ISLIP
RESOURCE
RECOVERY
AGENCY

Sonia Road Landfill
Brentwood, New York

Post Closure Groundwater Monitoring Program

2015 Monitoring Report Baseline Sampling Event

June 2015

Prepared by:

D&B ENGINEERS AND ARCHITECTS, P.C.

50 YEARS est. 1965

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50 YEARS est. 1965

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June 24, 2015

Anthony J. Varrichio, P.E.
Chief Engineer
Islip Resource Recovery Agency
401 Main Street
Islip, NY 11751

Re: Sonia Road Landfill
Post-Closure Groundwater Monitoring Program
2015 Monitoring Report
D&B No. 3371-05B

Dear Mr. Varrichio:

Enclosed please find six copies the 2015 Post-Closure Groundwater Monitoring Report for the Sonia Road Landfill. In addition, this report is provided in electronic format on the enclosed compact disc.

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

Very truly yours,

Thomas P. Fox, P.G.
Vice President

TPF/KSR/nc
Enclosure
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POST CLOSURE GROUNDWATER MONITORING PROGRAM
2015 MONITORING REPORT
(BASELINE SAMPLING EVENT)

SONIA ROAD LANDILL
BRENTWOOD, NEW YORK

Prepared for:

ISLIP RESOURCE RECOVERY AGENCY
TOWN OF ISLIP, NEW YORK

Prepared by:

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

JUNE 2015

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
2015 MONITORING REPORT

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1.0 INTRODUCTION

This report presents the results of the March 17, 2015 groundwater monitoring event conducted as part of the Post Closure Groundwater Monitoring Program for the Sonia Road Landfill. The sampling program was conducted for the Town of Islip, as administered by the Islip Resource Recovery Agency (IRRA), in conformance with the December 2001 Sampling and Analysis Plan (SAP). The SAP is a part of the Sonia Road Post Closure Monitoring and Maintenance Plan (Volume 3 of 4), which was approved by the New York State Department of Environmental Conservation (NYSDEC) in a letter dated January 18, 2006.

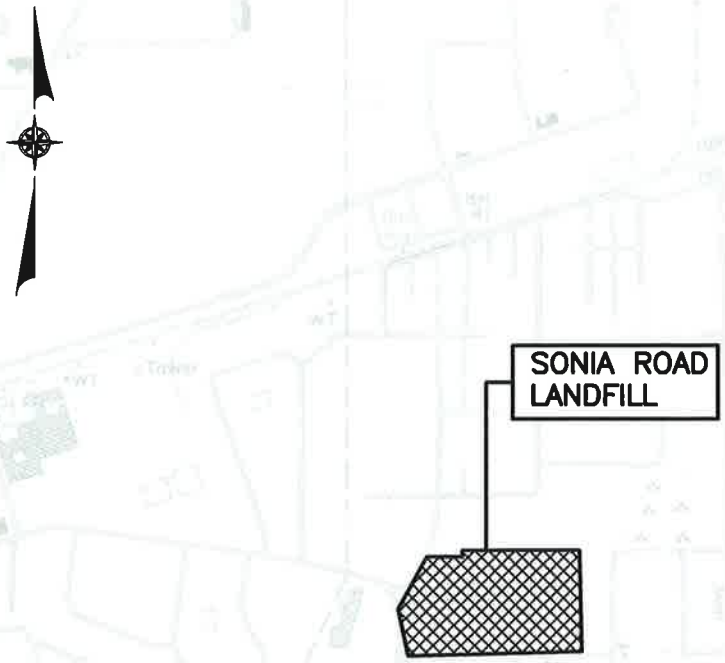
1.1 Purpose

The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater quality and flow direction subsequent to the capping and closure of the Sonia Road Landfill.

This Post Closure Groundwater Monitoring Program report includes discussions of the sample locations, sampling procedures, laboratory analyses, field and analytical results, data validation, groundwater level measurements and groundwater flow direction. In addition, the report includes a comparison of the analytical results of this March 2015 sampling event to applicable New York State groundwater quality standards and guidance values.

