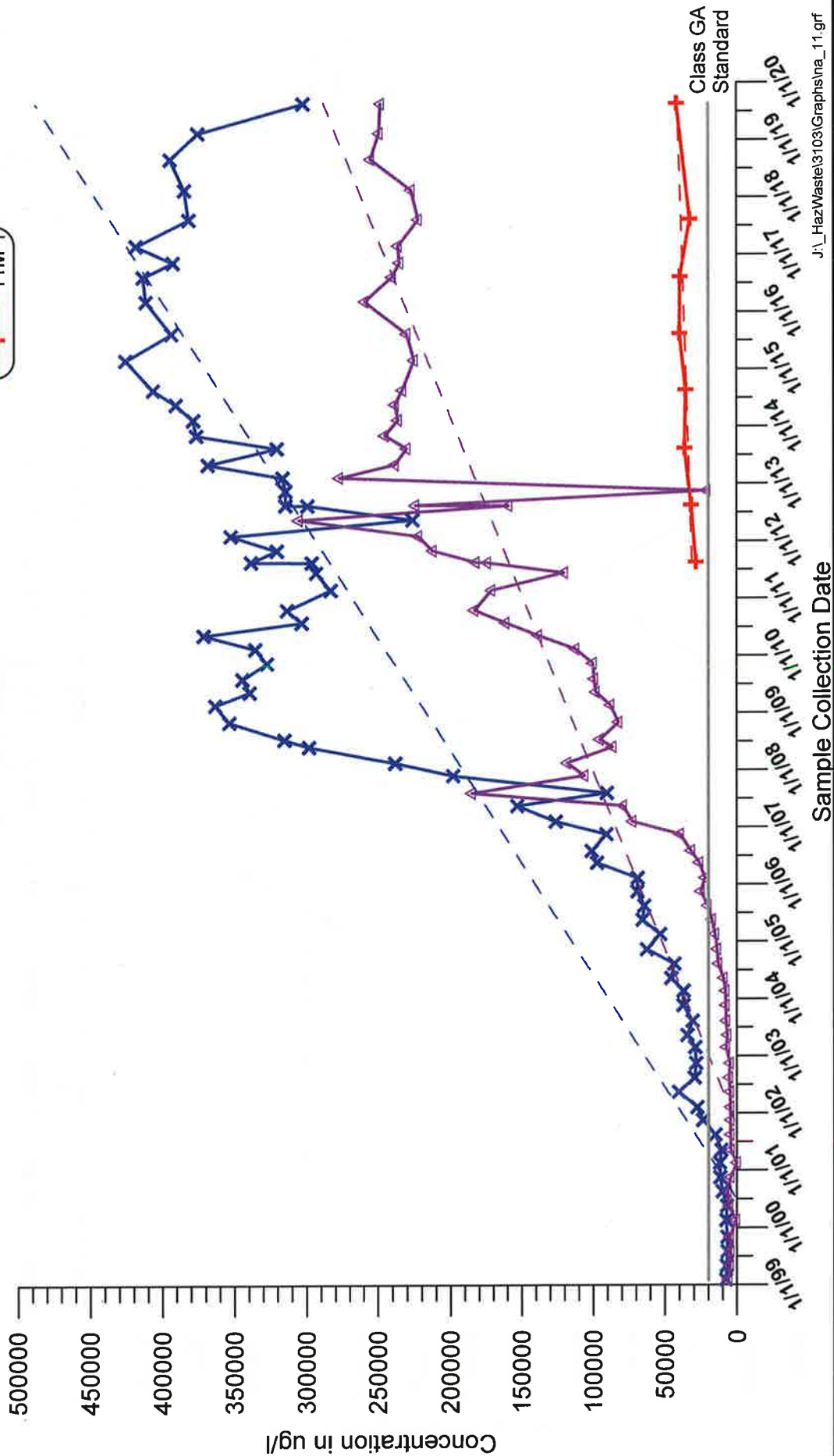
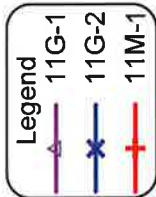
Blydenburgh Road Landfill Complex
Historical Sodium Data for Monitoring Well Cluster 4

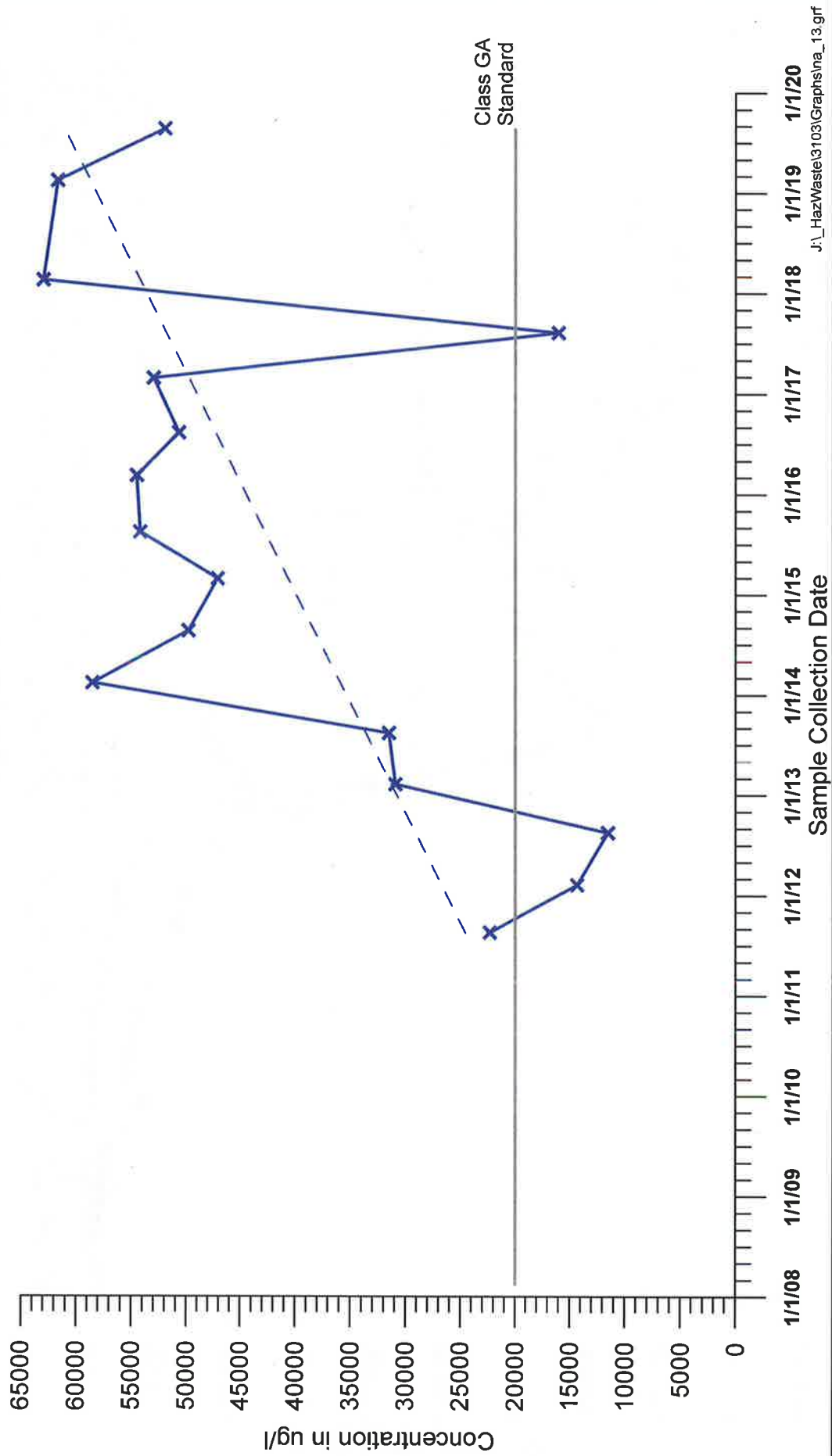


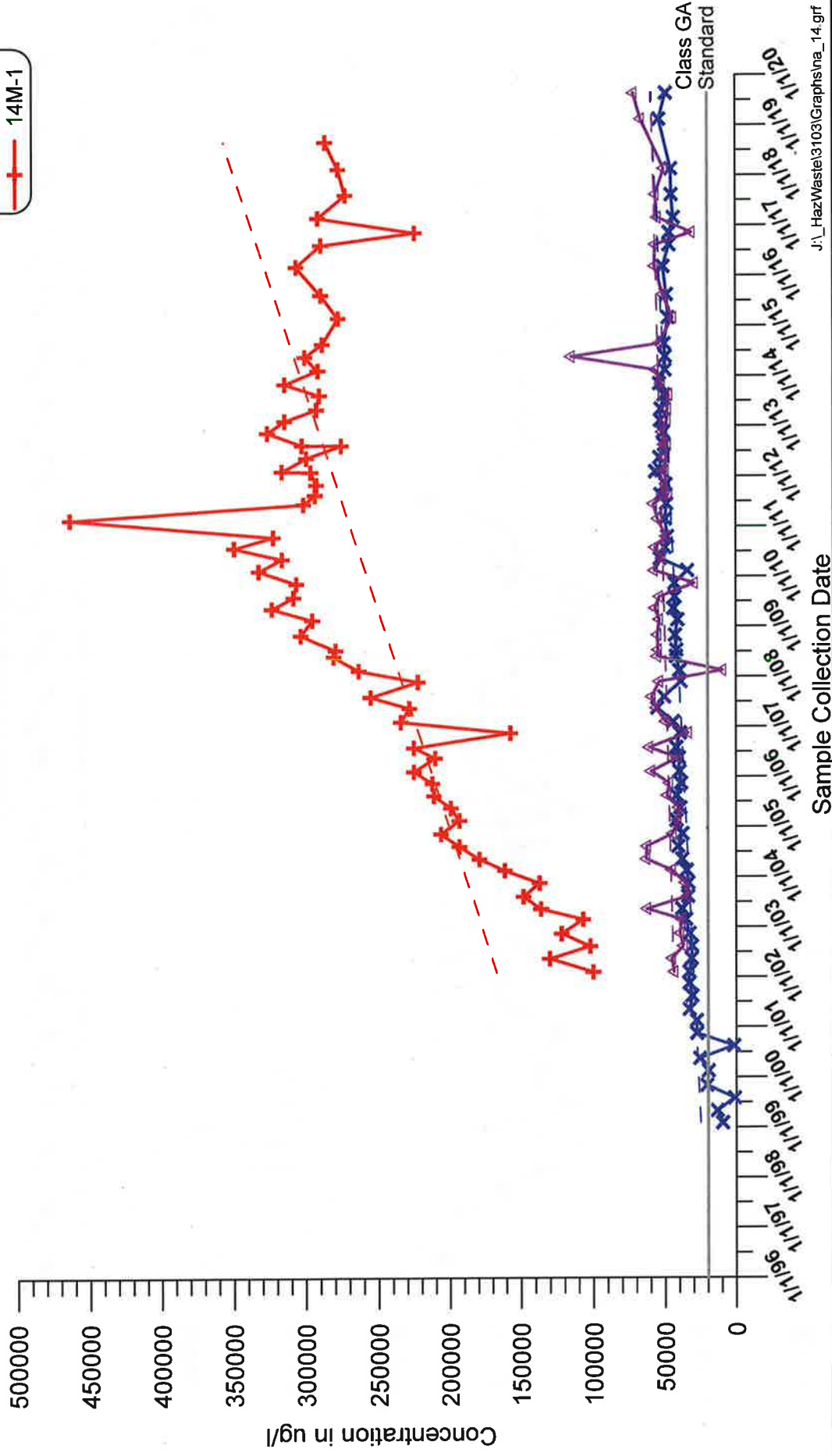
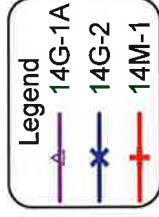
Blydenburgh Road Landfill Complex
Historical Sodium Data for Monitoring Well Cluster 6

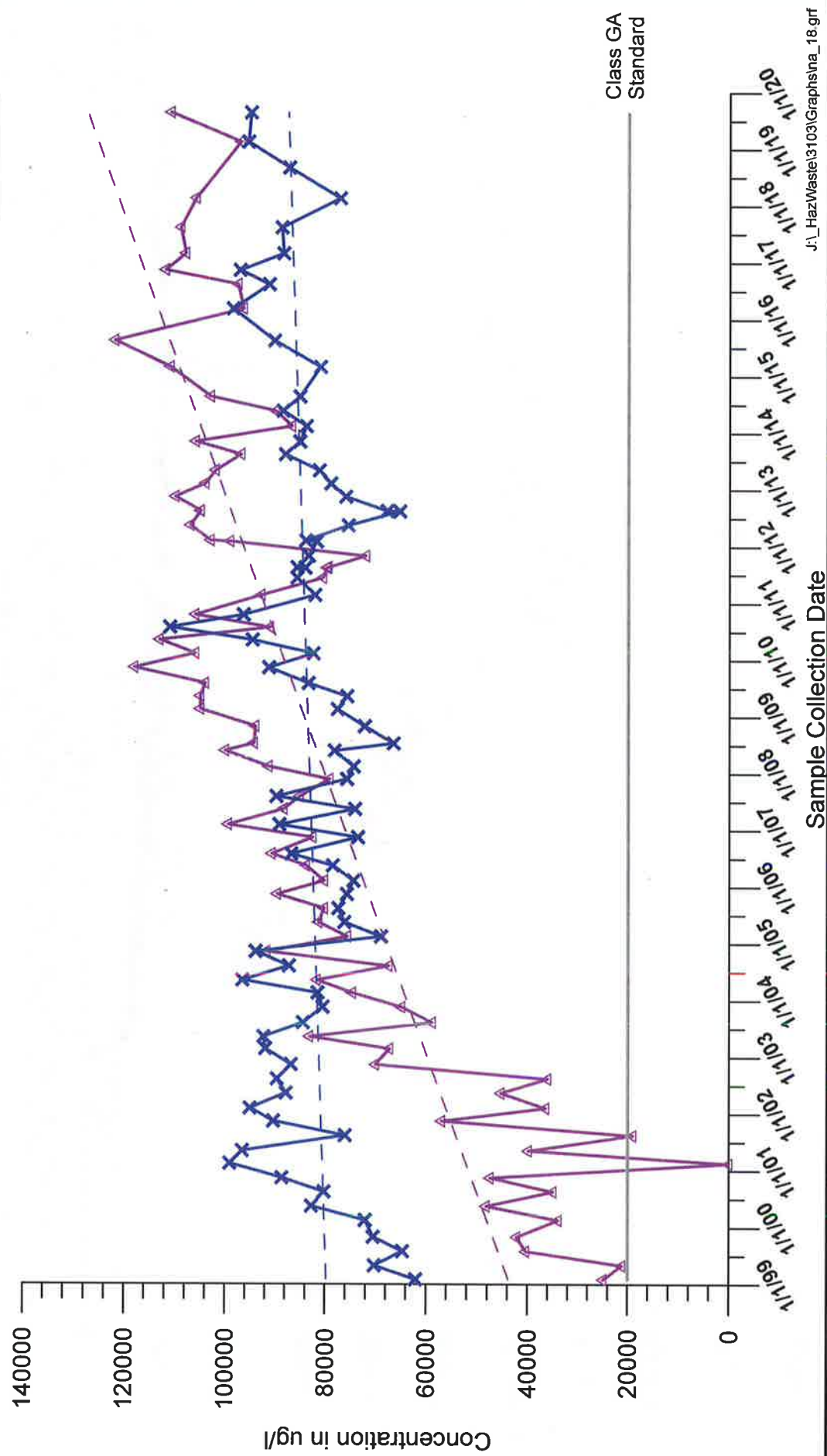
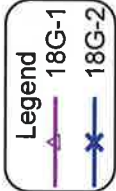




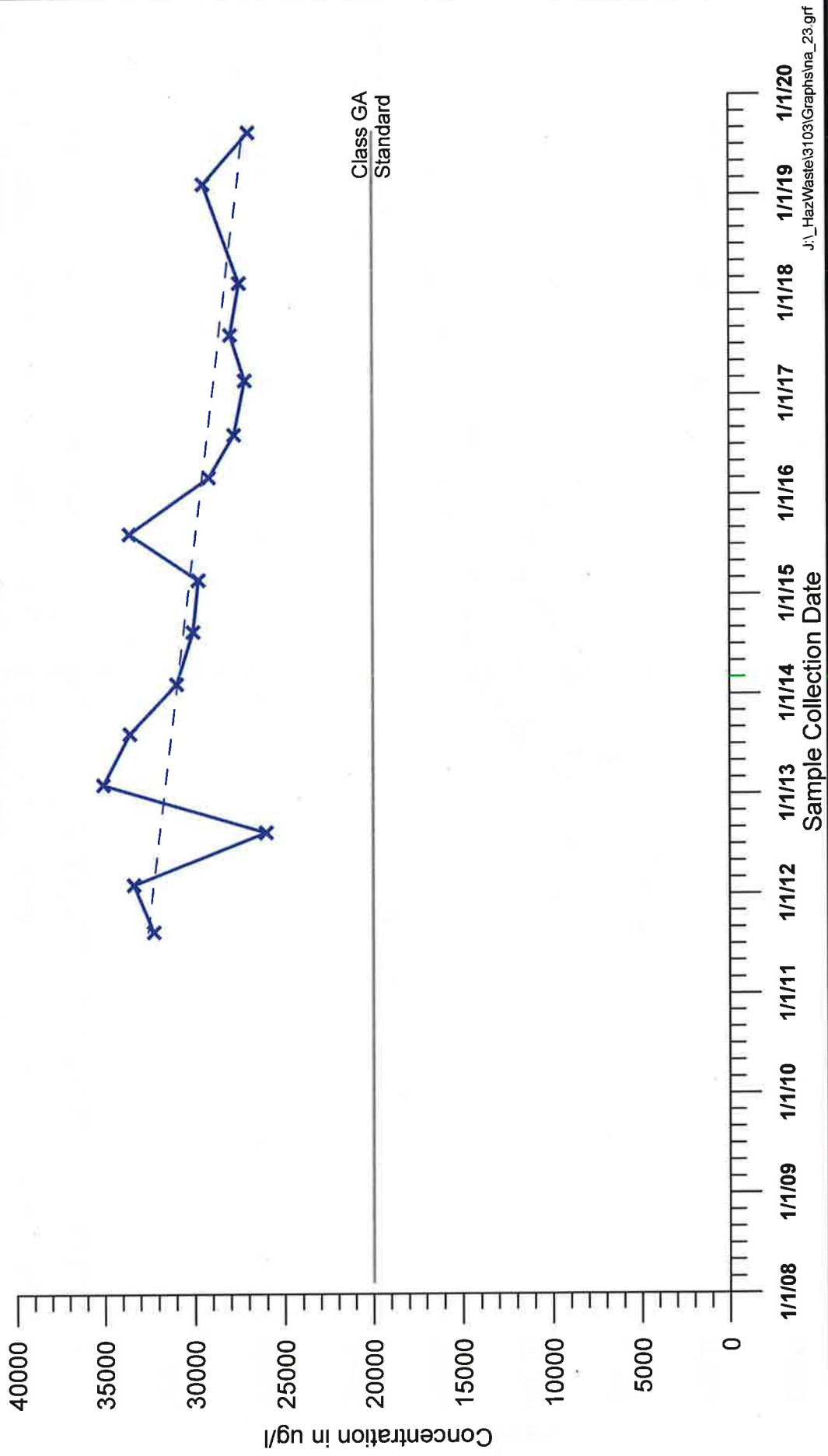


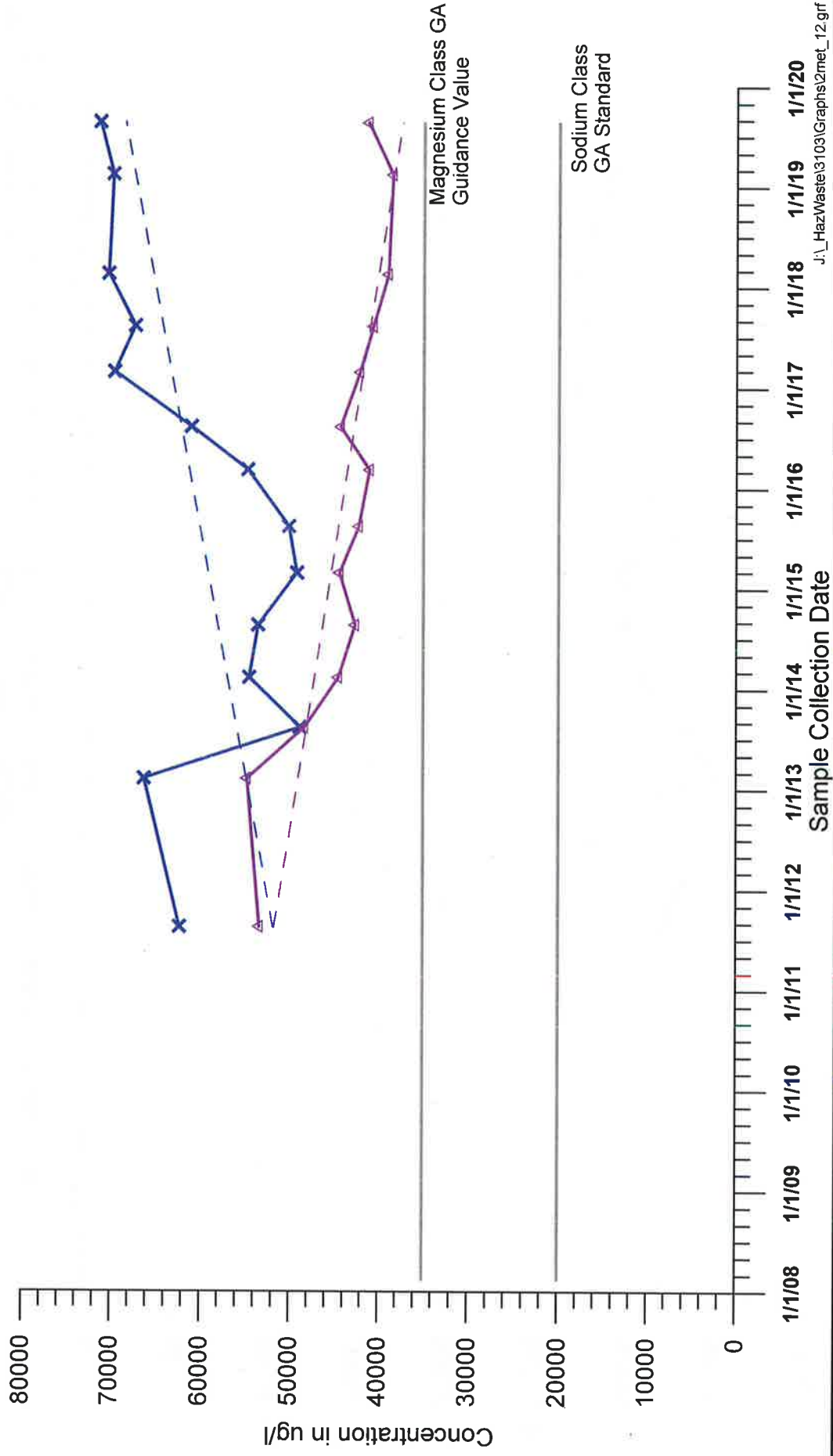
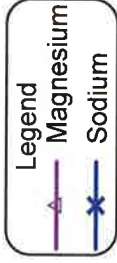


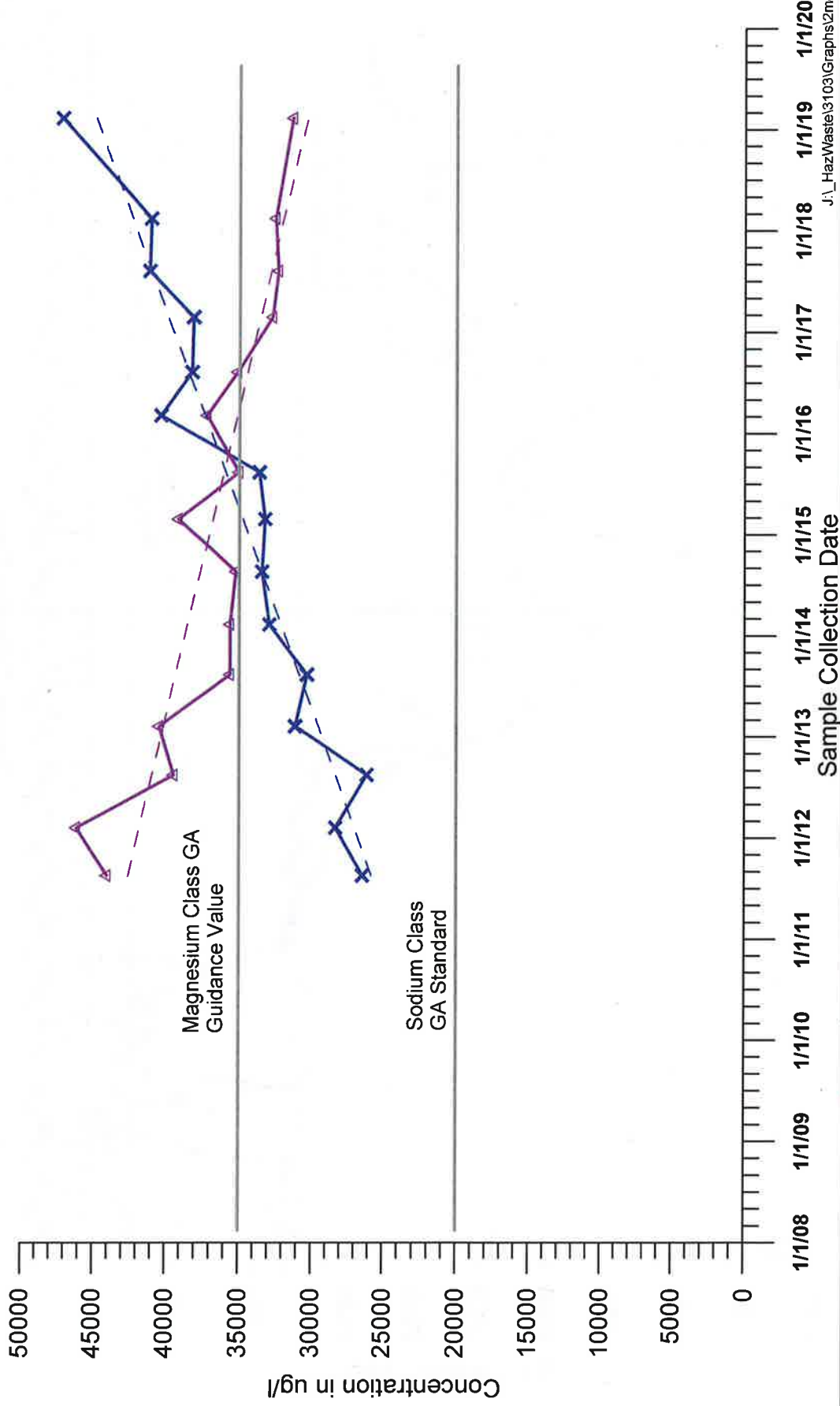
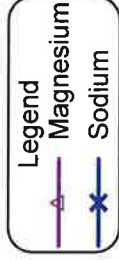


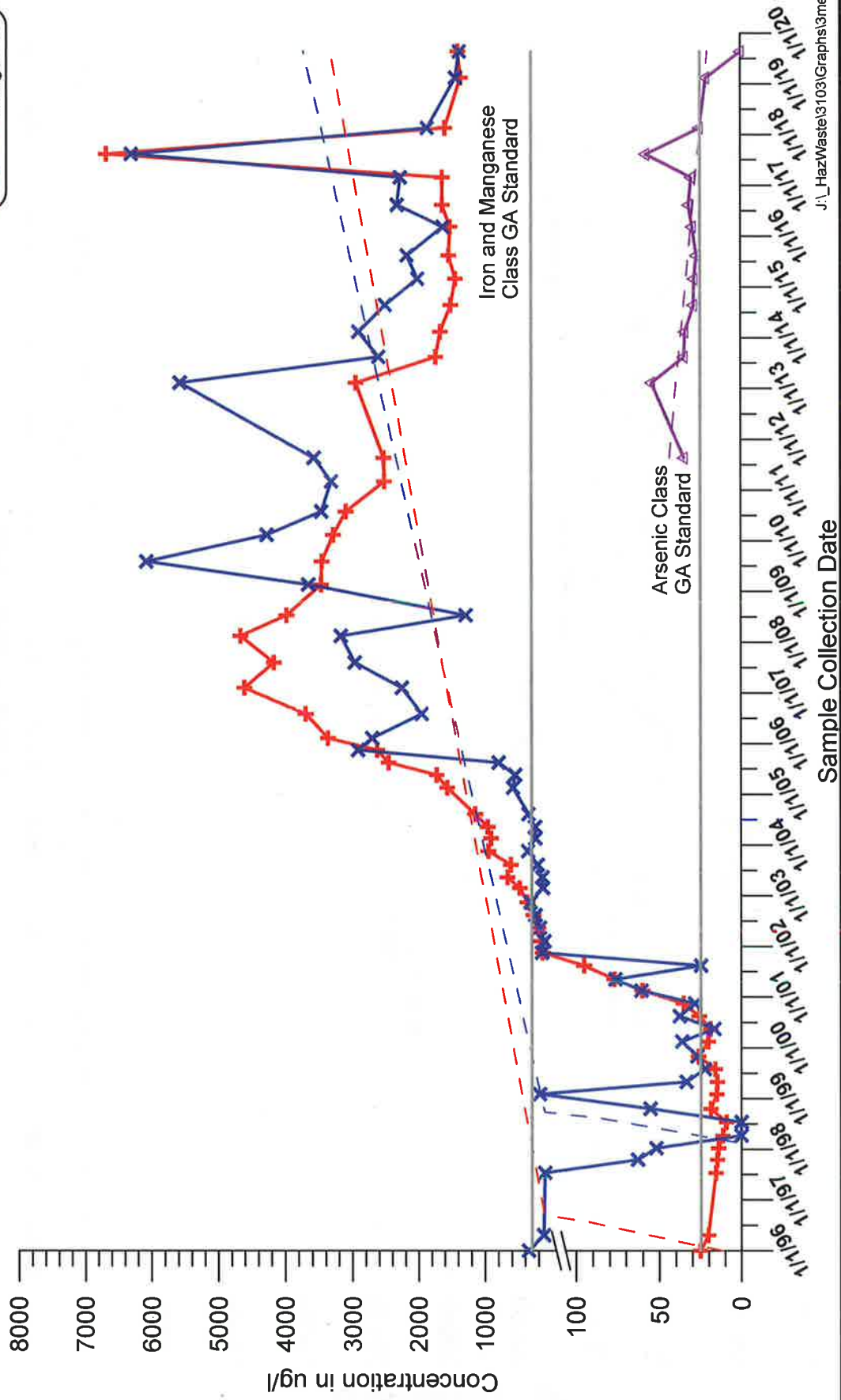
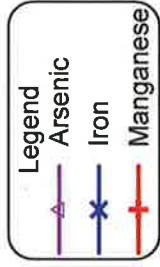


Blydenburgh Road Landfill Complex
Historical Sodium Data for Monitoring Well 18 Cluster

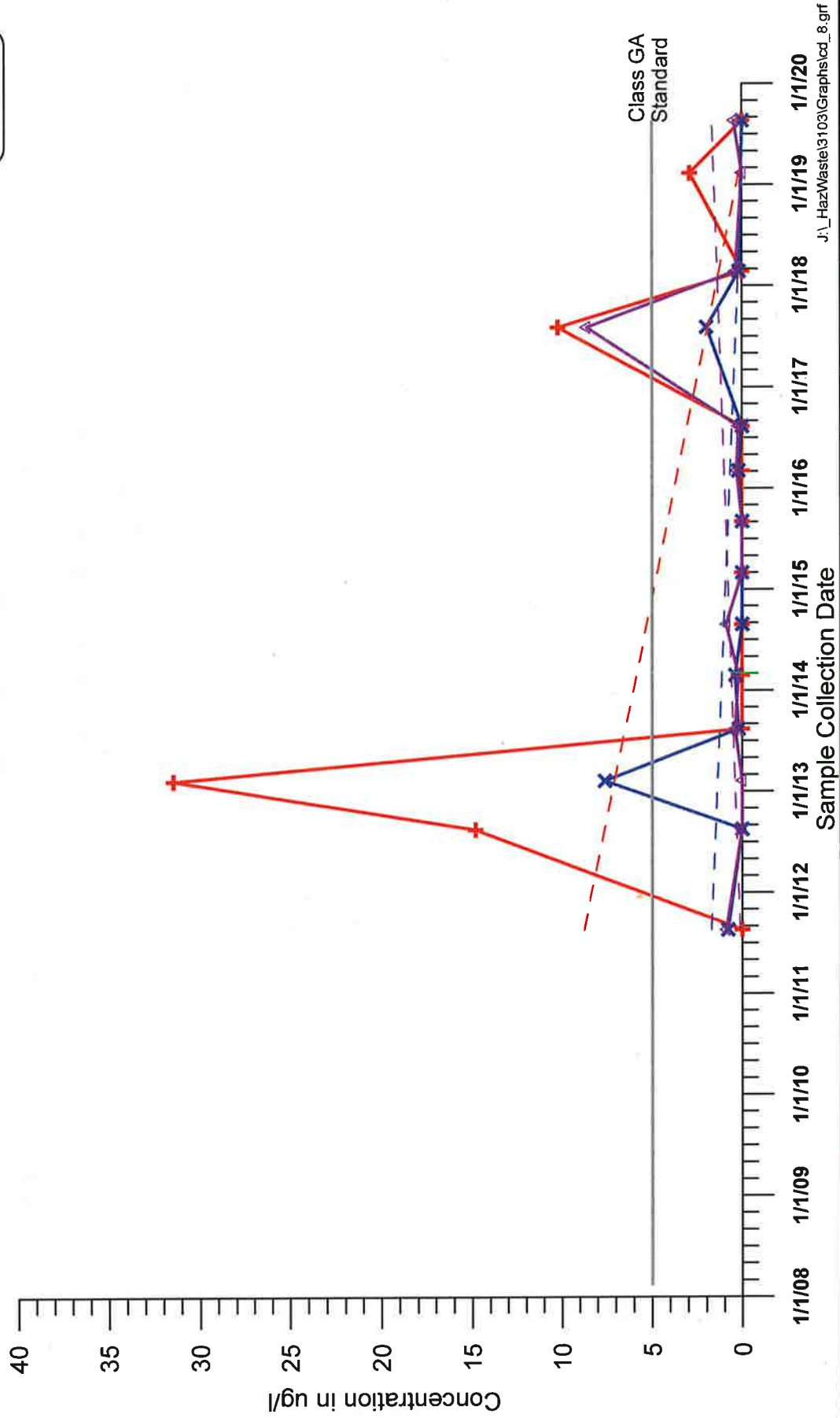
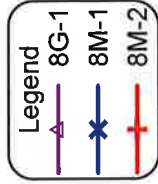


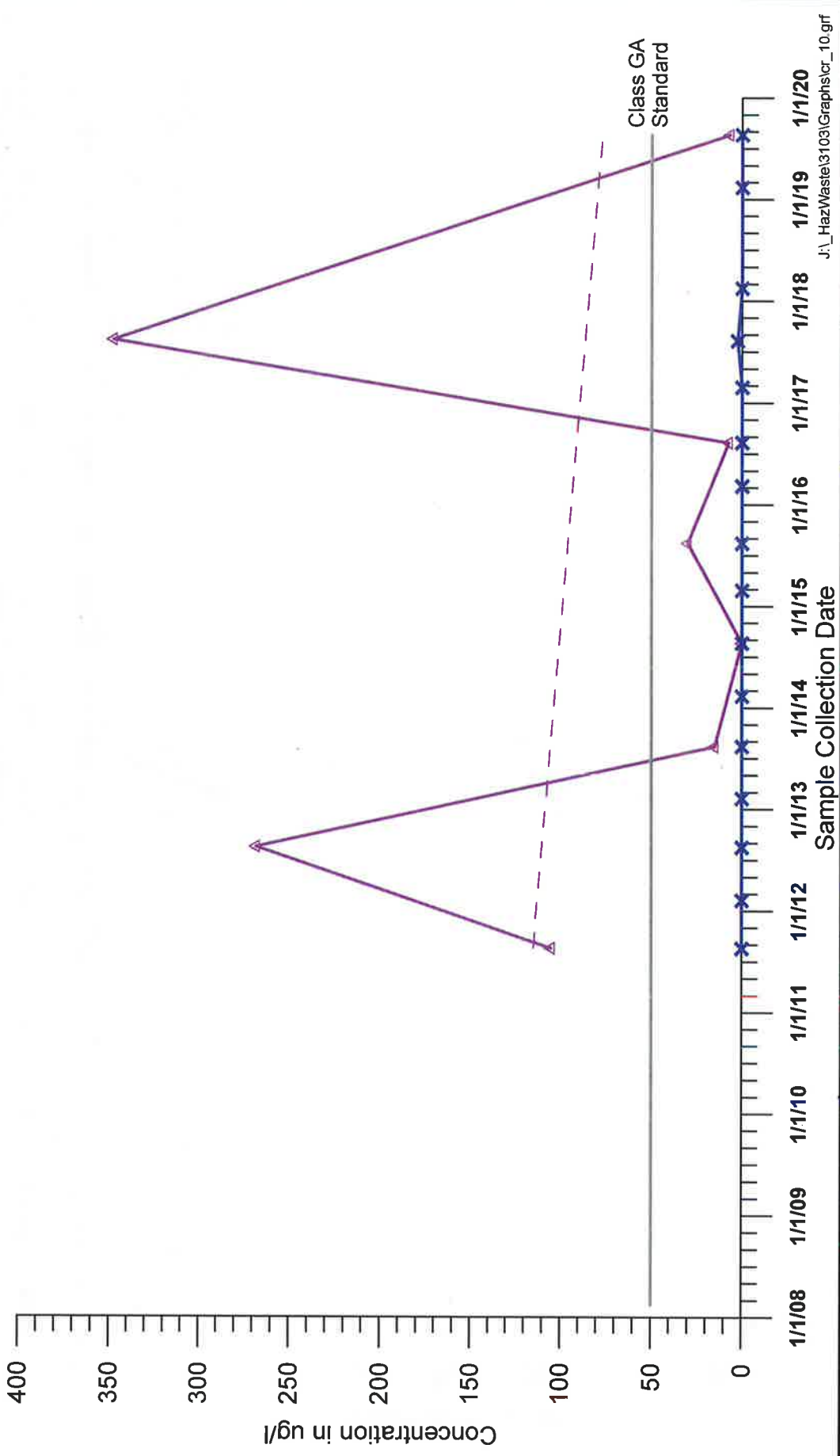


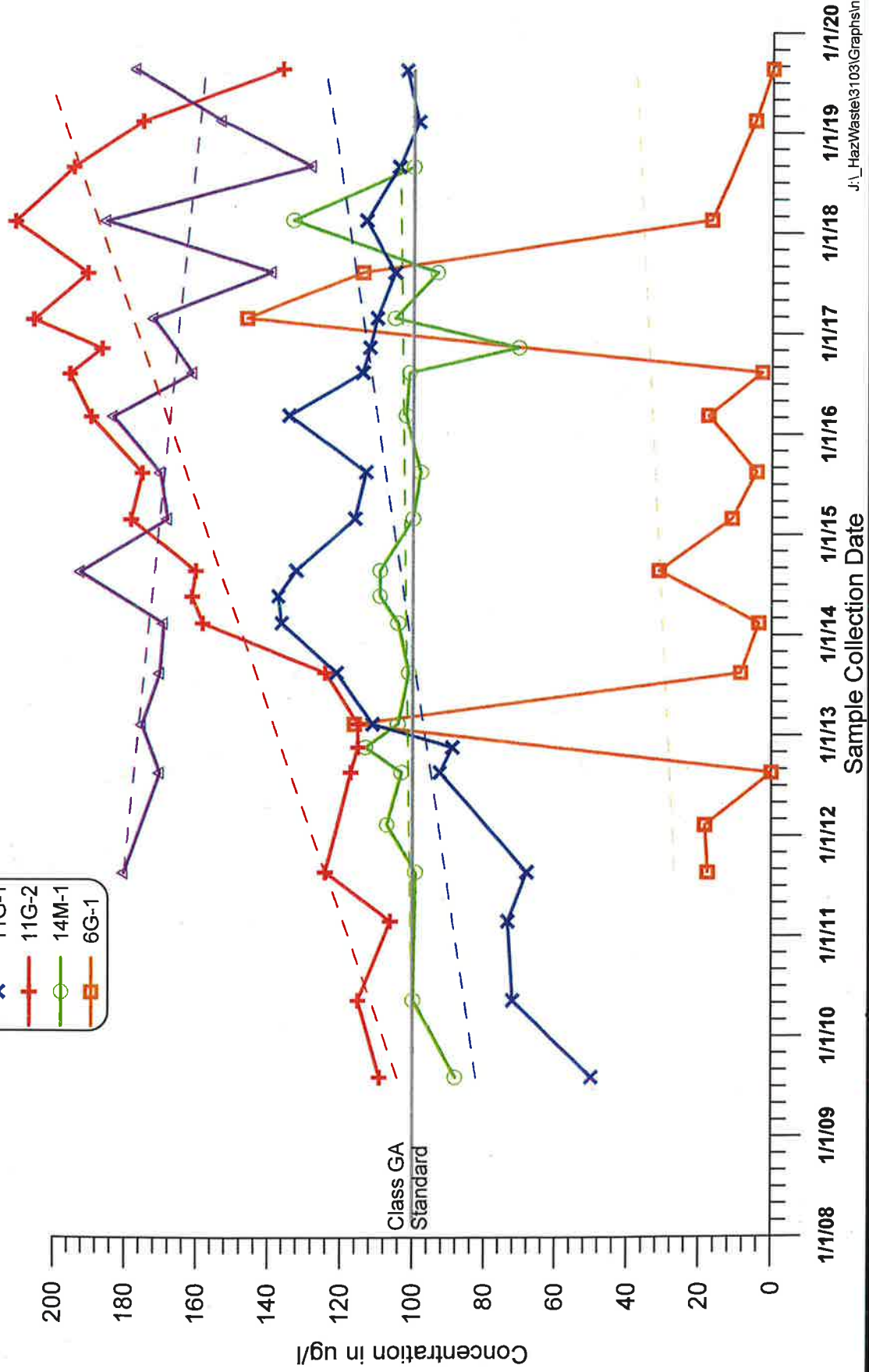
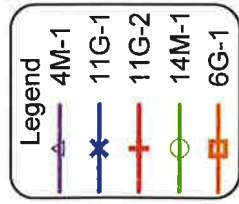




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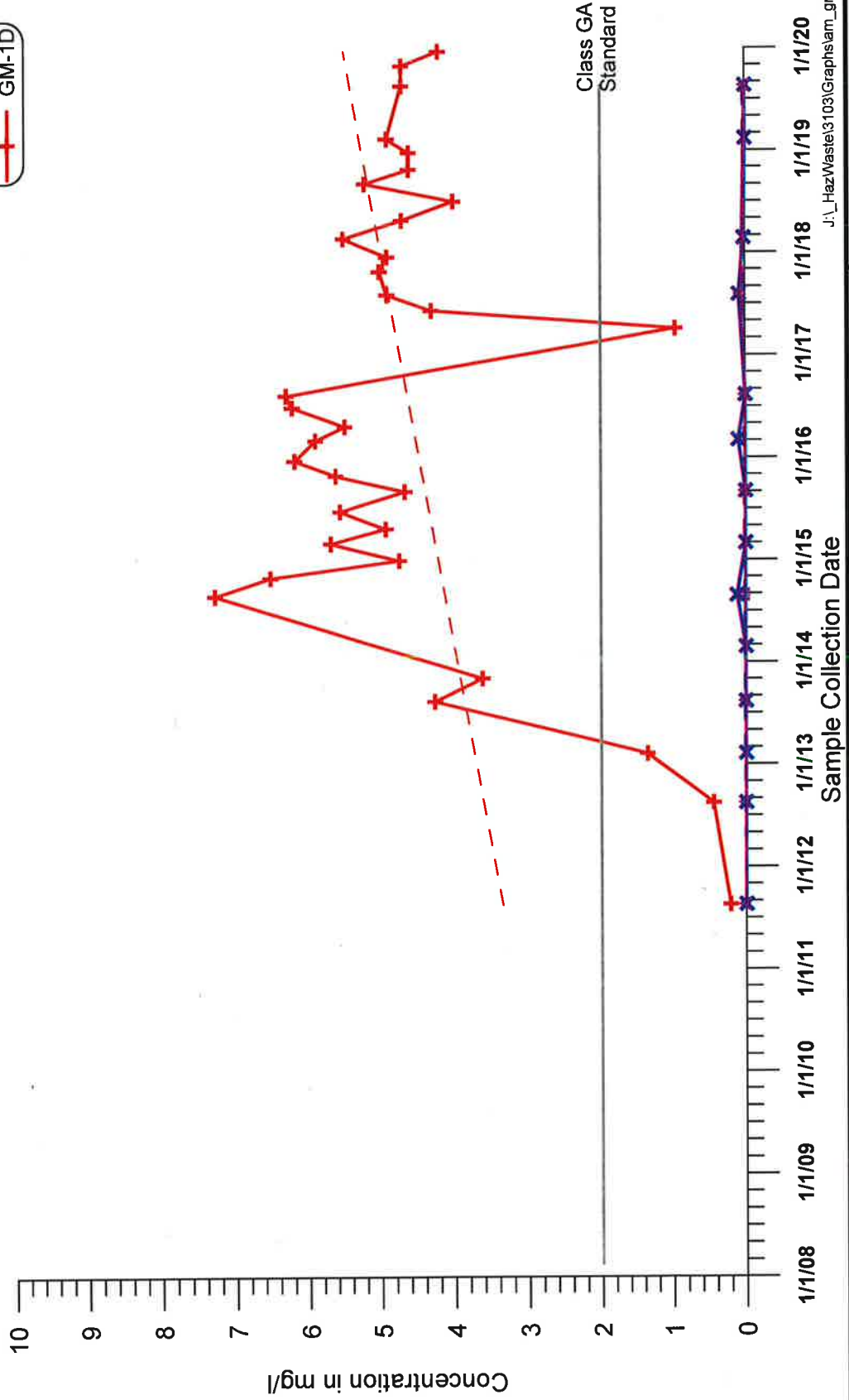
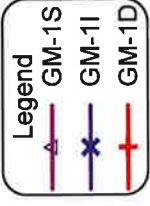