1.2 Site Location and Description

The Sonia Road Landfill is a capped and closed inactive municipal solid waste landfill owned by the Town of Islip. The landfill is located at 1355 Howells Road in the hamlet of Brentwood in the western portion of the Town and is in close proximity to the western town boundary with the Town of Babylon. The location of the Sonia Road Landfill is illustrated on **Figure 1-1.**



SOURCE: U.S.G.S. GREENLAWN, N.Y. AND BAY SHORE WEST, N.Y. QUADRANGLES

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER
MONITORING PROGRAM

SITE LOCATION MAP

SCALE: 1"=2000'

FIGURE 1-1

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The landfill property is 42.2 acres in area and is approximately rectangular in shape. The landfill is bounded to the north by industrial properties, to the east by residential properties, to the south by Deer Park Street with residential properties beyond, and to the west by Howell's Road, Secatogue Road, and Corbin Avenue with industrial properties beyond. In the southwest corner of the property is one residential parcel (Tax Map No. 221-2-1), which is not part of landfill property described above. At the northwest corner of the property is a 0.5-acre parcel owned by the Town of Islip (Tax Map No. 198-5-7.3), which is identified as a paper street. Given that the waste mass extends onto this parcel, it is considered as part of the landfill property, and as a result, the overall landfill property is considered to be 42.7 acres. At and abutting the northeast corner of the landfill property is the western extension of Sonia Road for which the facility is named.

The landfill property itself is zoned Industrial I and Industrial II with a small portion along the southeastern boundary zoned as residential.

To the southwest of the landfill property is the West Brentwood Middle School, which is located on the west side of Howell's Road. Beyond the school property to the south and west is the headwater of Sampawams Creek. Sampawams Creek is fed by groundwater discharge as well as storm water management systems for the surrounding areas. Sampawams Creek runs from north to south and empties into the Guggenheim Lakes, which are located north of the Southern State Parkway. Sampawams Creek generally describes the western boundary of the Town of Islip and the eastern boundary of the Town of Babylon.

The Sonia Road Landfill Site has been owned by the Town of Islip since 1965. Prior to 1965, the Site was privately owned and used as a source of mined sand and gravel. As a result of this mining operation, virtually the entire Site was disturbed, including the removal of vegetation, topsoil and underlying minerals. The mining operation was extensive with the removal of minerals progressing to and below the water table. Removal of minerals below the water table was accomplished through the use of dredging equipment. This activity resulted in the formation of a groundwater lake over a significant portion of the site (40% to 50%). It is

reported that this dredging operation may have removed materials to a depth of 50 feet below the water table. Soil borings constructed as part of the remedial investigation at the landfill confirmed that waste lies at least 36 feet below the water table.

In 1965, the Town of Islip took title to the Sonia Road property and began a landfilling operation for the disposal of municipal solid waste. Landfilling at the Site occurred between 1965 and 1977, with the most active period of landfilling occurring between 1965 and 1974. It has been estimated that between 1.5 and 2.0 million cubic yards of waste were disposed at the Site. There are no weight records to substantiate this estimate.