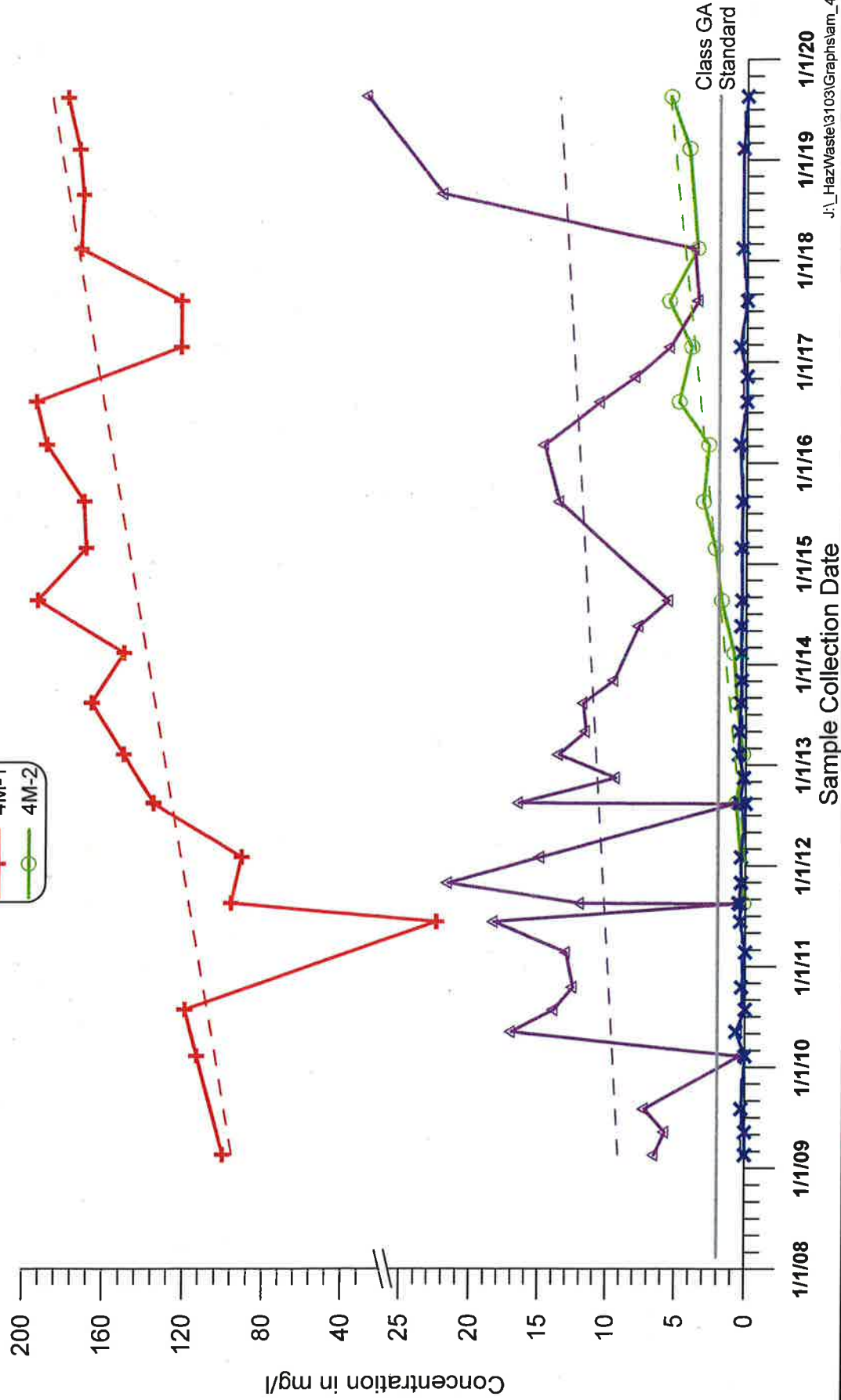
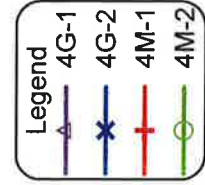


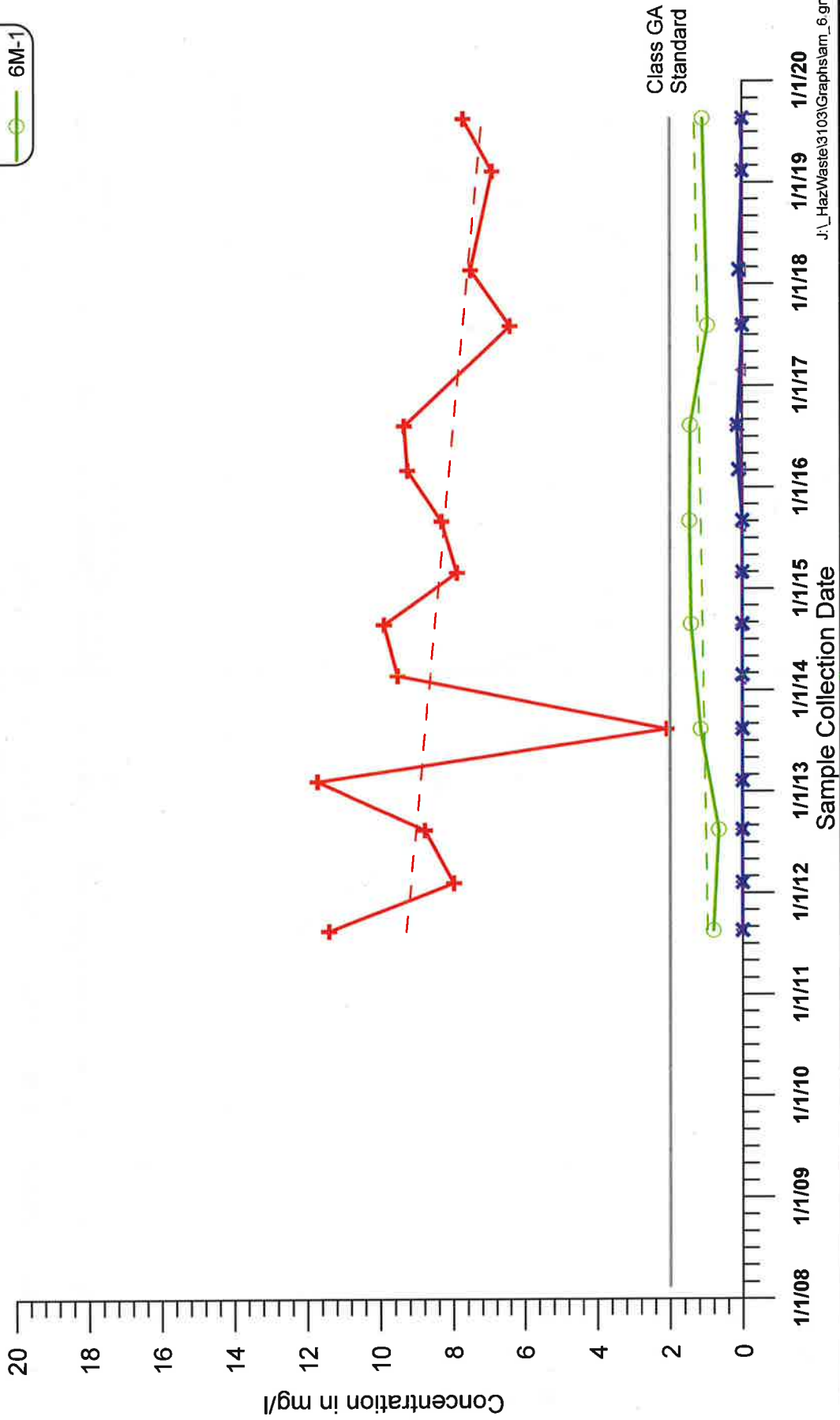
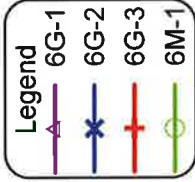
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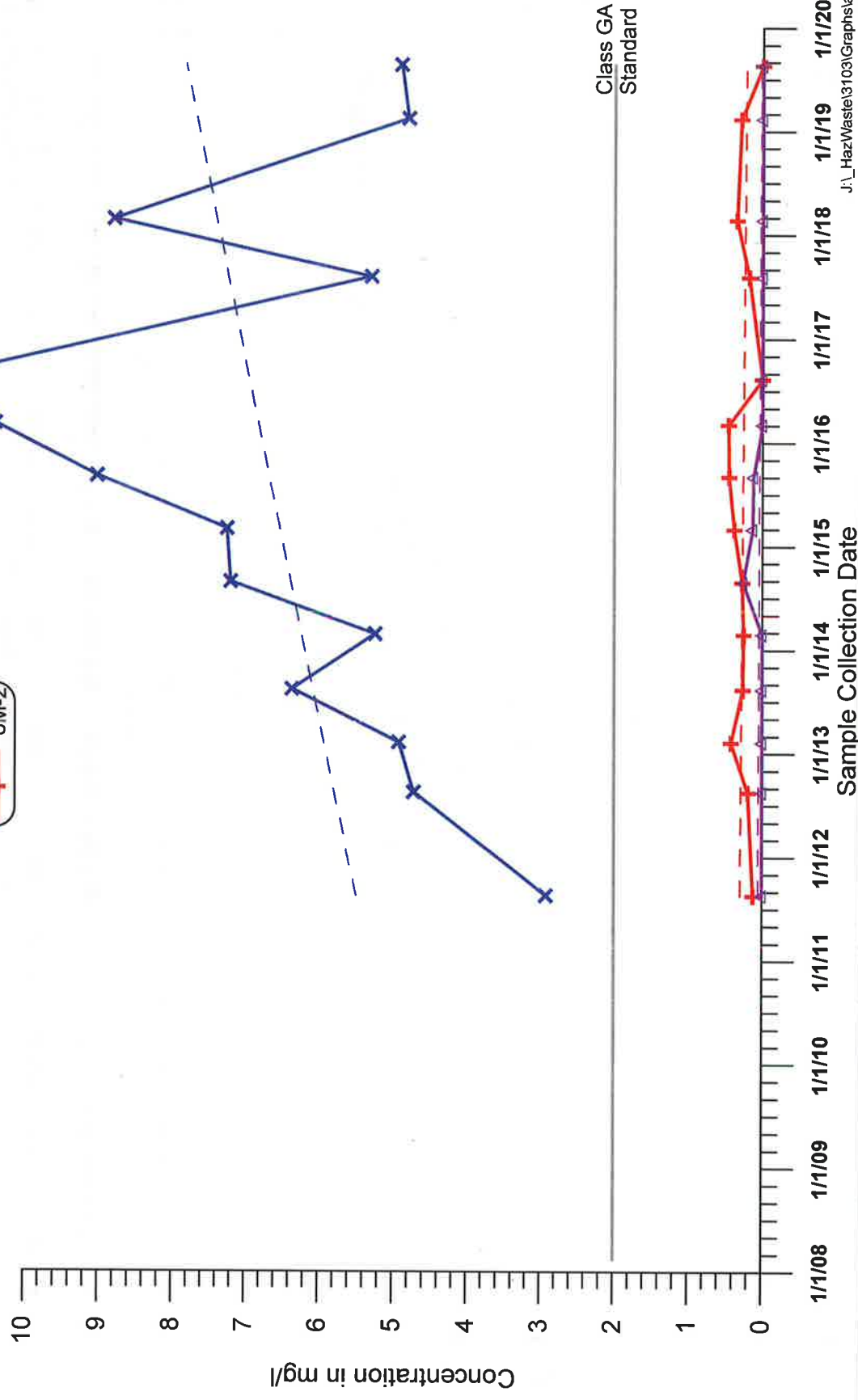
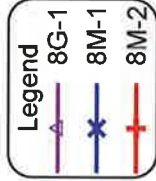
APPENDIX C-3

HISTORICAL TREND GRAPHS FOR MONITORING WELLS - LEACHATE INDICATORS



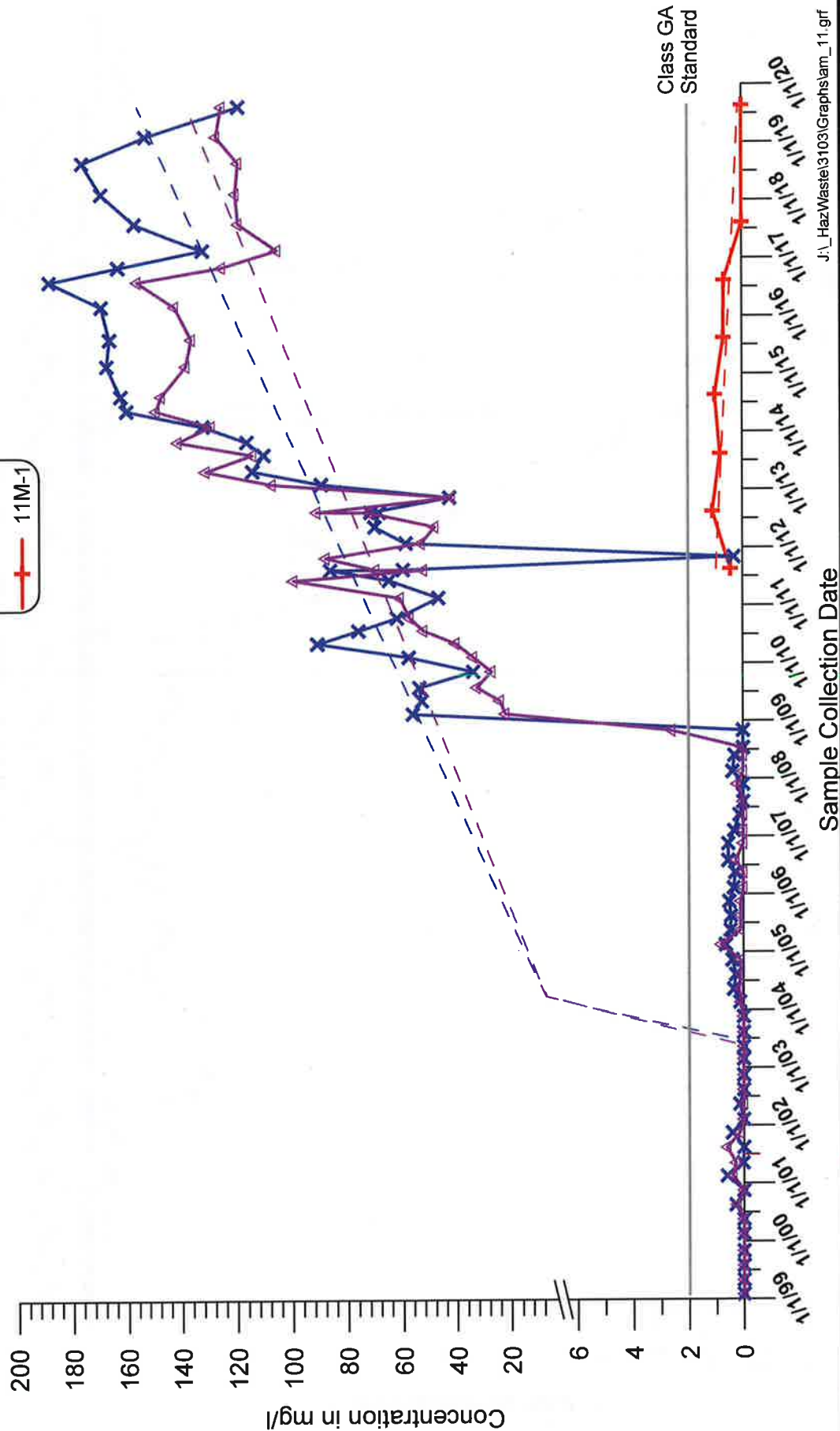
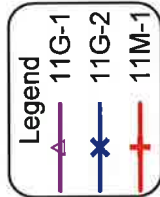






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**Blydenburgh Road Landfill Complex
Historical Ammonia Data for Monitoring Well Cluster 8**

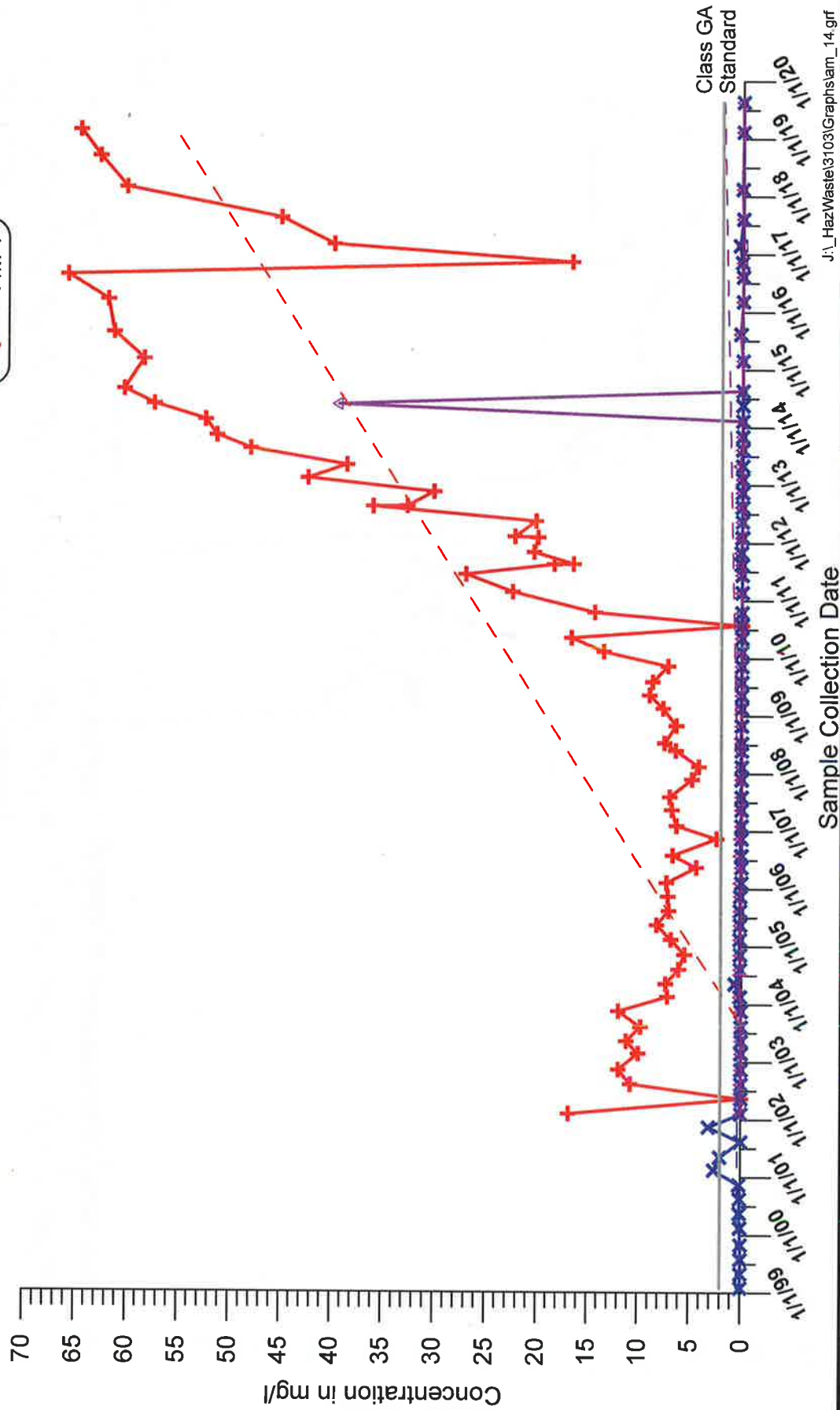




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Blydenburgh Road Landfill Complex
Historical Ammonia Data for Monitoring Well Cluster 14

Appendix
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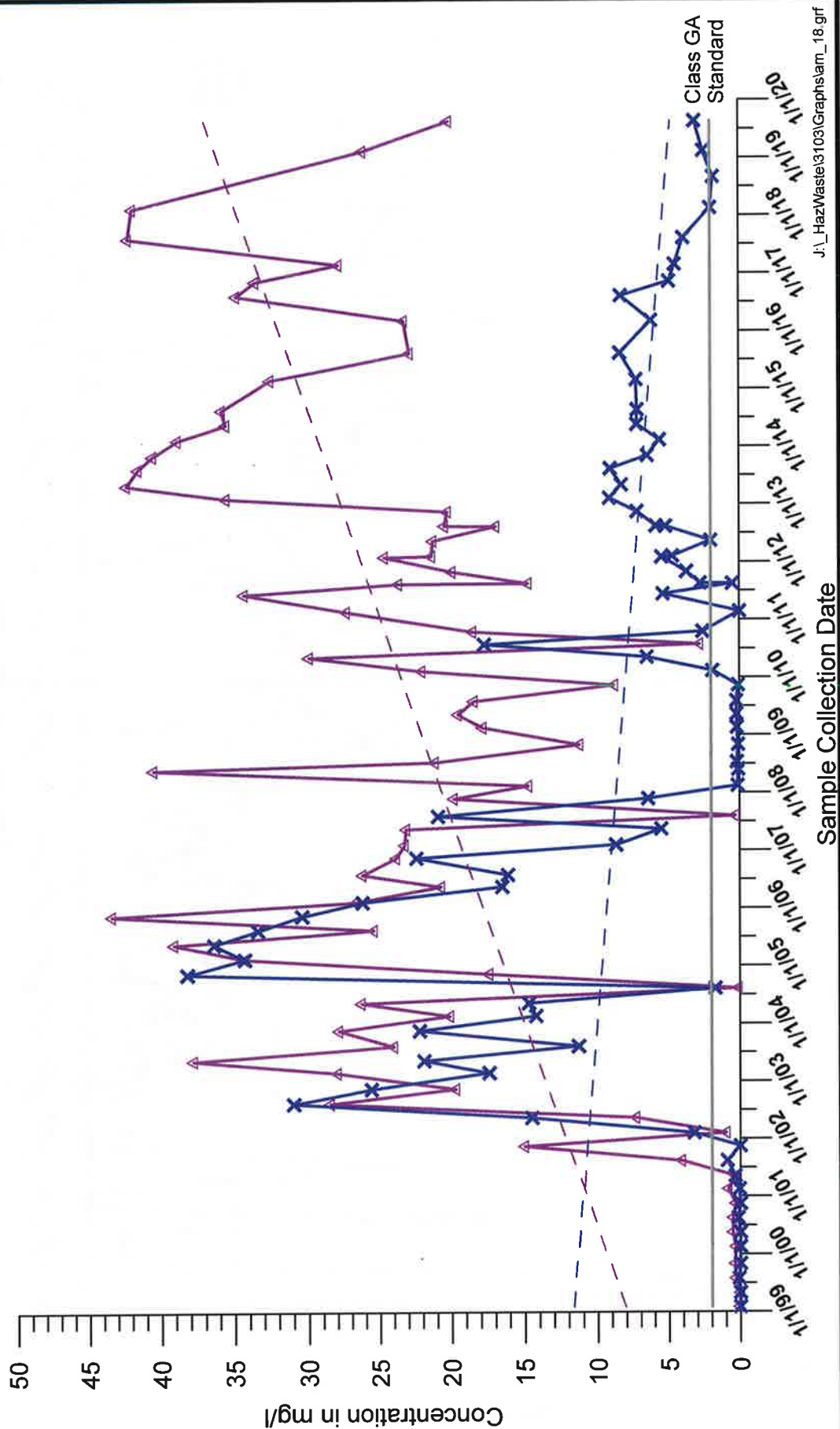


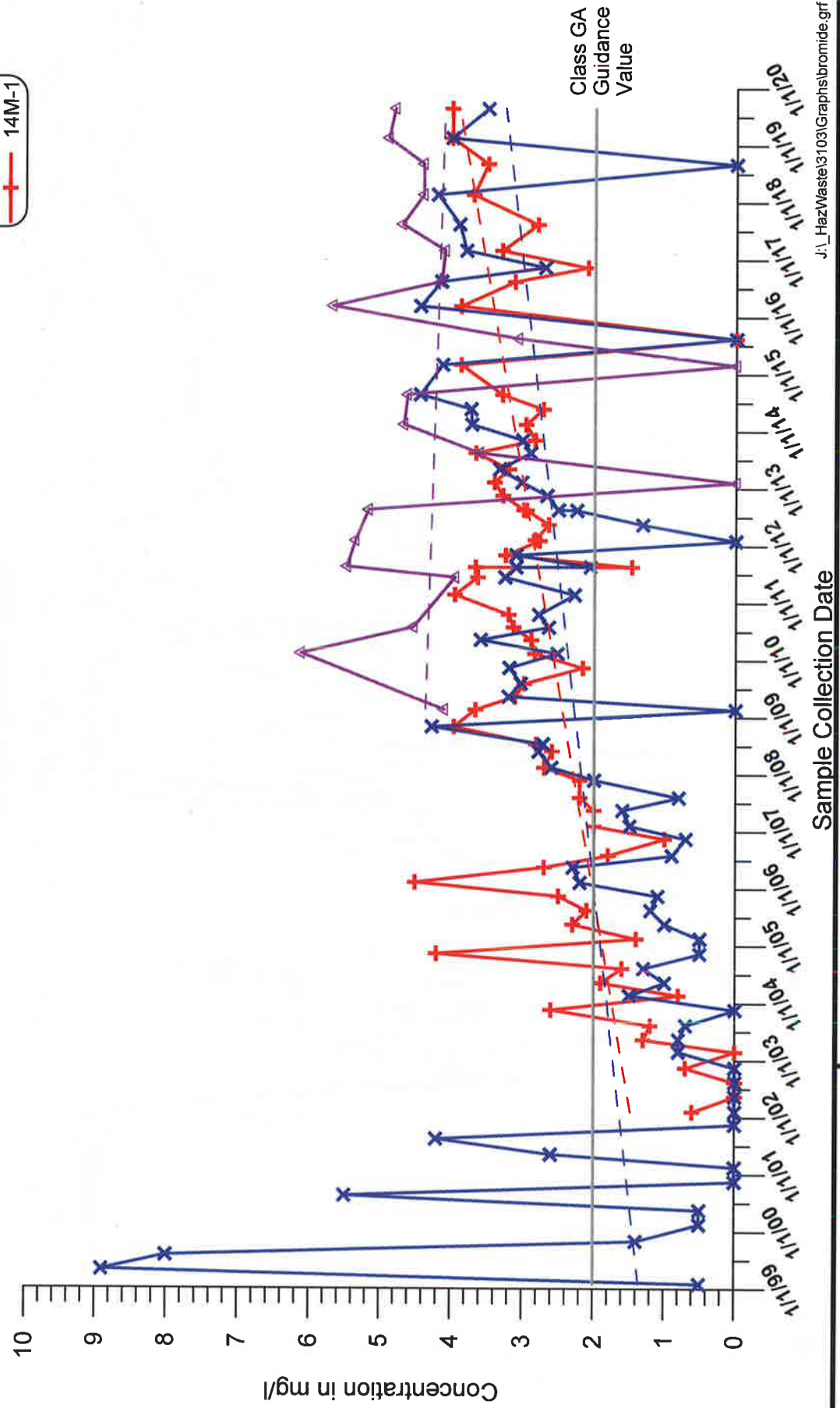
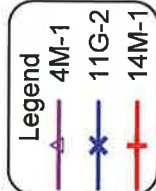


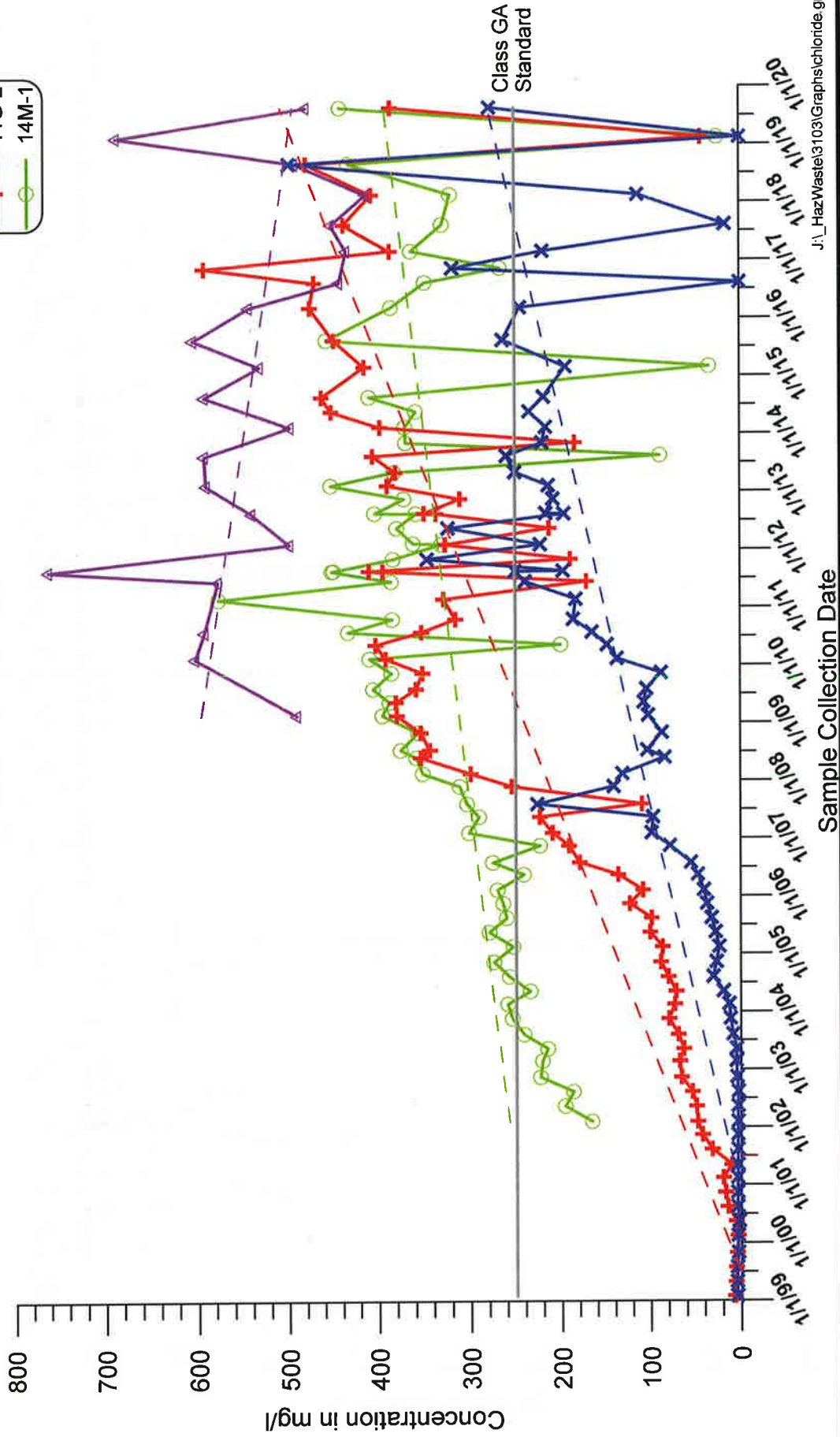
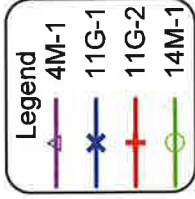
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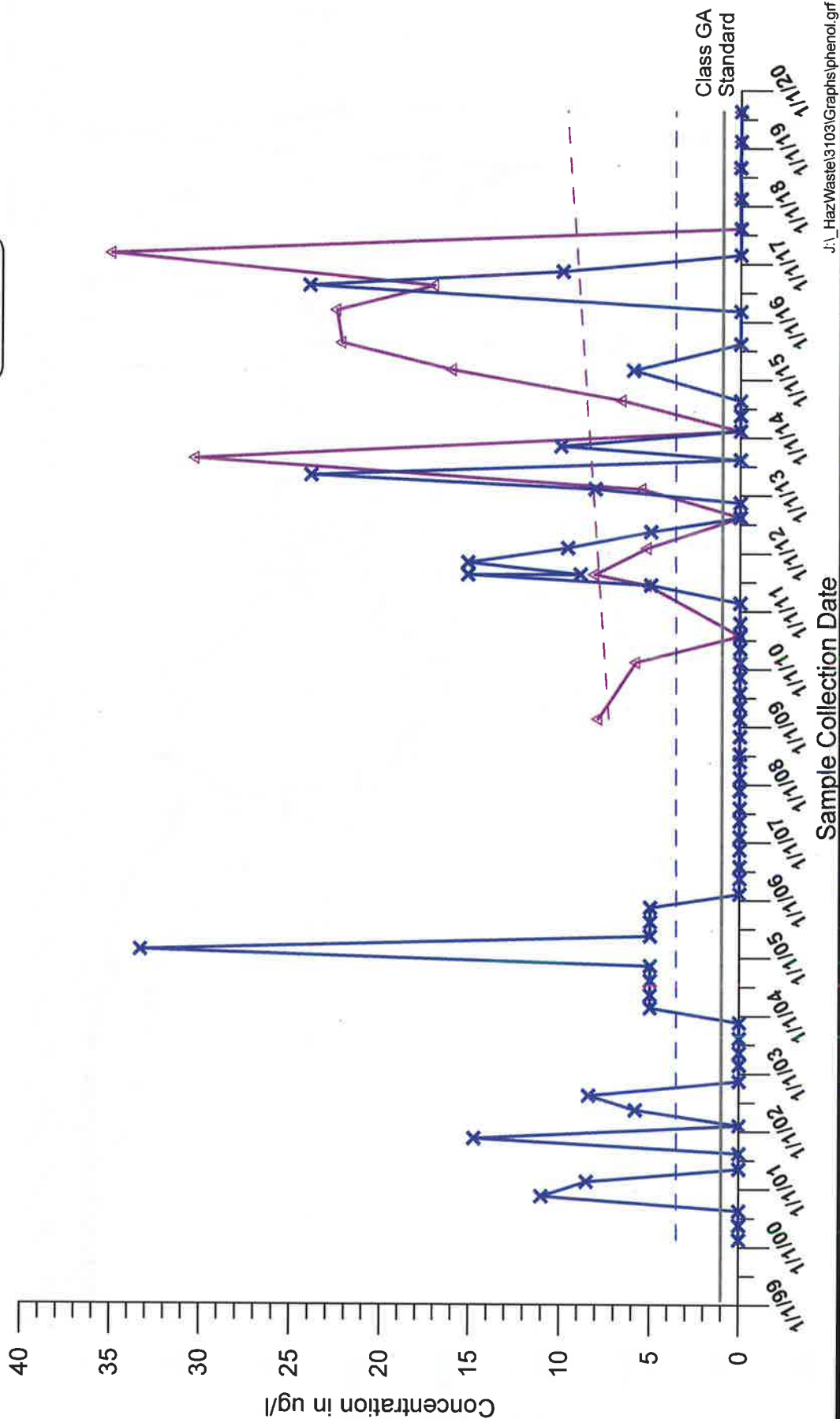
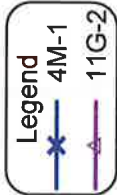
Blydenburgh Road Landfill Complex
Historical Ammonia Data for Monitoring Well Cluster 18

Appendix
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J:_HazWaste\3103\Graphs\phenol.grf



Blydenburgh Road Landfill Complex Historical Phenols Data for Select Monitoring Wells

APPENDIX D-1

EXTRACTION WELL SAMPLE RESULTS - VOLATILE ORGANIC COMPOUNDS

Appendix D-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-1 8/4/17 225' -57 DOWN	EW-1 2/23/18 225' -57 DOWN	EW-1 02/15/19 225' -57 DOWN	EW-1 08/14/19 225' -57 DOWN
Units in ug/l						
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-6	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds			0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

**Exceeds Class GA
Standard/Guidance value**

Appendix D-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Extraction Well Sample Results
 Volatile Organic Compounds

			Sample ID	EW-2	EW-2	EW-2	EW-2	EW-2	EW-2
			Sample_date	8/2/17(A)	8/4/17(B)	9/12/17(A)	10/18/17(A)	11/15/17(A)	12/11/17(A)
			Depth of Well BGS	223'	223'	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-53	-53	-53	-53	-53
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
			NYSDEC CLASS GA GROUNDWATER ST/GV						
COMPOUNDS	CAS Number								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	1.1	U	1.1
2-Hexanone	591-78-6	50 GV		U	U	U	U	U	U
Acetone	67-64-1	50 GV		U	U	15.3	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U	U	U
Total Volatile Organic Compounds			---	0	0	15.3	1.1	0	1.1

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-2 1/12/18(A) 223' -53 DOWN	EW-2 2/09/18(A) 223' -54 DOWN	EW-2 2/26/18(B) 223' -53 DOWN	EW-2 3/12/18(A) 223' -54 DOWN	EW-2 4/10/18(A) 223' -53 DOWN	EW-2 5/07/18(A) 223' -53 DOWN
Units in ug/l								
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.1	U	1.6	1.2	1.1	1.1
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds			1.1	0	1.6	1.2	1.1	1.1

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Appendix D-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

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			Sample ID	EW-2	EW-2	EW-2	EW-2	EW-2	EW-2
			Sample_date	6/05/18(A)	7/02/18(A)	8/13/18(A)	9/10/18(A)	10/3/18(A)	11/7/18(A)
			Depth of Well BGS	223'	223'	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-54	-53	-54	-53	-53
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l									
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U	U
1,1,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.1	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U	U
Total Volatile Organic Compounds			---	1.1	0	0	0	0	0

- + Applies to each isomer individually ug/l Micrograms per liter
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

Exceeds Class GA
Standard/Guidance value

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-2 12/5/18(A) 223' -53 DOWN	EW-2 1/7/19(A) 223' -53 DOWN	EW-2 2/11/19(A) 223' -53 DOWN	EW-2 2/15/19(B) 223' -53 DOWN	EW-2 3/8/19(A) 223' -53 DOWN	EW-2 4/8/19(A) 223' -53 DOWN
Units in ug/l	NYSDEC CLASS GA GROUNDWATER							
COMPOUNDS	CAS Number	ST/GV						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Appendix D-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Extraction Well Sample Results
 Volatile Organic Compounds

Sample ID			EW-2	EW-2	EW-2	EW-2	EW-2
Sample_date			5/13/19(A)	6/12/19(A)	7/15/19(A)	8/8/19(A)	8/16/19(B)
Depth of Well BGS			223'	223'	223'	223'	223'
Depth to bottom screen, relative to MSL			-53	-53	-53	-53	-53
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
NYSDEC CLASS GA							
GROUNDWATER							
ST/GV							
COMPOUNDS	CAS Number						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorodifluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds			0	0	0	0	0

- + Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

			Sample ID	EW-2	EW-2	EW-2	EW-2
			Sample_date	9/11/19(A)	10/7/19(A)	11/2/19(A)	12/16/19(A)
			Depth of Well BGS	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-53	-53	-53
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U
1,1-Dichloroethane	75-35-4	5 ST	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-3 8/3/17 312' -129' DOWN	EW-3 2/15/18 312' -129' DOWN	EW-3 02/13/19 312' -129' DOWN	EW-3 08/13/19 312' -129' DOWN
Units in ug/l						
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.3	1.2	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-6	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	1.3	1.2	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

Exceeds Class GA
Standard/Guidance value

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

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			Sample ID	EW-4	EW-4	EW-4	EW-4
			Sample_date	8/3/17	2/15/18	02/15/19	08/13/19
			Depth of Well BGS	305'	305'	305'	305'
			Depth to bottom screen, relative to MSL	-138	-138	-138	-138
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
COMPOUNDS		NYSDEC CLASS GA					
	CAS Number	GROUNDWATER					
		ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ	
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	
1,4-Dichlorobenzene	106-46-7	3 ST++	1.3	U	U	U	
2-Hexanone	591-78-6	50 GV	U	U	U	U	
Acetone	67-64-1	50 GV	U	1.5 J	U	U	
Acrylonitrile	107-13-1	5 ST	U	U	U	U	
Benzene	71-43-2	1 ST	U	U	U	U	
Bromochloromethane	74-97-5	5 ST	U	U	U	U	
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	
Bromoform	75-25-2	50 GV	U	U	U	U	
Bromomethane	74-83-9	5 ST	U	U	U	U	
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	
Chlorobenzene	108-90-7	5 ST	U	U	U	U	
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	
Chloroethane	75-00-3	5 ST	U	U	U	U	
Chloroform	67-66-3	7 ST	U	U	U	U	
Chloromethane	74-87-3	5 ST	U	U	U	U	
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	
Dibromomethane	74-95-3	5 ST	U	U	U	U	
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	
Ethylbenzene	100-41-4	5 ST	U	U	U	U	
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	
Methylene Chloride	75-09-2	5 ST	U	U	U	U	
Styrene	100-42-5	5 ST	U	U	U	U	
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	
Toluene	108-88-3	5 ST	U	U	U	U	
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ	
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	
Vinyl Acetate	108-05-4	---	U	U	U	U	
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	
Total Volatile Organic Compounds		---	1.3	1.5	0	0	

+ Applies to each isomer individually ug/l Micrograms per liter
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

**Exceeds Class GA
Standard/Guidance value**

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
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Volatile Organic Compounds

			Sample ID	EW-5	EW-5	EW-5	EW-5
			Sample_date	3/7/16	8/3/16	2/23/17	8/4/17
			Depth of Well BGS	213'	213'	213'	213'
			Depth to bottom screen, relative to MSL	-141	-141	-141	-141
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in ug/l							
		NYSDEC CLASS GA					
		GROUNDWATER					
COMPOUNDS	CAS Number	ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U		U		U
1,1,1-Trichloroethane	71-55-6	5 ST	5	3 J	3.4		3.3
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U		U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U		U
1,1-Dichloroethane	75-34-3	5 ST	1 J	U	U		U
1,1-Dichloroethene	75-35-4	5 ST	U	U	0.59 J		U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U		U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U		U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U		U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U		U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U		U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U		U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U		U
2-Hexanone	591-78-6	50 GV	U	U	U		U
Acetone	67-64-1	50 GV	U	U	U		U
Acrylonitrile	107-13-1	5 ST	U	U	U		U
Benzene	71-43-2	1 ST	U	U	U		U
Bromochloromethane	74-97-5	5 ST	U	U	U		U
Bromodichloromethane	75-27-4	50 GV	U	U	U		U
Bromoform	75-25-2	50 GV	U	U	U		U
Bromomethane	74-83-9	5 ST	U	U	U		U
Carbon Disulfide	75-15-0	60 GV	U	U	U		U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U		U
Chlorobenzene	108-90-7	5 ST	U	U	U		U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U		U
Chloroethane	75-00-3	5 ST	U	U	U		U
Chloroform	67-66-3	7 ST	U	U	U		U
Chloromethane	74-87-3	5 ST	U	U	U		U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U		U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U		U
Dibromochloromethane	124-48-1	50 GV	U	U	U		U
Dibromomethane	74-95-3	5 ST	U	U	U		U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U		U
Ethylbenzene	100-41-4	5 ST	U	U	U		U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U		U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U		U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U		U
Methylene Chloride	75-09-2	5 ST	U	U	U		U
Styrene	100-42-5	5 ST	U	U	U		U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U		U
Toluene	108-88-3	5 ST	U	U	U		U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U		U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U		U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U		U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U		U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U		U
Vinyl Acetate	108-05-4	---	U	U	U		U
Vinyl Chloride	75-01-4	2 ST	U	U	U		U
Xylenes, Total	XYLENES	5 ST+	U	U	U		U
Total Volatile Organic Compounds				6	3	3.99	3.3

- + Applies to each isomer individually ug/l Micrograms per liter:
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

**Exceeds Class GA
Standard/Guidance value**

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

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Sample ID			EW-6	EW-6	EW-6	EW-6	EW-6	EW-6
Sample_date			8/07/17(A)	8/11/17 (B)	9/12/17(A)	10/18/17(A)	11/15/17(A)	12/12/17(A)
Depth of Well BGS			215'	215'	215'	215'	215'	215'
Depth to bottom screen, relative to MSL			-137'	-137'	-137'	-137'	-137'	-137'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l	NYSDEC CLASS GA							
	CAS Number	GROUNDWATER ST/GV						
COMPOUNDS								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromosthane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	12.8	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	12.8	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
++ Applies to sum of isomer BGS Below Ground Surface
U Compound was analyzed for but not detected MSL Mean Sea Level
J Estimated detection limit or value MSW Municipal Solid Waste
UB Qualified as non detect (U) based on blank results GV Guidance Value
(A) Collected by IRRA during well shutdown ST Standard
(B) Collected by D&B during well shutdown B Detected in blank
NR Not reported

**Exceeds Class GA
Standard/Guidance value**

Appendix D-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Extraction Well Sample Results
 Volatile Organic Compounds

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-6 1/12/18(A) 215' -137' DOWN	EW-6 2/12/18(A) 215' -137' DOWN	EW-6 2/13/18(B) 215' -137' DOWN	EW-6 3/12/18(A) 215' -137' DOWN	EW-6 4/10/18(A) 215' -137' DOWN	EW-6 5/07/18(A) 215' -137' DOWN
Units in ug/l								
NYSDEC CLASS GA GROUNDWATER								
COMPOUNDS	CAS Number	ST/GV						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorodifluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds			0	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Appendix D-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Extraction Well Sample Results
 Volatile Organic Compounds

Sample ID			EW-6	EW-6	EW-6	EW-6	EW-6	EW-6
Sample_date			6/05/18(A)	7/02/18(A)	8/13/18(A)	9/10/18(A)	10/2/18(A)	10/7/18(A)
Depth of Well BGS			215'	215'	215'	215'	215'	215'
Depth to bottom screen, relative to MSL			-137'	-137'	-137'	-137'	-137'	-137'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l	NYSDEC CLASS GA							
	CAS Number	GROUNDWATER ST/GV						
COMPOUNDS								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Appendix D-1
 Blydenburgh Road Landfill Complex
 Post Closure Groundwater Monitoring Program
 Extraction Well Sample Results
 Volatile Organic Compounds

			Sample ID	EW-6	EW-6	EW-6	EW-6	EW-6	EW-6
			Sample_date	12/5/18 (A)	1/7/19(A)	4/8/19(A)	5/13/19(A)	6/12/19(A)	7/17/19(A)
			Depth of Well BGS	215'	223'	215'	215'	215'	215'
			Depth to bottom screen, relative to MSL	-137"	-137"	-137"	-137"	-137"	-137"
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
Units in ug/l									
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	1	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-6	0.4 ST	U	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U	U
Total Volatile Organic Compounds				0	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

Sample ID Sample_date Depth to bottom screen, relative to MSL Gradient relative to MSW			EW-6 8/8/19(A) 215' -137' DOWN	EW-6 8/14/19(B) 215' -137' DOWN	EW-6 9/11/19(A) 223' -137' DOWN	EW-6 10/07/19(A) 223' -137' DOWN	EW-6 11/12/19(A) 223' -137' DOWN	EW-6 12/16/19(A) 223' -137' DOWN
Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
COMPOUNDS								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U	U	U
1,1,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0	0	0

+ Applies to each isomer individually ug/l Micrograms per liter
 ++ Applies to sum of isomer BGS Below Ground Surface
 U Compound was analyzed for but not detected MSL Mean Sea Level
 J Estimated detection limit or value MSW Municipal Solid Waste
 UB Qualified as non detect (U) based on blank results GV Guidance Value
 (A) Collected by IRRA during well shutdown ST Standard
 (B) Collected by D&B during well shutdown B Detected in blank
 NR Not reported