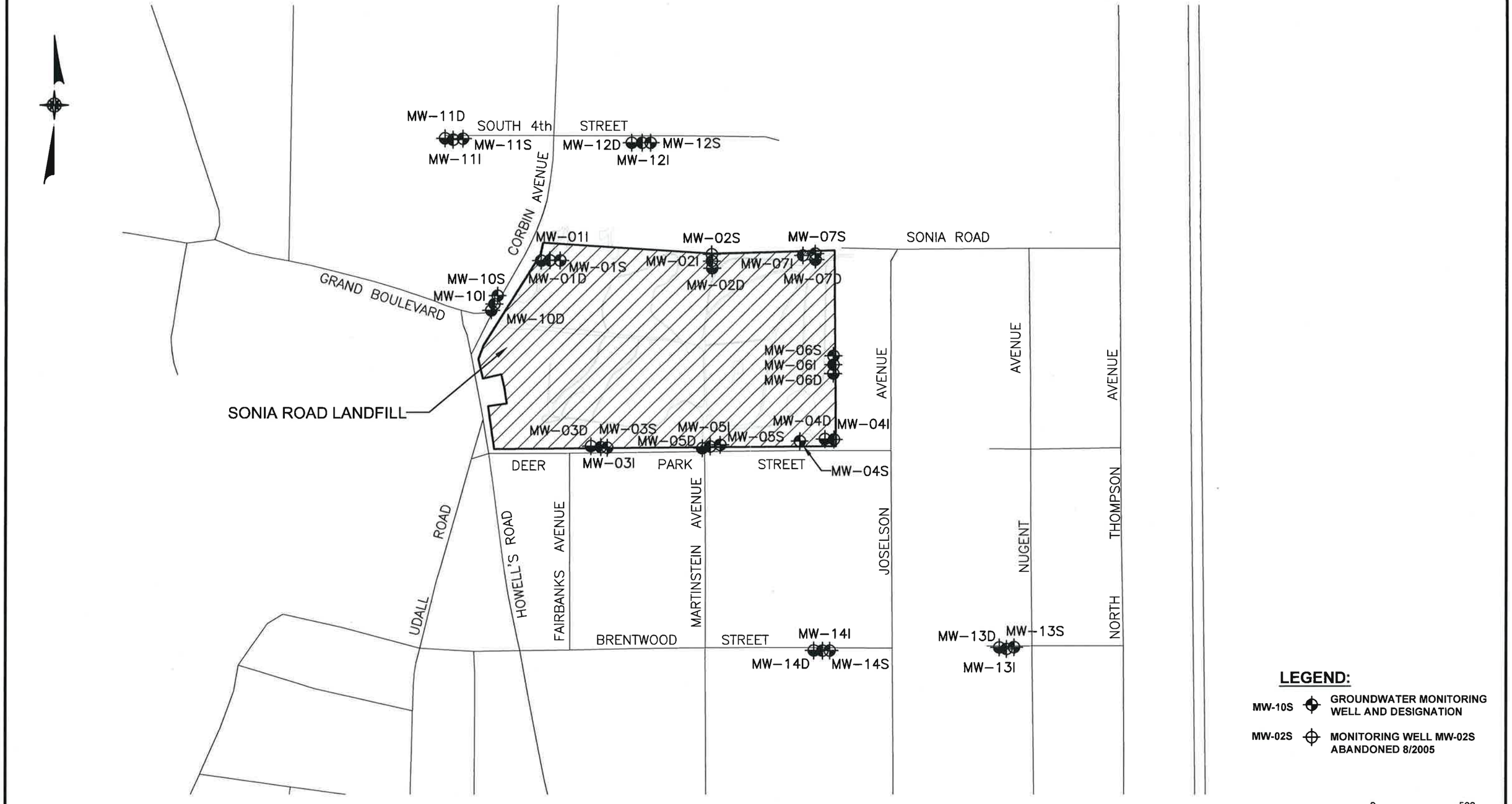
The landfill reportedly accepted all municipal solid waste delivered to the Site. This waste is reported to include wood, concrete, metal, plastic, glass, household waste in the form of refuse, rubbish, demolition materials and yard wastes (particularly leaves). It is also reported that junk automobiles were routinely disposed at the facility and that underground fires were common.

The Sonia Road Landfill was capped in the fall of 2000. The landfill capping system covers an area of approximately 40 acres. The capping system includes an active landfill gas management system, an on-site storm water management system and a perimeter road constructed around the entire Site using recycled concrete aggregate. The storm water management system consists of a series of drainage swales, catch basins, buried storm water piping, dry wells and two recharge basins. Storm water from the northeastern corner of the property is discharged to a series of dry wells (leaching rings) in the area of Sonia Road. The remainder of the site storm water is directed to Recharge Basins 1 and 2 located on the west side of the property. Recharge Basin 1 is located adjacent to the main entrance gate located on Corbin Avenue, and Recharge Basin 2 is located in the southwest corner of the property. For the majority of the site, drainage swales are located on the in-board side of the perimeter road.

2.0 MONITORING WELL NETWORK AND GROUNDWATER SAMPLE LOCATIONS

The monitoring well network for the Sonia Road Landfill consists of 35 wells. Well locations are illustrated on **Figure 2-1**. The monitoring wells were constructed as 12 well clusters, with each cluster comprised of a shallow (S) well, intermediate (I) well and deep (D) well, with the exception of the MW-02 cluster. Shallow well MW-02S was abandoned in August 2005 and has been eliminated from the Post Closure Monitoring Program. All 35 wells were utilized for water level measurements. Well construction information for all wells is summarized in **Table 2-1.**

Twenty-two (22) wells are included as part of the Post Closure Monitoring Program. The sampled wells are presented in **Table 2-2.** All 22 monitoring wells were sampled during the March 2015 sampling event.



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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