Exceeds Class GA
 Standard/Guidance value

APPENDIX D-2

EXTRACTION WELL SAMPLE RESULTS - INORGANIC PARAMETERS

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-1 8/4/17 225' -57 DOWN	EW-1 2/23/18 225' -57 DOWN	EW-1 02/15/19 225' -57 DOWN	EW-1 08/14/19 225' -57 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	34.4 J	36.8 J	36.6 J	37.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	116	125	122	112
Cadmium	7440-43-9	5 ST	0.098 J	U	UB	U
Calcium	7440-70-2	--	26000	28200	30500	31500
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	4.3 J	4.4 J	4 J	U
Copper	7440-50-8	200 ST	12 J	UB	3.7 J	U
Cyanide	57-12-5	200 ST	U	U	102	2.8 J
Iron	7439-89-6	300 ST#	U	11.2 J	U	U
Lead	7439-92-1	25 ST	1.9 J	U	U	U
Magnesium	7439-95-4	35000 GV	10200	11100	11200	11200
Manganese	7439-96-5	300 ST#	481	558	700	842
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	4.4 J	5 J	19.9 J	UB
Potassium	7440-09-7	--	3520 J	3570 J	3580 J	3460 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	73100	84000	76700	80700
Thallium	7440-28-0	0.5 GV	U	UB	U	4.1 J
Vanadium	7440-62-2	--	U	U	0.82 J	U
Zinc	7440-66-6	2000 GV	40.3	10.9 J	5.3 J	29

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-2 8/4/17 (B) 223' -53 DOWN	EW-2 2/26/18 (B) 223' -53 DOWN	EW-2 2/15/19 (B) 223' -53 DOWN	EW-2 8/16/19 (B) 223' -53 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	UB	UB	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	13.3 J	16.4 J	24.8 J	13.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	144	165	127	UB
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	35400	33200	26200	24500
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	U	U
Chromium, Total	7440-47-3	50 ST	U	U	3 J	U
Cobalt	7440-48-4	--	4.7 J	3.6 J	7 J	3.9 J
Copper	7440-50-8	200 ST	U	UB	16.1 J	8.6 J
Cyanide	57-12-5	200 ST	U	UJ	4.5 J	2.1 J
Iron	7439-89-6	300 ST#	2580	10200 J	11000	5860
Lead	7439-92-1	25 ST	2.6 J	U	1.6 J	U
Magnesium	7439-95-4	35000 GV	13800	12000	8740	8060
Manganese	7439-96-5	300 ST#	245	419	273	227
Mercury	7439-97-6	0.7 ST	UB	U	U	U
Nickel	7440-02-0	100 ST	6.3 J	21 J	24.2 J	18.4 J
Potassium	7440-09-7	--	6910	7060	5760	5570
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	65800	79900	88400	89200
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	12.2 J	45.3	16.5 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-3 8/3/17 312' -129 DOWN	EW-3 2/15/18 312' -129 DOWN	EW-3 02/13/19 312' -129 DOWN	EW-3 08/13/19 312' -129 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	128 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	46 J	47 J	45.9 J	47.4 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	146	146	139	148
Cadmium	7440-43-9	5 ST	U	U	UB	U
Calcium	7440-70-2	--	46400	49400	48400	48700
Chromium, Hexavalent	18540-29-9	50 ST	UB	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	14.6 J	10.7 J	12.1 J	13.7 J
Copper	7440-50-8	200 ST	4 J	2.8 J	6 J	U
Cyanide	57-12-5	200 ST	U	U	98.5 J	U
Iron	7439-89-6	300 ST#	U	U	24.1	U
Lead	7439-92-1	25 ST	2.2 J	U	2.2 J	2.5 J
Magnesium	7439-95-4	35000 GV	28500	30800	30300	29500
Manganese	7439-96-5	300 ST#	491	417	413	475
Mercury	7439-97-6	0.7 ST	UB	UB	U	U
Nickel	7440-02-0	100 ST	10.2 J	36.1 J	9.1 J	UB
Potassium	7440-09-7	--	5170	5090	4570 J	4730 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	58300	62500	65800	63400
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	UB	U
Zinc	7440-66-6	2000 GV	UB	6.6 J	UB	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-4 8/3/17 305' -138 DOWN	EW-4 2/15/18 213' -141 DOWN	EW-4 02/15/19 213' -141 DOWN	EW-4 08/13/19 305' -138 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	3.7 J	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	55.4 J	53.1 J	55 J	53.3 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	235	210	247	239
Cadmium	7440-43-9	5 ST	U	U	UB	U
Calcium	7440-70-2	--	46100	46400	47100	46600
Chromium, Hexavalent	18540-29-9	50 ST	UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	11 J	10 J	10.2 J	9.2 J
Copper	7440-50-8	200 ST	U	3.4 J	6 J	U
Cyanide	57-12-5	200 ST	U	U	18.6	2.3 J
Iron	7439-89-6	300 ST#	UB	18.8 J	37.9	20.6
Lead	7439-92-1	25 ST	2 J	U	U	U
Magnesium	7439-95-4	35000 GV	26500	26900	27200	26400
Manganese	7439-96-5	300 ST#	363	298	336	331
Mercury	7439-97-6	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	17.3 J	34.4 J	34.8 J	16.4 J
Potassium	7440-09-7	--	9820	8700	9460	9200
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	61400	61200	65600	64200
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	0.98 J	U
Zinc	7440-66-6	2000 GV	UB	18.8 J	23.5	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-5 3/7/16 213' -141 DOWN	EW-5 8/3/16 213' -141 DOWN	EW-5 2/23/17 213' -141 DOWN	EW-5 8/4/17 215' -137' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	24.9 J	UB	UB
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	34.1 J	30.2 J	30.7 B	30.9 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	39.2 J	38.7 J	43.4 B	UB
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	21900	25000	26200	23900
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	U
Chromium, Total	7440-47-3	50 ST	U	U	1.3 B	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	5.0 J	1.1 J	35.3	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	UJ	U	U	UB
Lead	7439-92-1	25 ST	5.7	6.6	5.2	U
Magnesium	7439-95-4	35000 GV	10500	11900	12200	10900
Manganese	7439-96-5	300 ST#	45.9	44.5	38.4	48.3
Mercury	7439-97-6	0.7 ST	UB	U	U	UB
Nickel	7440-02-0	100 ST	U	U	U	U
Potassium	7440-09-7	--	1580 J	771 J	1800 B	2200 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	10500 J	13400 J	11600	9560
Thallium	7440-28-0	0.5 GV	U	1.9 J	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	77.4	22.1	48.3	19.4 J

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in ug/l Gradient relative to MSW			EW-6 2/28/17(B) 215' -137' DOWN	EW-6 8/11/17(B) 215' -137' DOWN	EW-6 2/16/18(B) 215' -137' DOWN	EW-6 8/14/19(B) 215' -137' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	25 J	24.9 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	8.8 J	8.8 J	U	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	33.0 J	UB	30.1 J	37.6 J
Cadmium	7440-43-9	5 ST	U	U	0.30 J	U
Calcium	7440-70-2	--	22100	22100	20000	25500
Chromium, Hexavalent	18540-29-9	50 ST	UJ	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	13.6 J	1.3 J	U
Cyanide	57-12-5	200 ST	UJ	U	U	2.8 J
Iron	7439-89-6	300 ST#	59.3 J	87.7	UJ	44.6
Lead	7439-92-1	25 ST	2.2 J	U	4.5 J	U
Magnesium	7439-95-4	35000 GV	11600	11800	10600	13800
Manganese	7439-96-5	300 ST#	UB	6.7 J	6.6 J	10.7
Mercury	7439-97-6	0.7 ST	U	U	UB	U
Nickel	7440-02-0	100 ST	U	U	U	U
Potassium	7440-09-7	--	1160 J	1750 J	1000 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	8150	7890	9010 J	10900
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	16.3 J	8.1 J	U

ug/l Micrograms per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 J+ Estimated high based on blank results
 B Detected between the IDL and CRDL
 IDL Instrument Detection Limit
 CRDL Contract Required Detection Limit
 UB Qualified as non detect (U) based on blank results
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
 # Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

APPENDIX D-3

EXTRACTION WELL SAMPLE RESULTS - LEACHATE INDICATORS

Appendix D-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Sample ID			EW-1	EW-1	EW-1	EW-1
Sample_date			8/4/17	2/23/18	02/15/19	08/14/19
Depth of Well BGS			225'	225'	225'	225'
Depth to bottom screen, relative to MSL			-57	-57	-57	-57
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	198	151	173	184
Biochemical Oxygen Demand (BOD)	BOD	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.067 J	0.081 J	UB	UB
Chloride (as Cl)	16887-00-6	250 ST	58	61.7	67.7 J	80.5
Cod - Chemical Oxygen Demand	COD	---	U	17.8	20.3 J	U
Color	COLOR	---	5	U	U	U
Hardness (as CaCO ₃)	HARD	---	116	104	112	107
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UBJ	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---	U	U	U	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.1	1.9	2.8 J	1.6 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UB
Sulfate (as SO ₄)	14808-79-8	250 ST	22.2	19.4	25.3	29.2
Total Dissolved Solids	E-10173	---	301	324	312	344
Total Organic Carbon	TOC	---	0.81 J	1.2	0.66 J	0.81 J

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

(B) Collected by D&B during well shutdown

Appendix D-3
Blydenburgh Road Landfill Complex
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Leachate Indicators

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Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Units in mg/l Gradient relative to MSW			EW-2 8/4/17 (B) 223' -53 DOWN	EW-2 2/26/18 (B) 223' -53 DOWN	EW-2 2/15/19 (B) 223' -53 DOWN	EW-2 8/16/19 (B) 223' -53 DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	157	168	169	184
Biochemical Oxygen Demand (BOD)	BOD	---	UB	U	U	UB
Bromide	24959-67-9	2 GV	0.11 J	0.2 J	UB	0.12 J
Chloride (as Cl)	16887-00-6	250 ST	74.8	81.5	U	80.2
Cod - Chemical Oxygen Demand	COD	---	21.3	22	16.2 J	U
Color	COLOR	---	5	100	150	75
Hardness (as CaCO ₃)	HARD	---	148	120	96	70
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UBJ	0.5	0.24	UB
Nitrogen, Kjeldahl, Total	KN	---	UBJ	1.3 J	UB	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.2	1.4 J	3.4 J	1.1 J
Nitrogen, Nitrite	14797-65-0	1 ST	UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UJ
Sulfate (as SO ₄)	14808-79-8	250 ST	27.6	22.5	27.8	19.7
Total Dissolved Solids	E-10173	---	338	371	334	316
Total Organic Carbon	TOC	---	1.6	2	0.92 J	0.97 J

mg/l Milligrams per liter
U Compound was analyzed for but not detected
J Estimated detection limit or value
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			Sample ID	EW-3	EW-3	EW-3	EW-3
			Sample_date	8/3/17	2/15/18	02/13/19	08/13/19
			Depth of Well BGS	312'	312'	312'	312'
			Depth to bottom screen, relative to MSL	-129'	-129'	-129'	-129'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	233 J	225	269	279	
Biochemical Oxygen Demand (BOD)	BOD	---	UB	U	U	UB	
Bromide	24959-67-9	2 GV	0.17 J	U	0.22 J	UB	
Chloride (as Cl)	16887-00-6	250 ST	64.5	57.9	74.2	76	
Cod - Chemical Oxygen Demand	COD	---	17.2	19.9 J	14.1	U	
Color	COLOR	---	5	U	U	U	
Hardness (as CaCO3)	HARD	---	220	230	200	220	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	3.3 J	3.2	2.1	2.9	
Nitrogen, Kjeldahl, Total	KN	---	5.2 J	2.9 J	3.3 J	3.4 J	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	2.4	UJB	4	2.5	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	UB	UB	UB	UB	
Sulfate (as SO4)	14808-79-8	250 ST	24.8	23.2	30.2 J	31.3	
Total Dissolved Solids	E-10173	---	373	391	422 J	408	
Total Organic Carbon	TOC	---	2.3	2.5	2.2	2.4	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

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Sample ID			EW-4	EW-4	EW-4	EW-4
Sample_date			8/3/17	2/15/18	02/15/19	08/13/19
Depth of Well BGS			305'	213'	213'	305'
Depth to bottom screen, relative to MSL			-138	-141	-141	-138
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	242 J	238	39.7	251
Biochemical Oxygen Demand (BOD)	BOD	---	9.4	14.3	21.2	26
Bromide	24959-67-9	2 GV	0.34 J	0.16 J	0.47 J	0.49 J
Chloride (as Cl)	16887-00-6	250 ST	74.4	69.4	U	83.6
Cod - Chemical Oxygen Demand	COD	---	21.3	26.2 J	28.6 J	U
Color	COLOR	---	5	5	15	10
Hardness (as CaCO ₃)	HARD	---	196	130	200	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	11.7 J	9.9	11.7	10.3
Nitrogen, Kjeldahl, Total	KN	---	14.3 J	12.2 J	11.7 J	11.2 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	5.3	7.8 J	6.6 J	4
Nitrogen, Nitrite	14797-65-0	1 ST	0.66	0.63 J	0.3 J	0.66 J
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	0.0488	UB	UB	UB
Sulfate (as SO ₄)	14808-79-8	250 ST	28	28.5	33.7	36.6
Total Dissolved Solids	E-10173	---	435	419	452	394
Total Organic Carbon	TOC	---	4.4	4.2	5.1 J	4.8

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard
Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

Appendix D-3
Blydenburgh Road Landfill Complex
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Extraction Well Sample Results
Leachate Indicators

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			Sample ID	EW-5	EW-5	EW-5	EW-5
			Sample_date	3/7/16	8/3/16	2/23/17	3/4/17
			Depth of Well BGS	213'	213'	213'	215'
			Depth to bottom screen, relative to MSL	-141	-141	-141	-137'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Units in mg/l							
		NYSDEC CLASS GA GROUNDWATER ST/GV					
Chemical Name	CAS Number						
Alkalinity, Total (as CaCO3)	ALK	---	56.0	71.4 D	71.6	79.8	
Biochemical Oxygen Demand (BOD)	BOD	---	U	U	UB	UB	
Bromide	24959-67-9	2 GV	U	U	0.094 J	0.037 J	
Chloride (as Cl)	16887-00-6	250 ST	24.6	20.4	30.5	22.6	
Cod - Chemical Oxygen Demand	COD	---	UJ	U	UB	6.8 J	
Color	COLOR	---	U	10	5	5	
Hardness (as CaCO3)	HARD	---	90 D	112 D	120	120	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	0.42	UB	0.36	UBJ	
Nitrogen, Kjeldahl, Total	KN	---	U	U	U	U	
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	3.40 D	4.38 D	4.5	4	
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U	
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	0.0068	UB	
Sulfate (as SO4)	14808-79-8	250 ST	27.4	21.9	23.4	23.3	
Total Dissolved Solids	E-10173	---	154	182	177	182	
Total Organic Carbon	TOC	---	U	1.4	U	1.2	

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
 MSW Municipal Solid Waste
 GV Guidance Value
 ST Standard

Exceeds Class GA Standard/Guidance value

(B) Collected by D&B during well shutdown

Appendix D-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

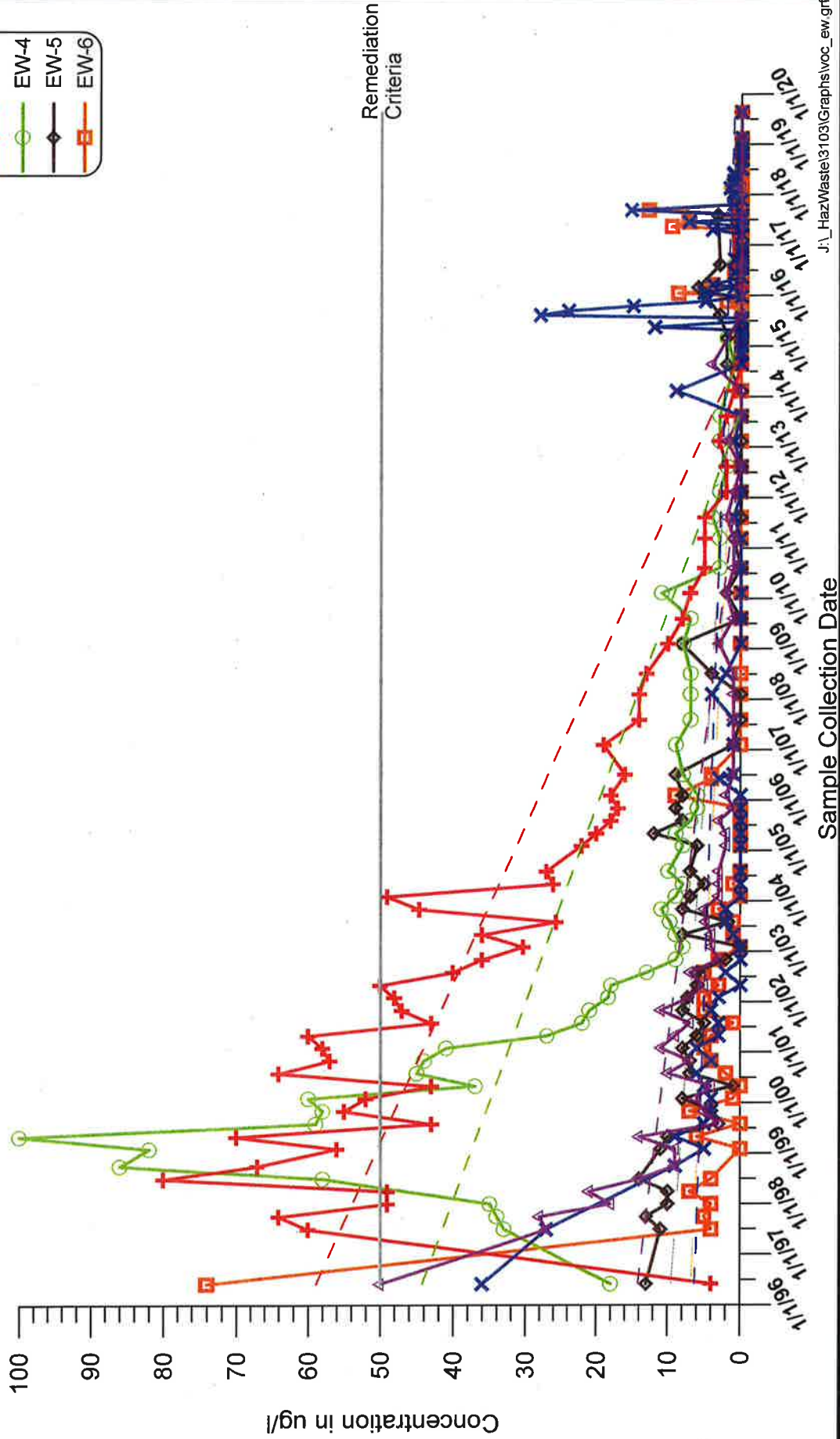
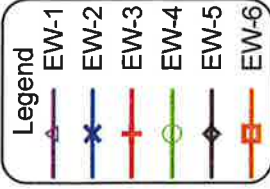
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Sample ID			EW-6	EW-6	EW-6	EW-6
Sample_date			2/28/17(B)	8/11/17 (B)	2/16/18 (B)	8/16/19 (B)
Depth of Well BGS			215'	215'	215'	215'
Depth to bottom screen, relative to MSL			-137'	-137'	-137'	-137'
Gradient relative to MSW			DOWN	DOWN	DOWN	DOWN
Units in mg/l						
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Alkalinity, Total (as CaCO ₃)	ALK	---	78.2	80.2 J	65.3	91
Biochemical Oxygen Demand (BOD)	BOD	---	UB	UB	U	UB
Bromide	24959-67-9	2 GV	0.04 J	0.04 J	U	UB
Chloride (as Cl)	16887-00-6	250 ST	10.4	13.3	14.0	20.4
Cod - Chemical Oxygen Demand	COD	---	UB	8.8 J	UJ	U
Color	COLOR	---	5	U	U	U
Hardness (as CaCO ₃)	HARD	---	100	116 J	88 D	107
Nitrogen, Ammonia (as N)	7664-41-7	2 ST	UB	UB	0.11	UB
Nitrogen, Kjeldahl, Total	KN	---	U	U	U	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST	4.3	4.2	3.71 D	4.4 J
Nitrogen, Nitrite	14797-65-0	1 ST	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST	U	U	U	UB
Sulfate (as SO ₄)	14808-79-8	250 ST	16.1	20.1	20.0	22.8
Total Dissolved Solids	E-10173	---	142	156	132	181
Total Organic Carbon	TOC	---	U	UBJ	U	0.97 J

mg/l Milligrams per liter
 U Compound was analyzed for but not detected
 J Estimated detection limit or value
 D Result was reported from a secondary dilution
 -- Not analyzed or no ST or GV
 BGS Below Ground Surface
 MSL Mean Sea Level
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 GV Guidance Value
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Exceeds Class GA Standard/Guidance value
 (B) Collected by D&B during well shutdown

APPENDIX E-1

HISTORICAL TREND GRAPHS FOR EXTRACTION WELLS - TOTAL VOLATILE ORGANIC COMPOUNDS



APPENDIX E-2

HISTORICAL TREND GRAPHS FOR EXTRACTION WELLS - INORGANIC PARAMETERS

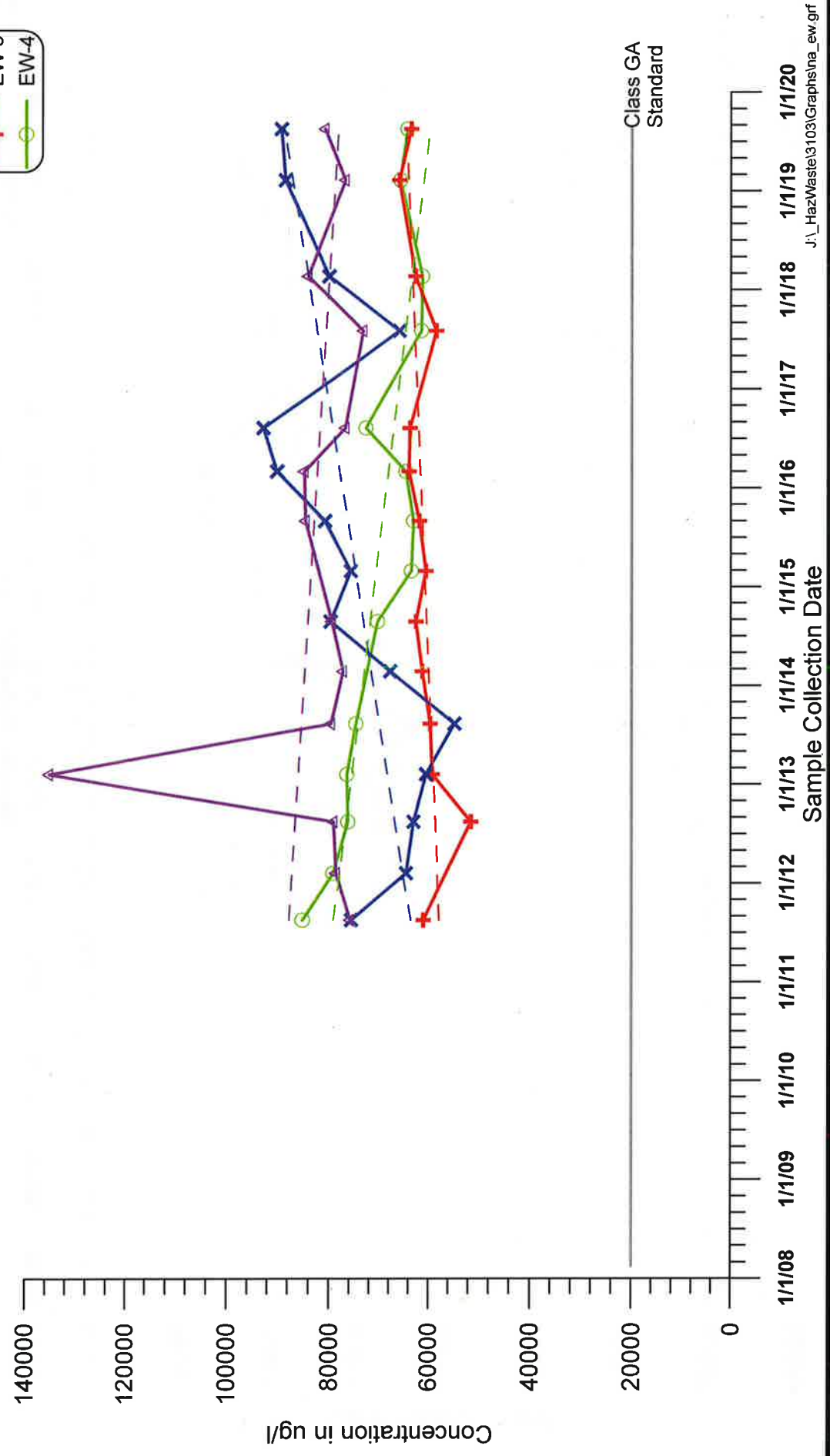


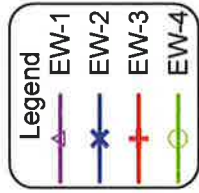
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**Blydenburgh Road Landfill Complex
Historical Sodium Data for Selected Extraction Wells**