GROUNDWATER MONITORING WELL LOCATIONS

FIGURE 2-1

Table 2-1

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

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Screen Setting		Measuring Point Elevation (feet above mean sea level)
					Depth (feet below measuring point)	Elevation (feet above mean sea level)	
MW-01D[1]	10/14/97	4	SS	106	96-106	(-32) - (-42)	64.53
MW-01I[1]	10/6/97	4	SS	78	68 - 78	(-2) - (-12)	65.36
MW-01S[1]	1/5/95	4	PVC	29	19 - 29	47 - 37	66.01
MW-02D[4]	10/13/97	4	SS	116	106 - 116	(-27) - (-37)	78.43
MW-02I[4]	10/1/97	4	SS	72	62 - 72	16 - 7	78.24
MW-02S	*Abandoned in August 2005*						
MW-03D[1]	9/30/97	4	SS	107	97 - 107	(-26) - (-36)	70.50
MW-03I[1]	1/9/95	4	PVC	84	79 - 84	(-8) - (-13)	70.77
MW-03S[1]	1/6/95	4	PVC	32	22 - 32	49 - 39	70.76
MW-04D[1]	10/6/97	4	SS	114	104 - 114	(-35) - (-45)	69.03
MW-04I[1]	9/29/97	4	SS	71	61 - 71	8 - (-2)	69.31
MW-04S[1]	1/6/95	4	PVC	34	24 - 34	48 - 38	71.10
MW-05D[1]	10/10/97	4	SS	116	106 - 116	(-35) - (-45)	70.96
MW-05I[1]	10/2/97	4	SS	70	60 - 70	11 - 1	70.26
MW-05S[1]	10/4/97	4	SS	34	19 - 34	52 - 37	70.28
MW-06D[5]	10/1/97	4	SS	117	107 - 117	(-32) - (-42)	75.02
MW-06I[4]	9/25/97	4	SS	76	66 - 76	9 - (-1)	74.52
MW-06S[5]	9/24/97	4	SS	37	22 - 37	53 - 38	74.45
MW-07D[1]	10/8/97	4	SS	122	112 - 122	(-37) - (-47)	75.04
MW-07I[4]	9/26/97	4	SS	74	64 - 74	9 - (-1)	73.43
MW-07S[1]	9/28/97	4	SS	34	19 - 34	54 - 39	72.83

Table 2-1 (continued)

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

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Screen Setting		Measuring Point Elevation (feet above mean sea level)
					Depth (feet below measuring point)	Elevation (feet above mean sea level)	
MW-10D[2]	10/15/97	4	SS	96	86 - 96	(-29) - (-39)	56.34
MW-10I[2]	10/7/97	4	SS	69	59 - 69	(-3) - (-13)	56.16
MW-10S[2]	10/8/97	4	SS	19	4 - 19	53 - 38	56.65
MW-11D[1]	10/16/97	4	SS	94	84 - 94	(-24) - (-34)	60.19
MW-11I[1]	10/11/97	4	SS	71	61 - 71	(-1) - (-11)	60.38
MW-11S[1]	10/13/97	4	SS	19	4 - 19	56 - 41	59.87
MW-12D[1]	10/15/97	4	SS	98	88 - 98	(-29) - (-39)	58.61
MW-12I[1]	10/10/97	4	SS	70	60 - 70	(-1) - (-11)	58.92
MW-12S[1]	10/13/97	4	SS	19	4 - 19	55 - 40	58.79
MW-13D[3]	10/16/97	4	SS	119	109 - 119	(-38) - (-48)	70.37
MW-13I[3]	10/7/97	4	SS	71	61 - 71	9 - (-1)	70.30
MW-13S[3]	10/8/97	4	SS	37	22 - 37	49 - 34	70.51
MW-14D[3]	10/17/97	4	SS	105	95 - 105	(-30) - (-40)	64.58
MW-14I[3]	10/9/97	4	SS	71	61 - 71	4 - (-6)	64.57
MW-14S[3]	10/14/97	4	SS	30	15 - 30	50 - 35	64.55

Notes:
[1]Monitoring wells surveyed by Municipal Land Survey, P.C., August 2001.
[2]Monitoring wells surveyed by YEC, Inc., November 1997.
[3]Monitoring wells surveyed by YEC, Inc., September 2000.
[4]Monitoring wells surveyed by Municipal Land Survey, P.C., August 11, 2005.
[5]Monitoring wells surveyed by Municipal Land Survey, P.C., August 2006.
SOURCE: Remedial Investigation/Feasibility Study (RI/FS) dated April 1998 and surveys noted above.

Table 2-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER MONITORING WELLS SAMPLED AS PART OF THE POST CLOSURE GROUNDWATER MONITORING PROGRAM

MW-01D	MW-04D	MW-06D	MW-11S
MW-01I	MW-04I	MW-06I	MW-12D
MW-01S	MW-04S	MW-06S	MW-12I
MW-02D	MW-05D	MW-07I	MW-12S
MW-02I	MW-05I	MW-11D	
MW-03S	MW-05S	MW-11I	

3.0 SAMPLING PROCEDURES AND ANALYSIS

Sampling procedures for the collection of the groundwater samples were implemented in accordance with the protocol described in the Sampling and Analysis Plan (SAP). Dedicated and disposable sampling equipment was used whenever possible 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 the groundwater samples, synoptic water level measurements were obtained from all 35 monitoring wells for determination of groundwater elevations and groundwater 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.**

3.2 Groundwater 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, specific conductance, temperature, oxidation-reduction potential (ORP), dissolved oxygen and turbidity. When the values of the field parameters equilibrated 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.