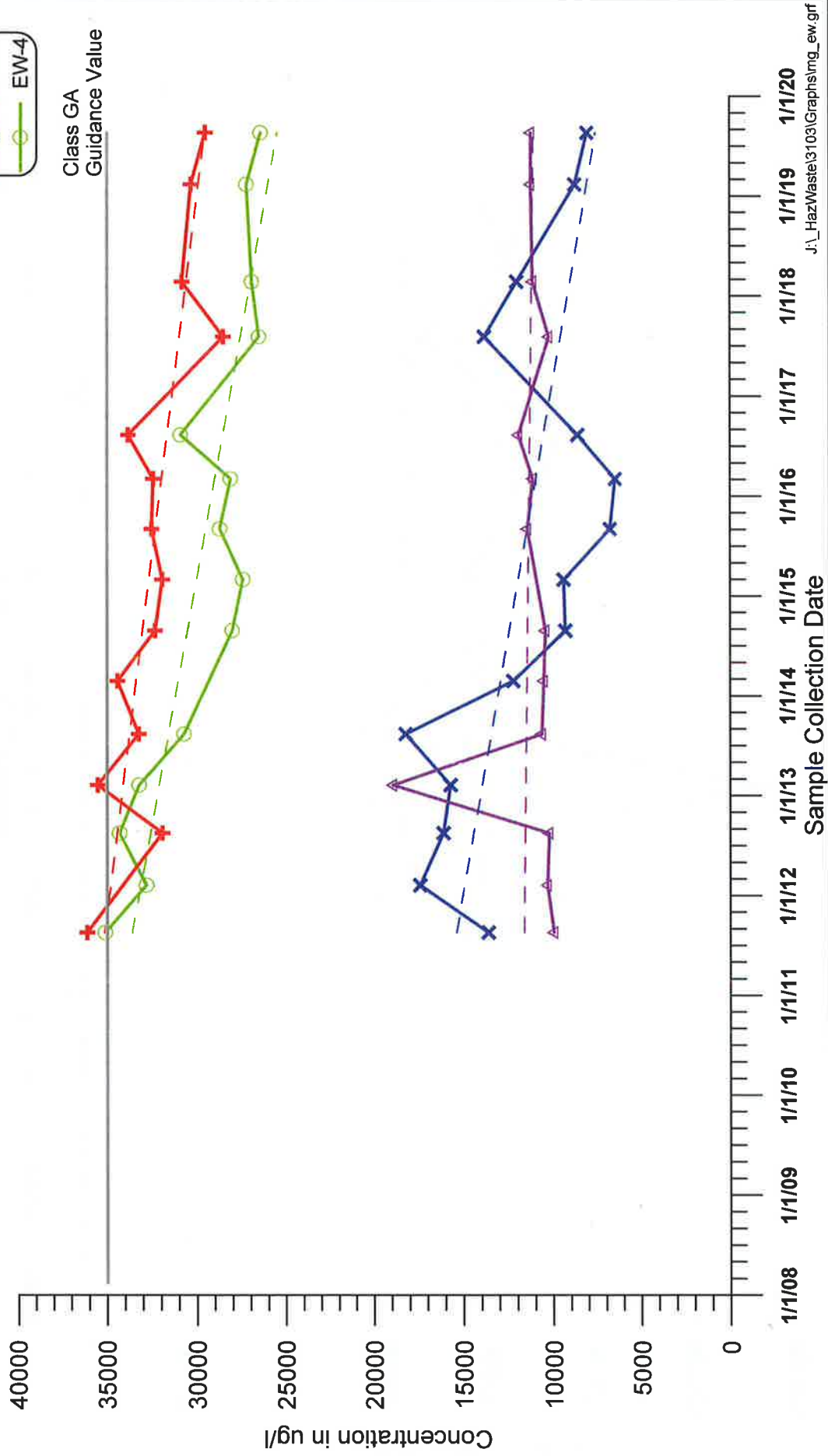
**Appendix
E-2**

J:_HazWaste\3103\Graphs\na_ew.grf



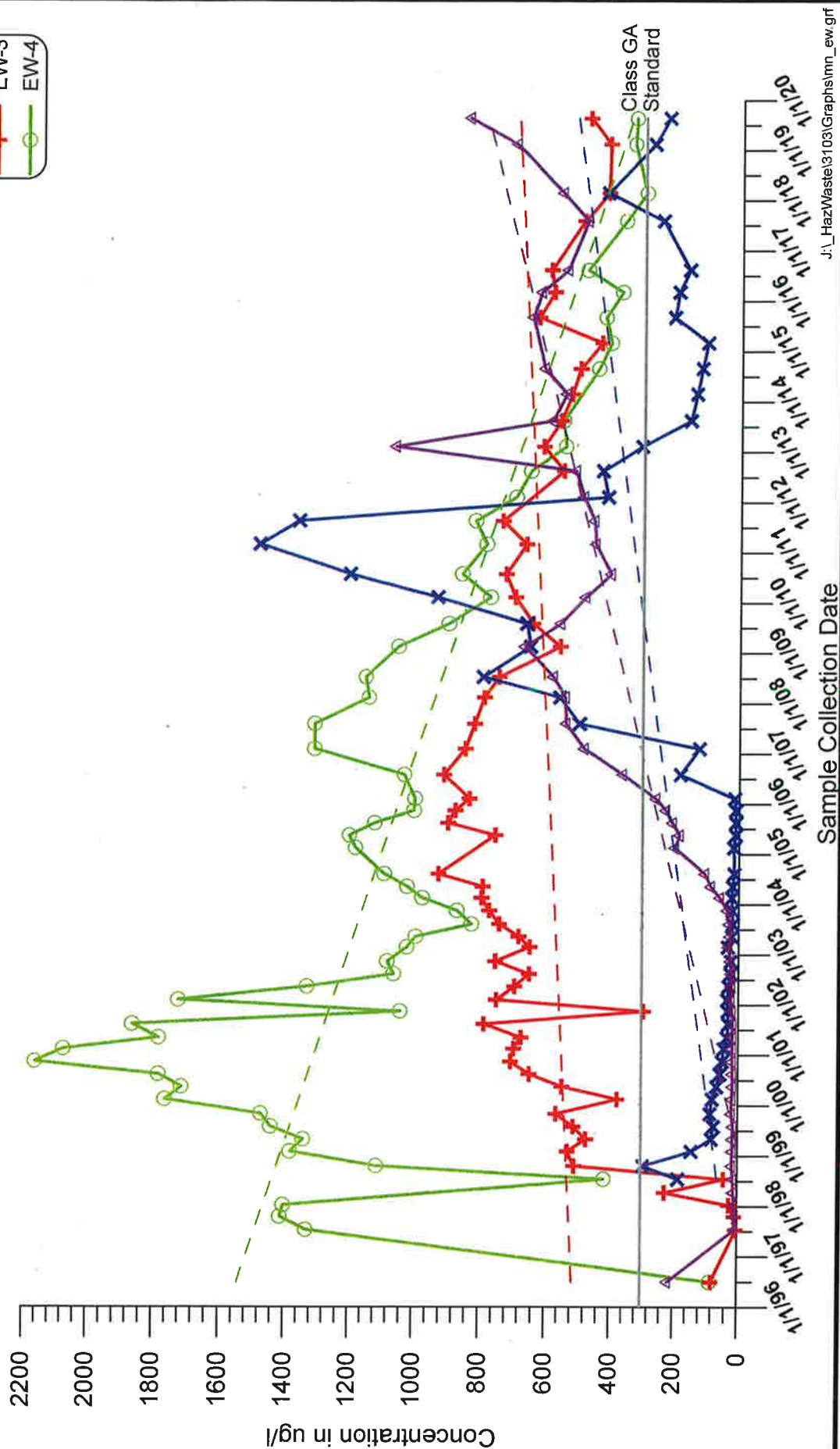


Class GA
Guidance Value



**Blydenburgh Road Landfill Complex
Historical Manganese Data for Selected Extraction Wells**

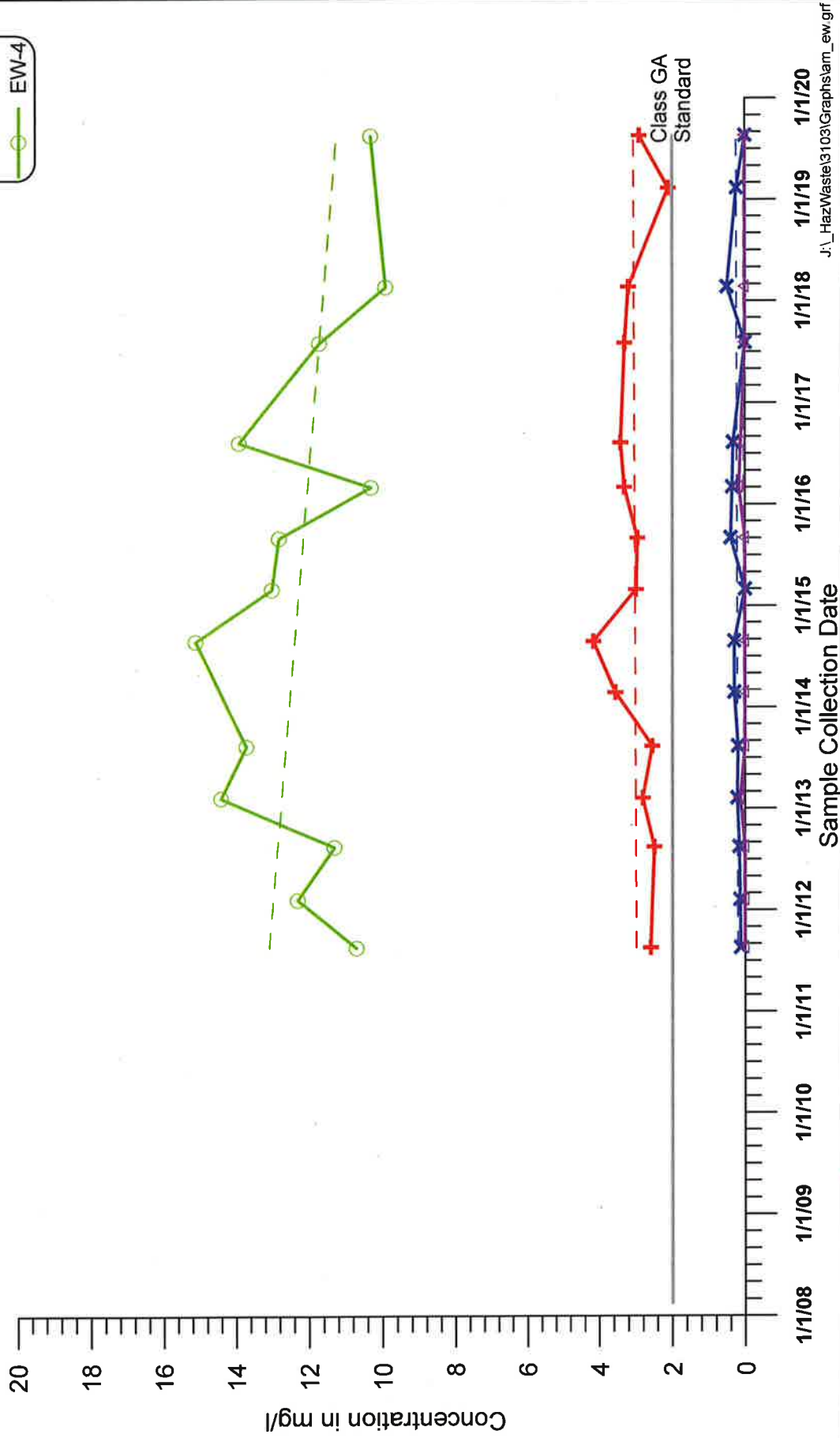
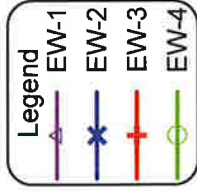
**Appendix
E-2**



J:_HazWaste\3103\Graphs\mn_ew.grf

APPENDIX E-3

HISTORICAL TREND GRAPHS FOR EXTRACTION WELLS - LEACHATE INDICATORS



APPENDIX F

DATA VALIDATION FORMS

DATA VALIDATION
(1st Quarter 2019- February)



DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill		
Project Number:	3763-1B		
Sample Date(s):	February 11-13, 2019		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 18</u> <u>Soil/ 0</u> <u>Field Duplicates/ 1</u> <u>Trip Blanks / 3</u> <u>Field Blanks/ 1</u>		
Analyzing Laboratory:	Pace Analytical., Melville, NY		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260C <u>Metals:</u> TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 <u>General Chemistry:</u> Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR D); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)		
Laboratory Report No:	7079120	Date:	3/12/2019

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified in Part 360. A validation was conducted on the data package and any applicable qualification of the data



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was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017; or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.



SDG: 7079120
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	7079120001	2/11/2019		X			
14M-1	7079120002	2/11/2019		X		X	X
14G-2	7079120003	2/11/2019		X		X	X
14G-1A	7079120004	2/11/2019		X		X	X
4M-1	7079120005	2/11/2019		X		X	X
4M-2	7079120006	2/11/2019		X		X	X
4G-2	7079120007	2/11/2019		X		X	X
TRIP BLANK	7079120009	2/12/2019		X			
10M-1	7079120010	2/12/2019		X		X	X
16M-1	7079120011	2/12/2019		X		X	X
23M-1	7079120012	2/12/2019		X		X	X
22M-1	7079120013	2/12/2019		X		X	X
7M-1	7079120014	2/12/2019		X		X	X
BLIND DUPLICATE-1	7079120015	2/12/2019	7M-1	X		X	X
TRIP BLANK	7079120016	2/13/2019		X			
11G-2	7079120017	2/13/2019		X		X	X
11G-1	7079120018	2/13/2019		X		X	X
18G-2	7079120019	2/13/2019		X		X	X
18G-1	7079120020	2/13/2019		X		X	X
13M-1	7079120021	2/13/2019		X		X	X
FIED BLANK-1	7079120022	2/13/2019		X		X	X
EW-3	7079120023	2/13/2019		X		X	X
13G-1	7079120024	2/13/2019		X		X	X



ORGANIC ANALYSES VOCs

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample (LCS) spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 3-5. Several VOCs %Rs were above the QC limits in the MS and/or MSD. Several RPDs were above the QC limits in the MS/MSD. They were not detected in the samples; therefore, qualification of the data was not necessary.



INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD		X		X	

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

2A&B. Boron, calcium, cadmium, manganese, sodium, vanadium and zinc were detected in the field blank, initial blank and/or preparation blank. The following metals were qualified as non-detect (UB): cadmium, vanadium and zinc in all samples; manganese in samples 4M-2, 10M-1, 13G-1, 14G-1A, 14G-2, 16M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1.



INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate RPD		X	X		
9. Field duplicates RPD		X		X	

%R percent recovery

RPD - relative percent difference

%D - percent difference

RSD - relative standard deviation

Comments:

Performance was acceptable, with the following exception:

- Hexavalent chromium was analyzed outside of holding times in samples 11G-2, 11G-1, 18G-2, 18G-1, 13M-1, FIED BLANK-1, EW-3, 13G-1, 10M-1, 16M-1 and 23M-1. It was qualified as an estimated detection limit (UJ) in associated samples.
- 2A&B. Ammonia, nitrate, TKN and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): nitrate in sample 11G-1, 13M-1 and 11G-2; TKN in samples 14G-2, 14G-1A, 16M-1, 23M-1, 7M-1 and BLIND DUPLICATE-1; and phenolics in all samples.
- The %Rs were below the QC limit in the MS for alkalinity associated with samples 4M-2 and 4G-2; hexavalent chromium associated with samples 14M-1, 14G-2, 14G-1A, 4M-1, 4M-2 and 4G-2; nitrate associated with samples 10M-1, 16M-1, 23M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1 and cyanide associated with samples EW-3 and 13G-1 and were qualified as estimated (J/UJ) in associated samples.

The %R was above the QC limit in the MS and detected above the reporting limit in the samples for TKN in samples 10M-1, 11G-1, 11G-2, 13M-1, 14M-1, 18G-1, 18G-2, 22M-1, 4G-2, 4M-1, 4M-2 and EW-3; nitrate in samples 14G-2 and 14G-1A; and sulfate all samples except 11G-2 and Field Blank and were qualified as estimated (J).
- The RPDs were above the QC limits in the duplicate for TKN associated with samples 11G-1, 11G-2, 13G-1, 13M-1, 14M-1, 18G-1, 18G-2, 4M-1, 4M-2, BLIND DUPLICATE-1, EW-3 and FIED BLANK-1; and total dissolved solids associated with samples 10M-1, 16M-1, 23M-1, 22M-1, 7M-1, BLIND DUPLICATE-1, 11G-2, 11G-1, 18G-2, 18G-1, 13M-1, FIED BLANK, EW-3 and 13G-1 and were qualified as estimated (J/UJ) in associated samples.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:7079120

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
No qualification of the data was necessary.			
<u>Metals</u>			
All samples	Cadmium, vanadium and zinc	UB	Detected in the initial blank, preparation blank and/or field blank
10M-1, 13G-1, 14G-1A, 14G-2, 16M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1	Manganese		
<u>General Chemistry</u>			
11G-2, 11G-1, 18G-2, 18G-1, 13M-1, FIED BLANK-1, EW-3, 13G-1, 10M-1, 16M-1 and 23M-1	Hexavalent chromium	UJ	Analyzed outside of holding times
11G-1, 13M-1 and 11G-2	Nitrate	UB	Detected in the FIELD BLANK and/or method blank
14G-2, 14G-1A, 16M-1, 23M-1, 7M-1 and BLIND DUPLICATE-1	TKN		
All samples	Phenolics		
4M-2 and 4G-2	Alkalinity	J/UJ	The %Rs were below the QC limit in the MS
14M-1, 14G-2, 14G-1A, 4M-1, 4M-2 and 4G-2	Hexavalent chromium		
10M-1, 16M-1, 23M-1, 22M-1, 7M-1 and BLIND DUPLICATE-1	Nitrate		
EW-3 and 13G-1	Cyanide		
10M-1, 11G-1, 11G-2, 13M-1, 14M-1, 18G-1, 18G-2, 22M-1, 4G-2, 4M-1, 4M-2 and EW-3	TKN	J	The %R was above the QC limit in the MS
14G-2 and 14G-1A	Nitrate		
All samples except 11G-2 and Field Blank	Sulfate		



Sample ID	Analyte(s)	Qualifier	Reason(s)
General Chemistry continued			
11G-1, 11G-2, 13G-1, 13M-1, 14M-1, 18G-1, 18G-2, 4M-1, 4M-2, BLIND DUPLICATE-1, EW-3 and FIED BLANK-1	TKN	J/UJ	The RPDs were above the QC limits in the duplicate
10M-1, 16M-1, 23M-1, 22M-1, 7M-1, BLIND DUPLICATE-1, 11G-2, 11G- 1, 18G-2, 18G-1, 13M-1, FIED BLANK, EW-3 and 13G-1	Total dissolved solids		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/2/2019
VALIDATION PERFORMED BY SIGNATURE:	



DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill		
Project Number:	3763-1B		
Sample Date(s):	February 14 & 15, 2019		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 12</u> <u>Soil/ 0</u> <u>Field Duplicates/ 1</u> <u>Trip Blanks / 2</u> <u>Field Blanks/ 1</u>		
Analyzing Laboratory:	Pace Analytical., Melville, NY		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260C <u>Metals:</u> TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 <u>General Chemistry:</u> Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR B); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)		
Laboratory Report No:	7079760	Date:	3/15/2019

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified in Part 360. A validation was conducted on the data package and any applicable qualification of the data

was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.



SDG: 7079760
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	7079760001	2/14/2019		X			
6G-3	7079760002	2/14/2019		X		X	X
6G-2	7079760003	2/14/2019		X		X	X
6G-1	7079760004	2/14/2019		X		X	X
12M-1	7079760005	2/14/2019		X		X	X
GM-1I	7079760006	2/14/2019		X		X	X
GM-1D	7079760007	2/14/2019		X		X	X
FIELD BLANK	7079760008	2/14/2019		X		X	X
TRIP BLANK	7079760010	2/15/2019		X			
8M-2	7079760011	2/15/2019		X		X	X
8M-1	7079760012	2/15/2019		X		X	X
8G-1	7079760013	2/15/2019		X		X	X
BLIND DUPLICATE	7079760014	2/15/2019	8M-2	X		X	X
EW-1	7079760015	2/15/2019		X		X	X
EW-2	7079760016	2/15/2019		X		X	X
EW-4	7079760017	2/15/2019		X		X	X



ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Laboratory Control Sample (LCS) spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions -- quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- The %Rs were above the QC limits in the LCS for 1,1,2-trichloroethane, 1,2-dibromoethane (EDB), bromochloromethane, bromodichloromethane, chloroform, xylene, cis-1,2-dichloroethene, cis-1,3-dichloropropene and trans-1,3-dichloropropene. The only compound detected above the reporting limit was cis-1,2-dichloroethene in sample 12M-1 and GM-1D which were qualified as estimated (J).



INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD		X	X		

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 2A&B. Aluminum, barium, boron, cadmium, chromium, magnesium, mercury, potassium and sodium were detected in the field blank, initial blank and/or preparation blank. The following metals were qualified as non-detect (UB): aluminum in all samples; boron in samples 8M-2, BLIND DUPLICATE_2, 6G-1 and 8G-1; and cadmium in all samples except 8M-2.
12. Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results cadmium was qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.



INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate %RPD		X	X		
9. Field duplicates RPD		X	X		

%R percent recovery

RPD - relative percent difference

%D - percent difference

RSD - relative standard deviation

Comments:

Performance was acceptable, with the following exception:

- The following were analyzed outside of holding times: hexavalent chromium associated with samples 12M-1, FIELD BLANK, GM-1D, GM-1I, 6G-1, 6G-2 and 6G-3. They were qualified as estimated (J) in associated samples.
- 2A&B. Bromide, nitrate, chloride, TKN, ammonia and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): bromide in samples 6G-2, 6G-1, BLIND DUPLICATE_2, EW-1 and EW-2; TKN in samples BLIND DUPLICATE_2, 8M-2, 6G-2 and EW-2; and phenolics in all samples.
- The %Rs were above the QC limits in the MS for chloride, TKN, nitrite and TOC. The following general chemistry parameters were detected above the reporting limit and were qualified as estimated (J): chloride in samples 6G-3, 6G-2, 6G-1, 12M-1, GM-1I, BLIND DUPLICATE_2 and EW-1; TKN in samples 12M-1, 8M-1, GM-1D, 6G-3 and EW-4; nitrite and TOC in sample EW-4.