In accordance with the SAP, groundwater samples were collected using new, dedicated, disposable polyethylene bailers and polypropylene rope. Samples for 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 picked up by American Analytical Laboratories, LLC.

Appropriate quality assurance/quality control (QA/QC) samples, which included one field blank, one matrix spike and matrix spike duplicate (MS/MSD) set and one blind duplicate, were collected in accordance with the SAP. In addition, a trip blank sample accompanied the laboratory cooler for each day of groundwater sampling.

In accordance with the SAP, purge water from all on-site wells and all wells immediately adjacent to the landfill property was disposed directly into the nearest landfill capping system drainage swale. Purge water generated from off-site well clusters 11 and 12 was pumped into 55- gallon drums, transported to the landfill and the purge water discharged into the landfill's on-site Recharge Basin 1 in accordance with the SAP.

3.3 Volatile Organic Vapor and Combustible Gas Monitoring

Volatile organic vapor and combustible gas measurements were collected in all 35 monitoring wells. Volatile organic vapors were measured using a photoionization detector (PID) and combustible gas was measured using a portable multi-gas meter. The volatile organic vapor and combustible gas monitoring results represent headspace measurements collected during the synoptic groundwater level measurements. The volatile organic vapor and combustible gas monitoring results for March 2015 reporting period are provided in **Section 4.0.**

3.4 Sample Analysis

Groundwater samples collected during the March 2015 sampling event from 22 monitoring wells were analyzed for New York Codes, Rules and Regulations (NYCRR) Part 360 Baseline Parameters. Other parameters, such as pH, temperature, specific conductance, ORP, dissolved oxygen and turbidity, were measured in the field for groundwater samples collected from each of the monitoring wells. The groundwater analytical results are discussed in **Section 4.2.**

4.0 ANALYTICAL RESULTS

4.1 Field Parameters

A summary of the final field parameter values measured at the time of sample collection during the March 2015 sampling event is provided in **Table 4-1.**

4.2 Monitoring Well Groundwater Results

The analytical results for the groundwater samples collected during the March 2015 sampling event, compared to NYSDEC Class GA groundwater standards and guidance values, are provided in **Appendix A-1** (leachate indicators), **Appendix A-2** (inorganic parameters) and **Appendix A-3** (volatile organic compounds). Historic sample results from 2007 to March 2015 are also included in these tables. Historical data from 1996 to 2006 have been provided to the IRRA in previous post closure groundwater monitoring reports.

4.2.1 Leachate Indicators

As shown in **Appendix A-1**, two leachate indicators (ammonia and total phenols) were detected in one or more wells at concentrations exceeding NYSDEC Class GA groundwater standards. These parameters are each discussed below.

Ammonia slightly exceeded the groundwater standard of 2 milligrams per liter (mg/l) in downgradient well MW-04I (2.36 mg/l), as well as upgradient well MW-12I (5.80 mg/l).

As part of evaluating changes in groundwater quality, historic results for ammonia were graphed for the shallow, intermediate and deep zones for upgradient wells and downgradient wells. These graphs are presented in **Appendix B.**

Table 4-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF FINAL FIELD PARAMETER RESULTS
MARCH 2015 SAMPLING EVENT

Monitoring Well	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temperature (°C)	ORP (mV)
MW-01S	6.89	0.505	0	0.60	13.05	59
MW-01I	5.42	0.195	0	2.84	14.90	188
MW-01D	5.57	0.840	0	1.44	15.40	184
MW-02I	6.47	0.343	0	0.23	14.65	153
MW02D	5.98	0.221	0	3.60	13.91	158
MW-03S	6.84	0.667	0	0.22	14.72	90
MW-04S	6.57	0.935	0	1.70	13.56	70
MW-04I	6.94	0.512	0	0.0	14.11	72
MW-04D	6.90	0.431	0	0.0	13.74	54
MW-05S	6.53	0.834	0	0.93	14.10	59
MW-05I	7.28	0.347	0	2.58	12.32	68
MW-05D	5.75	0.229	3	9.40	13.21	126
MW-06S	6.79	0.483	0	0.30	14.79	61
MW-06I	6.22	0.371	0	0.0	14.46	204
MW-06D	5.73	0.164	0	3.79	14.10	229
MW-07I	5.90	0.314	0	0.0	14.80	246
MW-11S	6.89	0.491	2	2.71	9.04	115
MW-11I	5.50	0.087	5	11.04	13.04	130
MW-11D	5.75	0.311	2	14.00	12.96	116
MW-12S	6.93	1.32	2	4.26	10.37	98
MW-12I	6.37	0.444	3	6.86	13.23	108
MW-12D	5.92	0.124	1.3	8.39	11.58	115