The %R was below QC limits in the MS for TKN in samples 6G-2, 6G-1, 12M-1, GM-1I, FIELD BLANK, 8M-2, 8M-1, 6G-3 and GM-1D; nitrate in all samples; cyanide in samples 6G-3 and 6G-2. The above general chemistry parameters were qualified as estimated (J/UJ) in associated samples.
- The RPD was above the QC limit in the duplicate for chemical oxygen demand in the duplicate associated with all samples and were qualified as an estimated (J/UJ).
- Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results chloride was qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:7079760

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
12M-1 and GM-1D	Cis-1,2-dichloroethene	J	The %Rs were above the QC limits in the LCS
<u>Metals</u>			
All samples	Aluminum	UB	Detected in the initial blank, preparation blank and/or field blank
8M-2, BLIND DUPLICATE_2, 6G-1 and 8G-1	Boron		
All samples except 8M-2	Cadmium		
8M-2 and BLIND DUPLICATE-2.	Cadmium	J/UJ	Field duplicate results
<u>General Chemistry</u>			
12M-1, FIELD BLANK, GM-1D, GM-1I, 6G-1, 6G-2 and 6G-3	Hexavalent chromium	J	Analyzed outside of holding times
6G-2, 6G-1, BLIND DUPLICATE_2, EW-1 and EW-2	Bromide	UB	Detected in the FIELD BLANK and/or method blank
BLIND DUPLICATE_2, 8M-2, 6G-2 and EW-2	TKN		
all samples	Phenolics		
6G-3, 6G-2, 6G-1, 12M-1, GM-1I, BLIND DUPLICATE_2 and EW-1	Chloride	J	The %Rs were above the QC limits in the MS
12M-1, 8M-1, GM-1D, 6G-3 and EW-4	TKN		
EW-4	Nitrite and TOC		
6G-2, 6G-1, 12M-1, GM-1I, FIELD BLANK, 8M-2, 8M-1, 6G-3 and GM-1D	TKN	J/UJ	The %R was below QC limits in the MS
All samples	Nitrate		
6G-3 and 6G-2	Cyanide		
All samples	Chemical oxygen demand	J/UJ	The RPD was above the QC limit in the duplicate
8M-2 and BLIND DUPLICATE-2	Chloride	J/UJ	Field duplicate results

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/6/2019
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION
(3rd Quarter 2019 – August)



DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill		
Project Number:	3763-1B		
Sample Date(s):	August 15 to 21, 2019		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 23</u> <u>Soil/ 0</u> <u>Field Duplicates/ 1</u> <u>Trip Blanks / 5</u> <u>Field Blanks/ 1</u>		
Analyzing Laboratory:	Pace Analytical., Melville, NY		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260C <u>Metals:</u> TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 <u>General Chemistry:</u> Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR B); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)		
Laboratory Report No:	70101745	Date:	9/18/2019

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified in Part 360. A validation was conducted on the data package and any applicable qualification of the data



was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.



SDG: 70101745

SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	70101745001	8/15/2019		X			
12M_1	70101745002	8/15/2019		X		X	X
15G_1	70101745003	8/15/2019		X		X	X
TRIP BLANK	70101745005	8/16/2019		X			
4M-1	70101745006	8/16/2019		X		X	X
4M-2	70101745007	8/16/2019		X		X	X
4G-2	70101745008	8/16/2019		X		X	X
4G-1	70101745009	8/16/2019		X		X	X
22M-1	70101745010	8/16/2019		X		X	X
EW-2	70101745011	8/16/2019		X		X	X
TRIP BLANK	70101745012	8/19/2019		X			
8M-2	70101745013	8/19/2019		X		X	X
8M-1	70101745014	8/19/2019		X		X	X
8G-1	70101745015	8/19/2019		X		X	X
BLIND DUPLICATE-2	70101745016	8/19/2019	8M-2	X		X	X
GM-1I	70101745017	8/19/2019		X		X	X
GM-1S	70101745018	8/19/2019		X		X	X
GM-1D	70101745019	8/19/2019		X		X	X
TRIP BLANK	70101745020	8/20/2019		X			
GM-2D	70101745021	8/20/2019		X		X	X
GM-2I	70101745022	8/20/2019		X		X	X
GM-2S	70101745023	8/20/2019		X		X	X
9G-1	70101745024	8/20/2019		X		X	X
7M-1	70101745025	8/20/2019		X		X	X
TRIP BLANK	70101745026	8/21/2019		X			
FIELD BLANK-2	70101745027	8/21/2019		X		X	X
10M-1	70101745028	8/21/2019		X		X	X
10G-1	70101745029	8/21/2019		X		X	X
16M-1	70101745030	8/21/2019		X		X	X
16G-1	70101745031	8/21/2019		X		X	X



ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample (LCS) spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

3-6. The %Rs were above the QC limits in the LCS for cis-1,3-dichloropropene, trans-1,3-dichloropropene and trans-1,4-dichloro-2-butene associated with samples TRIP BLANK 8/15/19, 12M_1, 15G_1, TRIP BLANK 8/16/19, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1 and EW-2. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were above the QC limits in the MS for trans-1,3-dichloropropene and 1,2-dichloropropane associated with samples TRIP BLANK 8/15/19, 12M_1, 15G_1, TRIP BLANK 8/16/19, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1 and EW-2. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were below the QC limits in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S and GM-1D. The above compounds were qualified as an estimated (UJ) in the associated samples.

The RPD was above the QC limit in the MS/ MSD for bromomethane associated with sample TRIP BLANK 8/20/19, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1, TRIP BLANK 8/21/19, FIELD BLANK-2, 10M-1, 10G-1, 16M-1 and 16G-1. It was not detected in the samples; therefore, qualification of the data was not necessary.



INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X	X		
12. Field duplicates RPD		X	X		

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 2A&B. Arsenic, antimony, boron, silver and potassium were detected in the field blank, initial blank and/or preparation blank. The following metals were qualified as non-detect (UB): arsenic in samples 12M_1 and 4M-1; boron all samples except 8M-2 and 4M-1; silver in samples 8M-1 and 7M-1; and potassium in samples 12M_1, 15G_1, 22M-1, 10G-1, 16M-1 and 16G-1.
11. The %D was above the QC limit in the serial dilution for magnesium associated with sample 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2. Magnesium was qualified as estimated (J/UJ) in the associated samples.
12. Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results boron, calcium, iron, magnesium, manganese, potassium and sodium were qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.



INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate RPD		X	X		
9. Field duplicates RPD		X			

%R percent recovery

RPD - relative percent difference

%D - percent difference

RSD - relative standard deviation

Comments:

Performance was acceptable, with the following exception:

- Hexavalent chromium was analyzed outside of holding times in samples 12M_1, 15G_1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D. It was qualified as an estimated detection limit (UJ) in associated samples.
- 2A&B. Ammonia, BOD, bromide, TKN and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): ammonia in samples GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G_1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2; BOD in all samples; bromide in samples GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1; TKN in samples GM-2S, 9G-1, 10G-1, 16G-1, 15G_1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1 and phenolics in all samples.
- The %Rs were below the QC limit in the MS for TKN associated with samples 12M_1, 15G_1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2; TOC associated with samples 12M-1 and 15G-1; and phenolics associated with all samples and were qualified as estimated (J/UJ) in associated samples.

The %R was above the QC limit in the MS and detected above the reporting limit in the samples for nitrate in samples 12M_1, 15G_1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1 and 16G-1 and were qualified as estimated (J).
- The RPDs were above the QC limits in the duplicate for TOC associated with samples 12M-1 and 15G-1; and BOD associated with samples GM-2D, GM-2I, GM-2S and 9G-1 and were qualified as estimated (J/UJ) in associated samples.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:70101745

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S and GM-1D	1,2-Dibromoethane (EDB) and trans-1,3-dichloropropene	UJ	The %Rs were below the QC limits in the MS
Metals			
12M_1 and 4M-1	Arsenic	UB	Detected in the initial blank, preparation blank and/or field blank
All samples except 8M-2 and 4M-1	Boron		
8M-1 and 7M-1	Silver		
12M_1, 15G_1, 22M-1, 10G-1, 16M-1 and 16G-1	Potassium		
8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2	Magnesium	J/UJ	The %D was above the QC limit in the serial dilution
8M-2 and BLIND DUPLICATE-2	Boron, calcium, iron, magnesium, manganese, potassium and sodium	J/UJ	Field duplicated results
General Chemistry			
12M_1, 15G_1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D	Hexavalent chromium	UJ	Analyzed outside of holding times
GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G_1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2	Ammonia	UB	Detected in the FIELD BLANK and/or method blank
All samples	BOD		
GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1	Bromide		
GM-2S, 9G-1, 10G-1, 16G-1, 15G_1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1	TKN		
All samples	Phenolics		



Sample ID	Analyte(s)	Qualifier	Reason(s)
General Chemistry continued			
12M_1, 15G_1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2	TKN	J/UJ	The %Rs were below the QC limit in the MS
12M-1 and 15G-1	TOC		
All samples	Phenolics		
12M_1, 15G_1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1 and 16G-1	Nitrate	J	The %R was above the QC limit in the MS
12M-1 and 15G-1	TOC	J/UJ	The RPDs were above the QC limits in the duplicate
GM-2D, GM-2I, GM-2S and 9G-1	BOD		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/28/2019
VALIDATION PERFORMED BY SIGNATURE:	



DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill		
Project Number:	3763-1B		
Sample Date(s):	August 13-15, 2019		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 19</u> <u>Soil/ 0</u> <u>Field Duplicates/ 1</u> <u>Trip Blanks / 2</u> <u>Field Blanks/ 1</u>		
Analyzing Laboratory:	Pace Analytical., Melville, NY		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260C <u>Metals:</u> TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 <u>General Chemistry:</u> Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR B); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)		
Laboratory Report No:	70101295	Date:	9/13/2019

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance		Not Required
	No	Yes	No	Yes	
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified in Part 360. A validation was conducted on the data package and any applicable qualification of the data



D&B ENGINEERS
AND
ARCHITECTS, P.C.

was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.



SDG: 70101295
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	70101295001	8/13/2019		X			
14M-1	70101295002	8/13/2019		X		X	X
14G-2	70101295003	8/13/2019		X		X	X
14G-1A	70101295004	8/13/2019		X		X	X
18G-2	70101295005	8/13/2019		X		X	X
18G-1	70101295006	8/13/2019		X		X	X
EW-3	70101295007	8/13/2019		X		X	X
EW-4	70101295008	8/13/2019		X		X	X
BLIND DUPLICATE 1	70101295009	8/13/2019	EW-4	X		X	X
FIELD BLANK 1	70101295010	8/13/2019		X		X	X
TRIP BLANK	70101295012	8/14/2019		X			
11M-1	70101295013	8/14/2019		X		X	X
11G-2	70101295014	8/14/2019		X		X	X
11G-1	70101295015	8/14/2019		X		X	X
23M-1	70101295016	8/14/2019		X		X	X
EW-1	70101295017	8/14/2019		X		X	X
EW-6	70101295018	8/14/2019		X		X	X
13M-1	70101295019	8/14/2019		X		X	X
13G-1	70101295020	8/14/2019		X		X	X
6M-1	70101295021	8/15/2019		X		X	X
6G-3	70101295022	8/15/2019		X		X	X
6G-2	70101295023	8/15/2019		X		X	X
6G-1	70101295024	8/15/2019		X		X	X



ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample (LCS) spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 3-5. The %Rs were above the QC limits in the MS for trans-1,3-dichloropropene and 1,2-dichloropropane associated with samples 6M-1, 6G-3, 6G-2 and 6G-1. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were below the QC limit in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK _1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and were qualified as an estimated detection limit (UJ).

The RPD was above the QC limit in the MS/MSD for bromomethane associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK _1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1. They were not detected in the samples; therefore, qualification of the data was not necessary.

6. The %R was below the QC limit in the LCS for iodomethene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK _1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and was qualified as an estimated detection limit (UJ).

The %Rs were above the QC limits in the LCS for cis-1,3-dichloropropene, trans-1,3-dichloropropene and trans-1,4-dichloro-2-butene associated with samples 6M-1, 6G-3, 6G-2



and 6G-1. They were not detected in the samples; therefore, qualification of the data was not necessary.



INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X		X	
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD		X		X	

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 2A. Aluminum, nickel and potassium were detected in the initial blank. Nickel was qualified as non-detect (UB) in samples 13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1 and EW-3.



INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate RPD		X	X		
9. Field duplicates RPD		X		X	

%R percent recovery

RPD - relative percent difference

%D - percent difference

RSD - relative standard deviation

Comments:

Performance was acceptable, with the following exception:

- Hexavalent chromium was analyzed outside of holding times in all samples. It was qualified as an estimated detection limit (UJ) in all samples.
- 2A&B. Ammonia, BOD, bromide, TKN and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): ammonia in samples 14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2 and 11M-1; BOD in samples 14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK_1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1; bromide in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3 and 6M-1; TKN in samples 11M-1, 6M-1, 13M-1 and 23M-1; and phenolics in all samples except 13G-1.
- The %Rs were below the QC limit in the MS for TKN in all samples except 6G-2 and 6G-1; phenolics in sample 6G-1; and TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; and were qualified as estimated (J/UJ) in associated samples.

The %R was above the QC limit in the MS and detected above the reporting limit in the samples for chloride in sample 6G-1; phenolics in sample 13G-1; nitrite in samples EW-4 and BLIND DUPLICATE_1; nitrate in samples EW-1, EW-6, 13G-1, 6G-2 and 6G-1; and were qualified as estimated (J).
- The RPDs were above the QC limits in the duplicate for TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; TDS in samples DUP 6M-1 and 6G-3; COD in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; and TKN in samples 6G-2 and 6G-1 and were qualified as estimated (J/UJ) in associated samples.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:70101295

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE 1, FIELD BLANK 1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1	1,2-Dibromoethane (EDB) and trans-1,3-dichloropropene	UJ	The %Rs were below the QC limit in the MS
TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE 1, FIELD BLANK 1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1	Iodomethene	UJ	The %R was below the QC limit in the LCS
<u>Metals</u>			
13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1 and EW-3	Nickel	UB	Detected in the initial blank, preparation blank and/or field blank
<u>General Chemistry</u>			
All samples	Hexavalent chromium	UJ	Analyzed outside of holding times
14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2 and 11M-1	Ammonia	UB	Detected in the FIELD BLANK and/or method blank
in samples 14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK 1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1	BOD		
in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3 and 6M-1	Bromide		
11M-1, 6M-1, 13M-1 and 23M-1	TKN		
All except 13G-1	Phenolics		
All samples except 6G-2 and 6G-1	TKN	J/UJ	The %Rs were below the QC limit in the MS
6G-1	Phenolics		
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	TOC		
6G-1	Chloride	J	The %R was above the QC limit in the MS
EW-1, EW-6, 13G-1, 6G-2 and 6G-1	Nitrate		
EW-4 and BLIND DUPLICATE 1	Nitrite		
13G-1	Phenolics		



Sample ID	Analyte(s)	Qualifier	Reason(s)
General Chemistry continued			
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	TOC	J/UJ	The RPDs were above the QC limits in the duplicate
DUP 6M-1 and 6G-3	TDS		
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	COD		
6G-2 and 6G-1	TKN		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/28/2019
VALIDATION PERFORMED BY SIGNATURE:	

APPENDIX G

MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS

APPENDIX G

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS FEBRUARY 11, 2019

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
GM-1S	151.17	109.11	42.06
GM-1I	151.19	109.21	41.98
GM-1D	151.19	Pump installed in well	---
GM-2S	160.08	118.00	42.08
GM-2I	160.65	118.56	42.09
GM-2D	160.71	118.84	41.87
GM-3S	60.51	17.00	43.51
GM-3I	60.39	17.07	43.32
GM-3D	60.03	17.52	42.51
4G-1	168.47	125.95	42.52
4G-2	170.03 ⁽¹⁾	127.66	42.37
4M-1	168.95	126.86	42.09
4M-2	169.53	129.23	40.30
5G-1	173.58	130.77	42.81
6G-1	180.17	138.12	42.05
6G-2	178.65	136.43	42.22
6G-3	179.83	137.49	42.34
6M-1	178.40	136.52	41.88
7G-1	69.33	24.71	44.62
7M-1	67.56	24.70	42.86
8G-1	133.97	92.35 ⁽³⁾	41.62
8M-1	135.21	93.60 ⁽³⁾	41.61
8M-2	135.11	93.65 ⁽³⁾	41.46
9G-1	90.83	47.55	43.28
9M-1	90.59	47.48	43.11
10G-1	88.52	47.62	40.90
10M-1	88.84	47.95	40.89
11G-1	168.90	126.71	42.19
11G-2	169.31	127.11	42.20
11M-1	168.32	126.02	42.30

APPENDIX G (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
FEBRUARY 11, 2019**

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
12G-1	173.61	133.31	40.30
12M-1	177.66	135.37	42.29
13G-1	110.49 ⁽¹⁾	69.09	41.40
13M-1	109.92 ⁽¹⁾	68.52	41.40
14G-1A	161.73	119.48	42.25
14G-1	162.82	120.61	42.21
14G-2	162.36	120.12	42.24
14M-1	161.98	120.05	41.93
15G-1	183.05	140.90	42.15
15M-1	183.47	141.34	42.13
16G-1	76.92	36.75	40.17
16M-1	76.90	36.86	40.04
18G-1	168.62	126.21	42.41
18G-2	168.78	126.34	42.44
22M-1	61.04	18.20	42.84
23M-1	76.81	34.21	42.60
MW-56	97.84	53.70	44.14
MW-57	84.05	39.86	44.19
MW-58	76.68	32.32	44.36
MW-59	87.58	42.90	44.68
MW-60	95.44	52.71	42.73
MW-61	107.01	64.38	42.63
MW-62	114.23	72.33	41.90
MW-63	126.26	83.61	42.65
MW-D12	162.39	120.70	41.69
19GR-1*	165.42	124.43	40.99
20G-1*	165.31	123.21	42.10
21G-1*	172.83	130.73	42.10
24G-1*	176.91	134.29	42.62
24G-2*	176.44	133.90	42.54
24G-3*	176.13	133.61	42.52

APPENDIX G (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
FEBRUARY 11, 2019**

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
25G-1*	159.91 ⁽²⁾	117.75	42.16
25G-2*	158.71	116.47	42.24
26G-1*	165.10	123.32	41.78
26G-2*	165.57	123.51	42.06
26G-3*	165.43	123.22	42.21
27G-1*	166.58	125.14	41.44
27G-2*	166.52	124.42	42.10
27G-3*	166.64	124.51	42.13
28G-1*	201.99	159.29	42.70
28G-2*	201.31	158.66	42.65
28G-3*	200.16	158.56	41.60

Notes:

---: Groundwater elevation not calculated.

* Additional water level measurements collected by Cashin Associates, P.C. as part of the Cleanfill Landfill Groundwater Monitoring Program

⁽¹⁾ New Survey (Wells 4G-2, 13G-1 and 13M-1) obtained by Municipal Land Survey.

⁽²⁾ New survey (Well 25G-1) obtained by Roux Associates.

⁽³⁾ Due to access constraints, water level measurements for wells 8G-1, 8M-1 and 8M-2 were recorded on February 15, 2019.

APPENDIX G (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
AUGUST 13, 2019**

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
GM-1S	151.17	109.59	41.58
GM-1I	151.19	109.70	41.49
GM-1D	151.19	Pump installed in well	---
GM-2S	160.08	118.41	41.67
GM-2I	160.65	119.01	41.64
GM-2D	160.71	119.56	41.15
GM-3S	60.51	17.32	43.19
GM-3I	60.39	17.70	42.69
GM-3D	60.03	18.39	41.64
4G-1	168.47	126.37	42.10
4G-2	170.03 ⁽¹⁾	128.09	41.94
4M-1	168.95	127.30	41.65
4M-2	169.53	130.05	39.48
5G-1	173.58	131.16	42.42
6G-1	180.17	138.60	41.57
6G-2	178.65	136.95	41.70
6G-3	179.83	138.03	41.80
6M-1	178.40	137.43	40.97
7G-1	69.33	25.90	43.43
7M-1	67.56	25.39	42.17
8G-1	133.97	93.35 ⁽³⁾	40.62
8M-1	135.21	94.19 ⁽³⁾	41.02
8M-2	135.11	94.42 ⁽³⁾	40.69
9G-1	90.83	48.10	42.73
9M-1	90.59	47.98	42.61
10G-1	88.52	48.41	40.11
10M-1	88.84	48.72	40.12
11G-1	168.90	127.09	41.81
11G-2	169.31	127.46	41.85
11M-1	168.32	126.47	41.85

APPENDIX G (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
AUGUST 13, 2019**

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
12G-1	173.61	133.90	39.71
12M-1	177.66	135.93	41.73
13G-1	110.49 ⁽¹⁾	69.60	40.89
13M-1	109.92 ⁽¹⁾	69.18	40.74
14G-1A	161.73	119.95	41.78
14G-1	162.82	121.04	41.78
14G-2	162.36	120.65	41.71
14M-1	161.98	120.53	41.45
15G-1	183.05	141.62	41.43
15M-1	183.47	142.06	41.41
16G-1	76.92	37.84	39.08
16M-1	76.90	37.79	39.11
18G-1	168.62	126.64	41.98
18G-2	168.78	126.77	42.01
22M-1	61.04	19.05	41.99
23M-1	76.81	34.83	41.98
MW-56	97.84	54.81	43.03
MW-57	84.05	40.97	43.08
MW-58	76.68	33.41	43.27
MW-59	87.58	44.51	43.07
MW-60	95.44	53.31	42.13
MW-61	107.01	64.96	42.05
MW-62	114.23	72.89	41.34
MW-63	126.26	84.31	41.95
MW-D12	162.39	121.06	41.33
19GR-1*	165.42	124.62	40.80
20G-1*	165.31	123.40	41.91
21G-1*	172.83	130.94	41.89
24G-1*	176.91	134.37	42.54
24G-2*	176.44	134.02	42.42
24G-3*	176.13	133.74	42.39

APPENDIX G (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS AUGUST 13, 2019

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
25G-1*	159.91 ⁽²⁾	117.93	41.98
25G-2*	158.71	116.66	42.05
26G-1*	165.10	123.52	41.58
26G-2*	165.57	123.71	41.86
26G-3*	165.43	123.42	42.01
27G-1*	166.58	125.34	41.24
27G-2*	166.52	124.62	41.90
27G-3*	166.64	124.72	41.92
28G-1*	201.99	159.47	42.52
28G-2*	201.31	158.81	42.50
28G-3*	200.16	157.78	42.38

Notes:

---: Groundwater elevation not calculated.