Notes:
Mg/l: Milligrams per liter
mS/cm: Millisiemens per centimeter
NTUs: Nephelometric turbidity units
mV: Millivolts

°C: Degrees Celsius
ORP: Oxidation Reduction Potential
DO: Dissolved oxygen

Total phenols exceeded the groundwater standard of 0.001 mg/l in thirteen wells (MW-01I, MW-02D, MW-03S, MW-04D, MW-04I, MW-04S, MW-05D, MW-06D, MW-06I, MW-06S, MW-11I, MW-12D and MW-12S). Concentrations of total phenols in these wells ranged from 0.007 mg/l in well and MW-12S to 0.142 mg/l in well MW-06D. It should be noted that the concentrations of total phenol exceeded the groundwater standard in both upgradient and downgradient wells.

The differences in leachate indicator concentrations for the March 2015 sampling event compared to the previous November 2013 sampling event are summarized in **Table 4-2** and discussed below. For discussion purposes, an increase or decrease in concentration is defined by a minimum change of +/- 20% compared to the previous result. If a concentration remained consistent it is defined as within 20% of the previous result.

Alkalinity

Five (5) wells (MW-02D, MW-04I, MW-05D, MW-06I, and MW-11D) exhibited an increase in alkalinity concentrations. Eight (8) wells (MW-01I, MW-03S, MW-04D, MW-06D, MW-06S, MW-11S, MW-12I and MW-12D) exhibited a decrease in alkalinity concentrations. The remaining nine (9) wells were consistent.

Ammonia

Three (3) wells (MW-04I, MW-11S and MW-12I) exhibited an increase in ammonia concentrations. Eight (8) wells (MW-01S, MW-01I, MW-02I, MW-03S, MW-04S, MW-05S, MW-06S and MW-07I) exhibited a decrease in ammonia concentrations. The remaining eleven (11) wells were consistent.

Table 4-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY COMPARISON OF 2015 SAMPLING EVENT TO PREVIOUS SAMPLING EVENT FOR LEACHATE INDICATORS

Well	Location	Alkalinity	Ammonia	BOD	Bromide	COD	Chloride	Hardness	Nitrate	Total Phenols	Sulfate	TOC	TDS	TKN
MW-01S	Upgradient	C	D	C	C	D	C	I	I	C	C	C	C	D
MW-01I	Upgradient	D	D	C	C	C	D	D	D	I	D	C	D	D
MW-01D	Upgradient	C	C	C	C	C	I	I	I	C	I	C	I	D
MW-02I	Upgradient	C	D	C	C	D	I	C	I	C	I	C	C	D
MW-02D	Upgradient	I	C	C	C	C	I	I	C	C	I	C	I	D
MW-03S	Downgradient	D	D	D	C	D	D	C	I	I	D	C	C	D
MW-04S	Downgradient	C	D	C	C	D	C	C	I	I	C	I	C	D
MW-04I	Downgradient	I	I	C	C	C	D	I	I	C	C	C	D	D
MW-04D	Downgradient	D	C	I	C	I	C	D	I	I	D	C	C	D
MW-05S	Downgradient	C	D	D	C	I	C	C	I	C	D	C	D	D
MW-05I	Downgradient	C	C	C	C	C	D	D	I	C	D	D	D	C
MW-05D	Downgradient	I	C	C	C	C	I	I	C	I	I	D	C	C
MW-06S	Side gradient	D	D	D	C	I	C	D	I	I	I	D	D	D
MW-06I	Side gradient	I	C	C	D	C	I	C	D	I	I	C	I	D
MW-06D	Side gradient	D	C	C	C	C	C	C	C	I	C	C	C	D
MW-07I	Upgradient	C	D	C	C	C	I	C	C	C	I	C	I	D
MW-11S	Upgradient	D	I	C	C	C	C	D	I	I	D	C	D	D
MW-11I	Upgradient	C	C	C	C	C	D	I	C	C	I	C	C	D
MW-11D	Upgradient	I	C	C	C	C	C	I	I	C	I	I	C	D
MW-12S	Upgradient	C	C	C	C	C	I	I	I	I	I	C	I	D
MW-12I	Upgradient	D	I	C	C	C	D	I	I	C	I	I	C	I
MW-12D	Upgradient	D	C	C	C	C	D	C	C	I	D	C	D	D

I: Increase in concentration (change greater than 20%) in comparison to previous sampling result.
D: Decrease in concentration (change greater than 20%) in comparison to previous sampling result.
C: Consistent in concentration (within 20%) in comparison to previous sampling result.
Parameter exceeds standard/guidance value during the current sampling event.

BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
TOC: Total Organic Carbon
TKN: Total Kjeldahl Nitrogen

Biochemical Oxygen Demand

Well MW-04D exhibited an increase in biochemical oxygen demand (BOD) concentration and wells MW-03S, MW-05S and MW-06S exhibited decreases in BOD concentrations. The remaining eighteen (18) wells were consistent.

Bromide

Bromide concentrations in all wells remained consistent, except for well MW-06I which showed a decrease in bromide concentration.

Chemical Oxygen Demand

Three (3) wells (MW-04D, MW-05S and MW-06S) exhibited an increase in chemical oxygen demand (COD) concentrations. Four (4) wells (MW-01S, MW-02I, MW-03S and MW-04S) exhibited a decrease in COD concentrations. The remaining fifteen (15) wells were consistent.

Chloride

Seven (7) wells (MW-01D, MW-02I, MW-02D, MW-05D, MW-06I, MW-07I and MW-12S) exhibited an increase in chloride concentrations. Seven (7) wells (MW-01I, MW-03S, MW-04I, MW-05I, MW-11I, MW-12I and MW-12D) exhibited a decrease in chloride concentrations. The remaining eight (8) wells were consistent.

Hardness

Nine (9) wells (MW-01S, MW-01D, MW-02D, MW-04I, MW-05D, MW-11I, MW-11D, MW-12S and MW-12I) exhibited an increase in hardness concentrations. Five (5) wells

(MW-01I, MW-04D, MW-05I, MW-06S, and MW-11S) exhibited a decrease in hardness concentrations. The remaining eight (8) wells were consistent.

Nitrate

Fourteen (14) wells (MW-01S, MW-01D, MW-02I, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S, MW-11S, MW-11D, MW-12S and MW-12I) exhibited an increase in nitrate concentrations. Wells MW-01I and MW-06I exhibited a decrease in nitrate concentrations. The remaining six (6) wells were consistent.

Total Phenols

Total phenol concentrations in eleven (11) wells (MW-01I, MW-03S, MW-04S, MW-04D, MW-05D, MW-06S, MW-06I, MW-06D, MW-11S, MW-12S and MW-12D) exhibited an increase in total phenol concentrations. The remaining eleven (11) wells were consistent.

Sulfate

Eleven (11) wells (MW-01D, MW-02I, MW-02D, MW-05D, MW-06S, MW-06I, MW-07I, MW-11I, MW-11D, MW-12S and MW-12I) exhibited an increase in sulfate concentrations. Seven (7) wells (MW-01I, MW-03S, MW-04D, MW-05S, MW-05I, MW-11S and MW-12D) exhibited a decrease in sulfate concentrations. The remaining four (4) wells were consistent.

Total Organic Carbon

Three (3) wells (MW-04S, MW-11D and MW-12I) exhibited an increase in total organic carbon (TOC) concentrations. Three (3) wells (MW-05I, MW-05D and MW-06S) exhibited a decrease in TOC concentrations. The remaining sixteen (16) wells were consistent.

Total Dissolved Solids

Five wells (MW-01D, MW-02D, MW-06I, MW-07I and MW-12S) exhibited an increase in total dissolved solids (TDS) concentrations. Seven (7) wells (MW-01I, MW-04I, MW-05S, MW-05I, MW-06S, MW-11S and MW-12D exhibited a decrease in TDS concentrations. The remaining ten (10) wells were consistent.

Total Kjeldahl Nitrogen

Well MW-12I exhibited an increase in total kjeldahl nitrogen (TKN) concentration. TKN concentrations in wells MW-05I and MW-05D remained consistent. The remaining nineteen (19) wells exhibited a decrease in TKN concentrations.

4.2.2 Inorganic Parameters

As shown in **Appendix A-2**, four metals (antimony, iron, manganese and sodium) were detected in one or more wells at concentrations exceeding NYSDEC Class GA groundwater standards or guidance values. These parameters are each discussed below.

Antimony

The groundwater guidance value for antimony of 3 ug/l was exceeded in four (4) wells (MW-01S [5.41 ug/], MW-04D [5.75 ug/l], MW-04I [7.56 ug/l] and MW-12S [6.6 ug/l]).

Iron

The groundwater standard for iron of 300 ug/l was exceeded in nine (9) wells (MW-01S, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S and MW-11D). Iron concentrations detected in these wells ranged from 2,020 ug/l in MW-11D to 39,100 ug/l in MW-04S.