* Additional water level measurements collected by Cashin Associates, P.C. as part of the Cleanfill Landfill Groundwater Monitoring Program

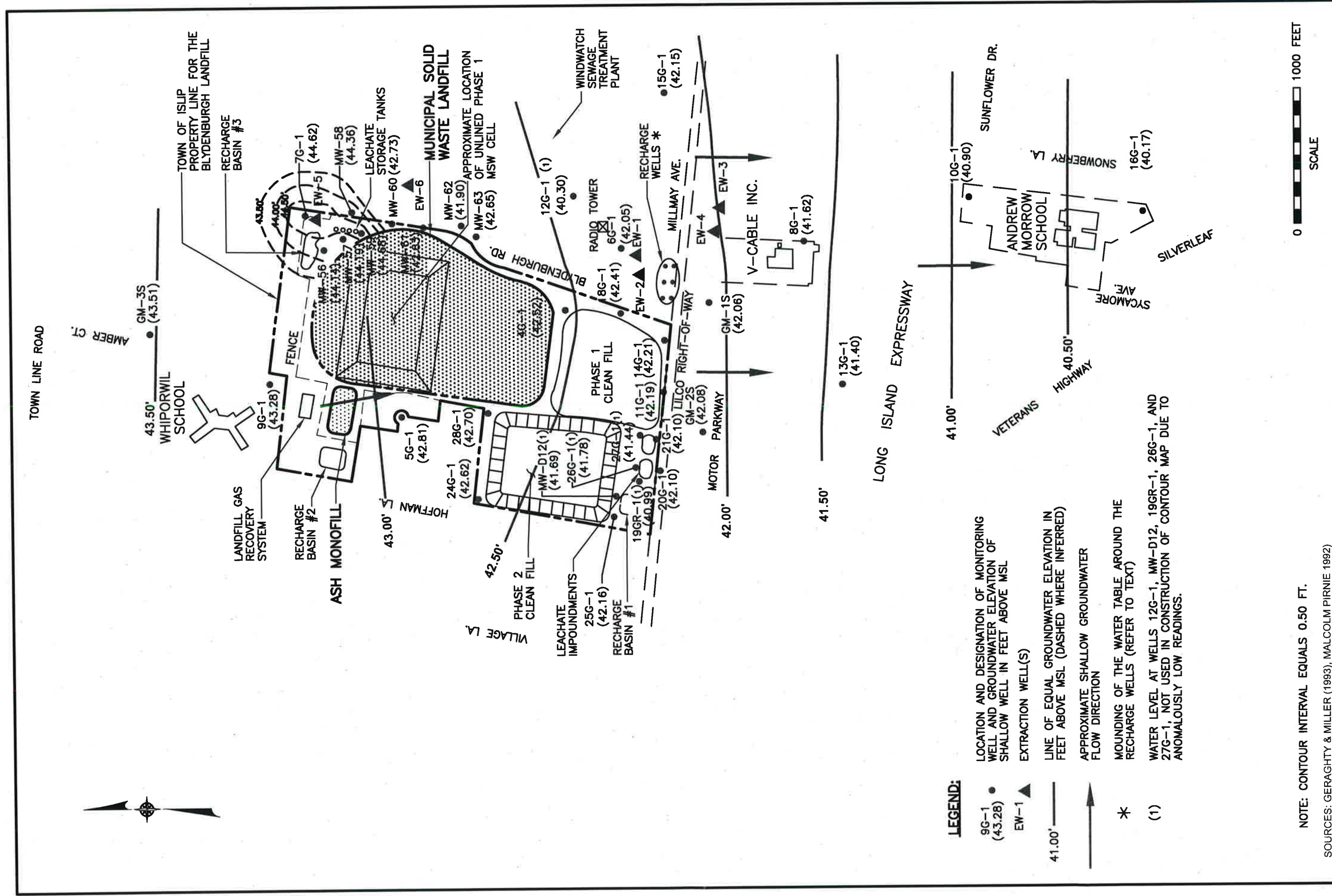
⁽¹⁾ New Survey (Wells 4G-2, 13G-1 and 13M-1) obtained by Municipal Land Survey.

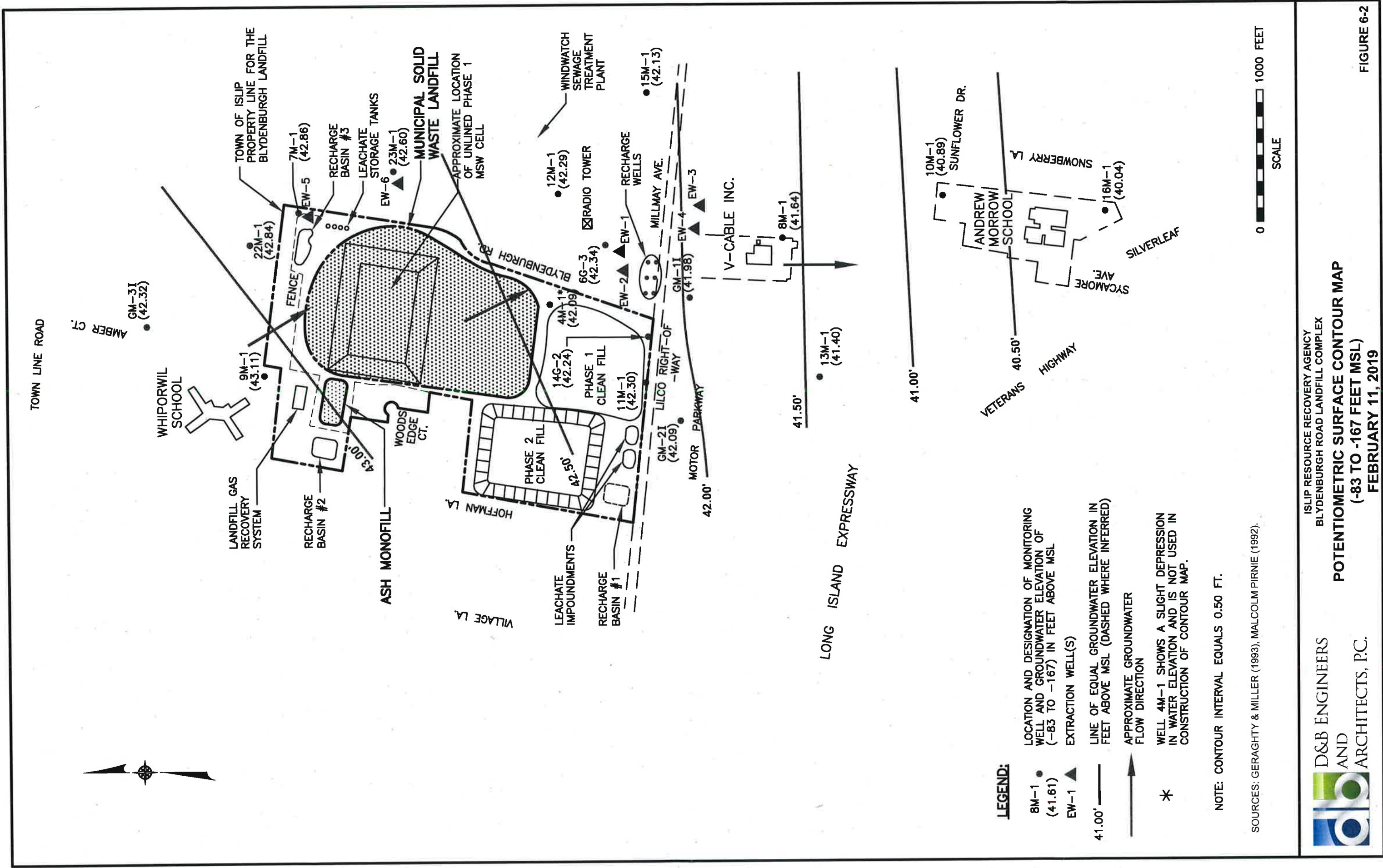
⁽²⁾ New survey (Well 25G-1) obtained by Roux Associates.

⁽³⁾ Due to access constraints, water level measurements for wells 8G-1, 8M-1 and 8M-2 were recorded on August 19, 2019.

APPENDIX H

WATER TABLE CONTOUR AND POTENTIOMETRIC SURFACE CONTOUR MAPS (-83 to -167 feet msl)





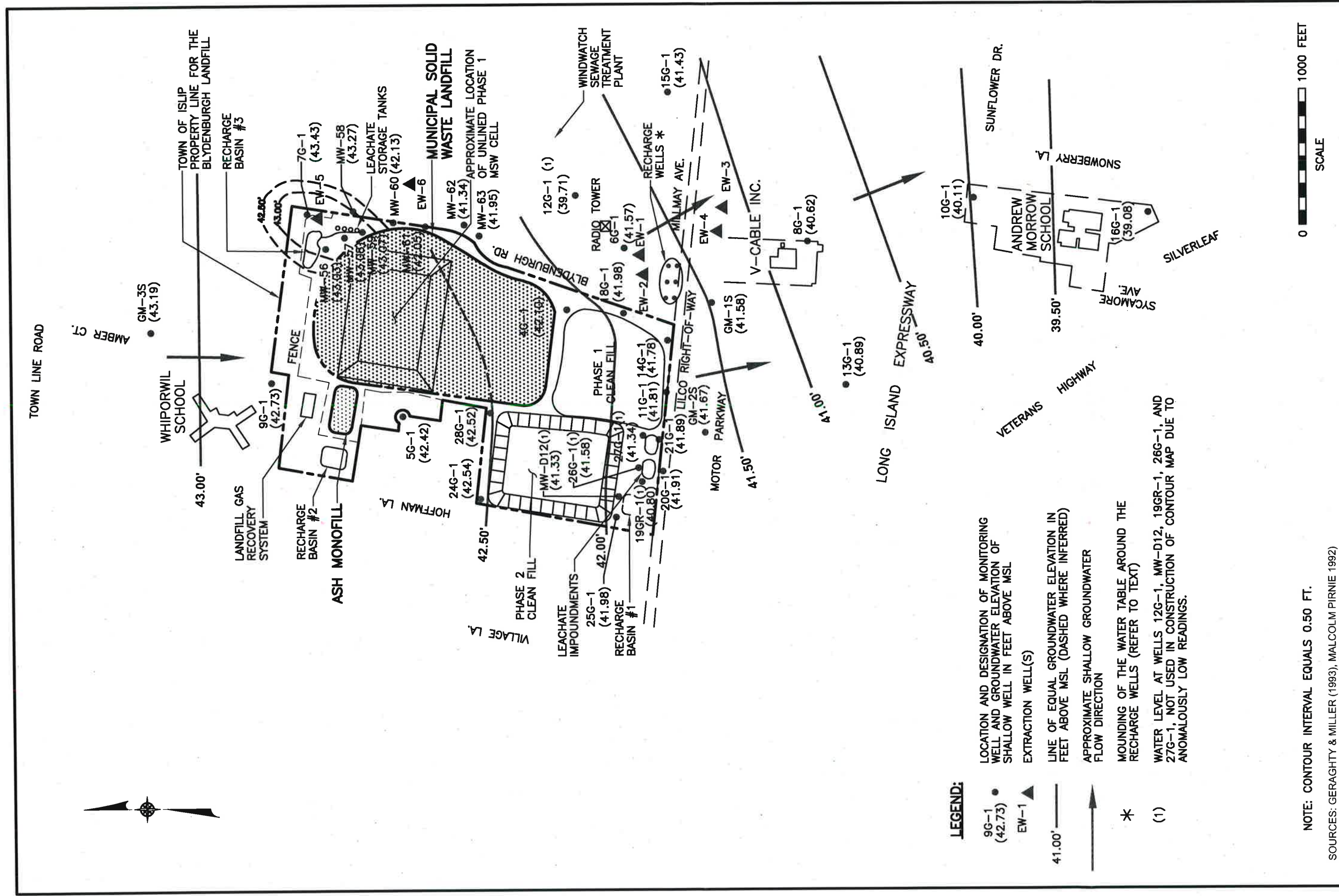
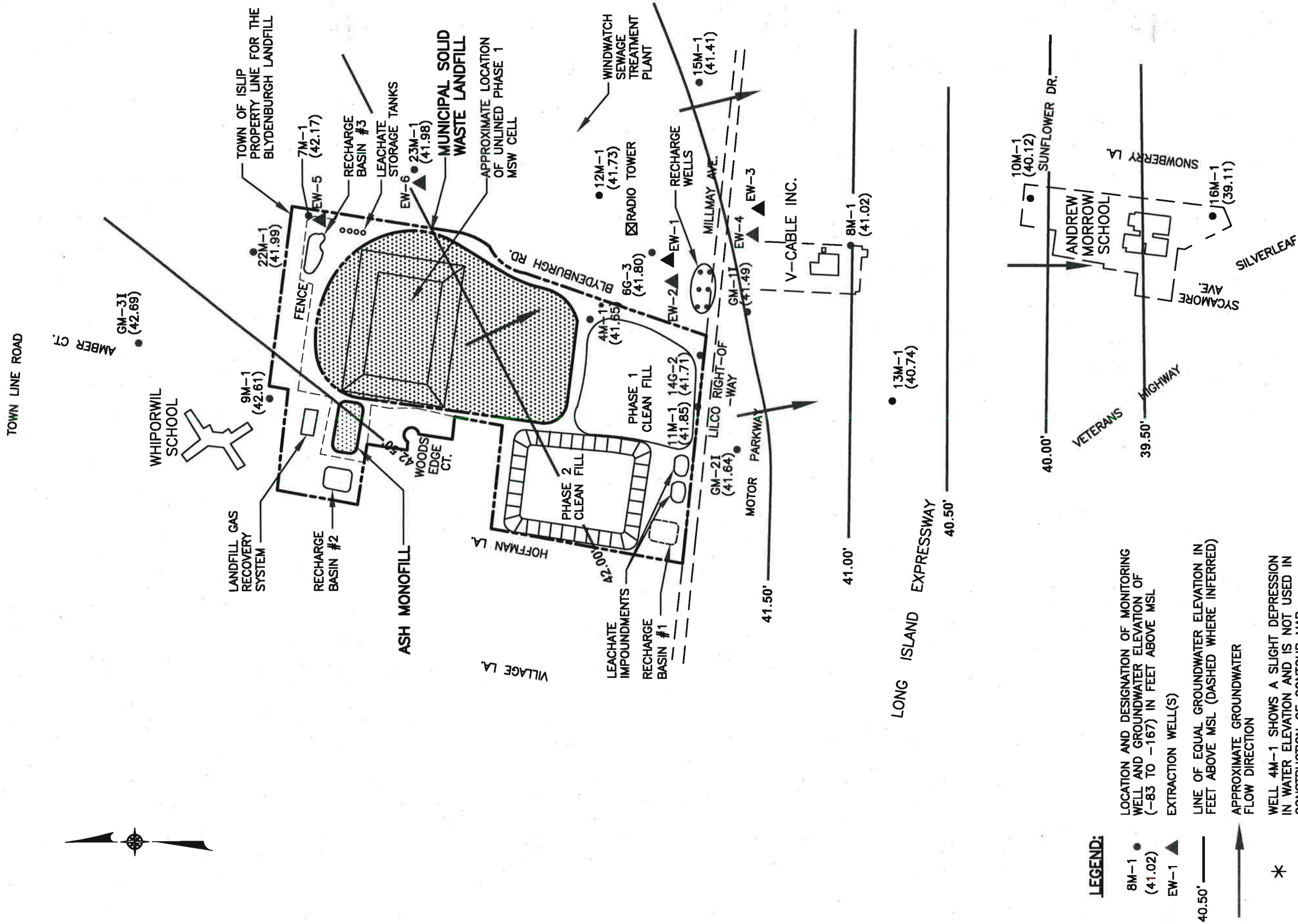


FIGURE 6-1



LEGEND:

- 8M-1 (41.02) • LOCATION AND DESIGNATION OF MONITORING WELL AND GROUNDWATER ELEVATION OF (-83 TO -167) IN FEET ABOVE MSL
- EW-1 ▲ EXTRACTION WELL(S)
- 40.50' — LINE OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MSL (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- * WELL 4M-1 SHOWS A SLIGHT DEPRESSION IN WATER ELEVATION AND IS NOT USED IN CONSTRUCTION OF CONTOUR MAP.

NOTE: CONTOUR INTERVAL EQUALS 0.50 FT.

SOURCES: GERAGHTY & MILLER (1993), MALCOLM PIRNIE (1992).



D&B ENGINEERS
AND
ARCHITECTS, P.C.

ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX
POTENTIOMETRIC SURFACE CONTOUR MAP
(-83 TO -167 FEET MSL)
AUGUST 13, 2019

FIGURE 6-2

APPENDIX I

HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS

APPENDIX I

BLYDENBURGH ROAD LANDFILL COMPLEX **POST CLOSURE GROUNDWATER MONITORING PROGRAM** **HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS**

Well Designation	Water Level Elevation (feet above mean sea level)					
	Third Quarter August 1999	Fourth Quarter November 1999	First Quarter February 2000 ⁽¹⁾	Second Quarter May 2000 ⁽¹⁾	Third Quarter August 2000 ⁽¹⁾	Fourth Quarter November 2000 ⁽¹⁾
Recharge Well 1	86.42	49.42	72.42	56.42	46.42	42.42
Recharge Well 2	87.88	94.88	68.88	94.88	97.88	74.88
Recharge Well 3	70.39	44.39	68.39	75.39	46.39	42.39
Recharge Well 4	74.86	75.86	60.86	62.86	54.86	38.86
Recharge Well 5	55.08	49.08	57.08	43.08	51.08	45.08
Recharge Well 6	67.16	49.16	57.16	43.16	45.16	47.16

Well Designation	Water Level Elevation (feet above mean sea level)					
	First Quarter February 2001 ⁽¹⁾	Second Quarter May 2001 ⁽¹⁾	Third Quarter August 2001 ⁽¹⁾	Fourth Quarter November 2001 ⁽¹⁾	First Quarter February 2002 ⁽¹⁾	Second Quarter May 2002 ⁽¹⁾
Recharge Well 1	40.42	54.42	54.42	56.42	68.42	70.42
Recharge Well 2	94.88	106.88	98.88	88.88	94.88	94.88
Recharge Well 3	48.39	92.39	95.39	88.39	54.39	89.39
Recharge Well 4	68.86	74.86	72.86	56.86	52.86	68.86
Recharge Well 5	54.08	53.08	53.08	57.08	53.08	45.08
Recharge Well 6	64.16	63.16	63.16	65.16	53.16	64.16

Well Designation	Water Level Elevation (feet above mean sea level)					
	Third Quarter August 2002 ⁽¹⁾	Fourth Quarter November 2002 ⁽¹⁾	First Quarter February 2003 ⁽¹⁾	Second Quarter May 2003 ⁽¹⁾	Third Quarter August 2003 ⁽¹⁾	Fourth Quarter November 2003 ⁽¹⁾
Recharge Well 1	80.42	75.42	76.42	80.42	76.42	81.42
Recharge Well 2	87.88	107.88	98.88	106.88	100.88	106.88
Recharge Well 3	72.39	92.39	100.39	98.39	112.39	70.39
Recharge Well 4	66.86	73.86	56.86	64.86	79.86	77.86
Recharge Well 5	55.08	55.08	53.08	55.08	58.08	48.08
Recharge Well 6	61.16	59.16	63.16	51.16	75.16	54.16

⁽¹⁾A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

APPENDIX I (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX POST CLOSURE GROUNDWATER MONITORING PROGRAM HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS

Well Designation	Water Level Elevation (feet above mean sea level)						
	First Quarter February 2004 ⁽¹⁾	Second Quarter May 2004 ⁽¹⁾	Third Quarter August 2004 ⁽¹⁾	First Quarter February 2005 ⁽¹⁾	Second Quarter May 2005 ⁽¹⁾	Third Quarter August 2005 ⁽¹⁾	Fourth Quarter November 2005 ⁽¹⁾
Recharge Well 1	84.42	82.42	71.42	76.42	88.42	68.42	70.42
Recharge Well 2	101.88	102.88	103.88	104.88	114.88	122.48	57.88
Recharge Well 3	112.39	122.39	70.39	98.39	95.39	74.39	94.39
Recharge Well 4	74.86	81.86	76.86	75.86	65.86	75.86	78.86
Recharge Well 5	48.08	57.08	46.08	61.08	53.08	48.08	49.08
Recharge Well 6	77.16	82.16	71.16	77.16	64.16	69.16	67.16

Well Designation	Water Level Elevation (feet above mean sea level)						
	First Quarter February 2006 ⁽¹⁾	Third Quarter July 2006 ⁽¹⁾	First Quarter February 2007 ⁽¹⁾	Third Quarter July 2007 ⁽¹⁾	First Quarter February 2008 ⁽¹⁾	Third Quarter August 2008 ⁽¹⁾	First Quarter February 2009 ⁽¹⁾
Recharge Well 1	74.42	68.42	84.42	84.42	96.42	116.42	84.42
Recharge Well 2	125.88	112.88	120.88	122.88	137.88	77.88	102.88
Recharge Well 3	54.39	74.39	80.39	90.39	98.39	60.39	50.39
Recharge Well 4	74.86	64.86	58.86	54.86	74.86	94.86	82.86
Recharge Well 5	48.08	53.08	51.08	53.08	51.08	50.08	49.08
Recharge Well 6	50.16	79.16	95.16	104.16	97.16	169.16	119.16

Well Designation	Water Level Elevation (feet above mean sea level)						
	Third Quarter August 2009 ⁽¹⁾	First Quarter February 2010 ⁽¹⁾	Third Quarter August 2010 ⁽¹⁾	First Quarter February 2011 ⁽¹⁾	Third Quarter August 2011 ⁽¹⁾	First Quarter February 2012 ⁽¹⁾	Third Quarter August 2012 ⁽¹⁾
Recharge Well 1	75.42	84.42	86.42	96.42	78.42	82.42	91.42
Recharge Well 2	132.88	94.88	108.88	114.88	74.88	90.88	99.88
Recharge Well 3	49.39	60.39	60.39	53.39	65.39	60.39	65.39
Recharge Well 4	109.86	76.86	60.86	82.86	64.86	70.86	66.86
Recharge Well 5	51.08	53.08	71.08	51.08	61.08	56.08	60.08
Recharge Well 6	139.16	151.16	129.16	129.16	109.16	135.16	151.16

⁽¹⁾ A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

APPENDIX I (continued)

**BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS**

Well Designation	Water Level Elevation (feet above mean sea level)						
	First Quarter February 2013 ⁽¹⁾	Third Quarter August 2013 ⁽¹⁾	First Quarter February 2014 ⁽¹⁾	Third Quarter August/September 2014 ⁽¹⁾	First Quarter March 2015 ⁽¹⁾	Third Quarter August 2015 ⁽¹⁾	First Quarter February 2016 ⁽¹⁾
Recharge Well 1	86.42	80.42	96.42	81.42	96.42	91.42	96.42
Recharge Well 2	102.88	96.88	114.88	137.88	122.88	127.88	130.88
Recharge Well 3	78.39	62.39	70.39	60.39	50.39	60.39	102.39
Recharge Well 4	72.86	78.86	52.86	91.86	44.86	74.86	46.86
Recharge Well 5	57.08	47.08	61.08	55.08	58.08	55.08	53.08
Recharge Well 6	123.16	95.16	81.16	141.16	103.16	167.16	147.16

Well Designation	Water Level Elevation (feet above mean sea level)						
	Third Quarter August 2016 ⁽¹⁾	First Quarter February 2017 ⁽¹⁾	Third Quarter August 2017 ⁽¹⁾	First Quarter February 2018 ⁽¹⁾	Third Quarter August 2018 ⁽¹⁾	First Quarter February 2019 ⁽¹⁾	Third Quarter August 2019 ⁽¹⁾
Recharge Well 1	71.42	78.42	74.42	74.42	96.42	81.42	86.42
Recharge Well 2	102.88	102.88	142.86	107.88	92.88	97.88	147.88
Recharge Well 3	65.39	43.39	62.39	50.39	75.39	75.39	48.39
Recharge Well 4	76.86	46.86	52.86	44.86	56.86	49.86	59.86
Recharge Well 5	65.08	53.08	51.08	48.08	53.08	58.08	53.08
Recharge Well 6	129.16	169.16	129.16	149.16	134.16	139.16	119.16

⁽¹⁾ A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