As part of evaluating changes in groundwater quality, historic results for iron plus manganese were graphed for the shallow, intermediate and deep zones for upgradient wells and downgradient wells. These graphs are presented in **Appendix B.**

Manganese

The groundwater standard for manganese of 300 ug/l was exceeded in fifteen (15) wells (MW-01D, MW-01I, MW-01S, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S, MW-06I, MW-06D, MW-07I, MW-11S and MW-12I). Manganese concentrations detected in these wells ranged from 341 ug/l in MW-06S to 5,460 ug/l in MW-05S.

As part of evaluating changes in groundwater quality, historic results for iron plus manganese were graphed for the shallow, intermediate and deep zones for upgradient wells and downgradient wells. These graphs are presented in **Appendix B.**

Sodium

The groundwater standard for sodium of 20,000 ug/l was exceeded in wells MW-01D (31,700 ug/l) and MW-12S (32,100 ug/l).

As part of evaluating changes in groundwater quality, historic results for sodium were graphed for the shallow, intermediate and deep zones for upgradient wells and downgradient wells. These graphs are presented in **Appendix B.**

The differences in inorganic parameter concentrations for the March 2015 sampling event compared to the previous November 2013 sampling event are summarized in **Table 4-3** and discussed below. For discussion purposes, an increase or decrease in concentration is defined by a minimum change of +/- 20% compared to the previous result. If a concentration remained consistent it is defined as within 20% of the previous result.

Table 4-3

SONIA ROAED LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY COMPARISON OF 2015 SAMPLING EVENT TO PREVIOUS SAMPLING EVENT FOR INORGANIC PARAMETERS

Well	Location	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Hexavalent Chromium
MW-01S	Upgradient	D	D	C	I	C	D	C	I	C
MW-01I	Upgradient	C	C	C	D	C	D	C	D	D
MW-01D	Upgradient	I	C	C	C	I	D	C	I	C
MW-02I	Upgradient	D	D	C	I	C	D	C	C	C
MW-02D	Upgradient	I	C	C	I	C	C	C	I	C
MW-03S	Downgradient	D	C	C	C	C	D	C	C	C
MW-04S	Downgradient	C	D	D	C	C	C	C	C	C
MW-04I	Downgradient	C	I	C	C	C	D	C	I	C
MW-04D	Downgradient	C	C	D	C	C	C	C	D	C
MW-05S	Downgradient	C	C	C	C	C	D	C	C	C
MW-05I	Downgradient	C	D	C	D	C	D	C	D	C
MW-05D	Downgradient	C	C	C	I	C	I	C	I	C
MW-06S	Side gradient	D	C	C	D	C	D	D	D	C
MW-06I	Side gradient	D	C	C	I	C	C	C	C	C
MW-06D	Side gradient	C	C	C	C	C	D	C	C	C
MW-07I	Upgradient	I	C	C	I	C	D	C	C	C
MW-11S	Upgradient	I	D	C	C	C	D	C	D	C
MW-11I	Upgradient	I	C	C	I	C	D	D	I	C
MW-11D	Upgradient	I	C	C	I	C	D	C	I	C
MW-12S	Upgradient	I	C	C	I	C	D	C	I	C
MW-12I	Upgradient	C	C	C	I	C	C	C	I	C
MW-12D	Upgradient	I	C	C	C	C	D	C	C	C

I: Increase in concentration (change greater than 20%) in comparison to previous sampling result.
D: Decrease in concentration (change greater than 20%) in comparison to previous sampling result.
C: Consistent in concentration (within 20%) in comparison to previous sampling result.
Parameter exceeds standard/guidance value during the current sampling event.

Table 4-3 (continued)

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY COMPARISON OF 2015 SAMPLING EVENT TO PREVIOUS SAMPLING EVENT FOR INORGANIC PARAMETERS

Well	Location	Total Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
MW-01S	Upgradient	C	D	C	I	C	I	I	C	C
MW-01I	Upgradient	C	C	C	C	C	D	D	C	C
MW-01D	Upgradient	C	C	C	D	C	C	I	C	I
MW-02I	Upgradient	C	C	C	D	C	C	I	C	C
MW-02D	Upgradient	C	C	C	C	C	I	C	C	C
MW-03S	Downgradient	C	C	C	I	I	C	C	C	C
MW-04S	Downgradient	C	C	C	C	C	C	C	C	D
MW-04I	Downgradient	C	C	C	D	C	I	D	C	C
MW-04D	Downgradient	C	C	C	C	D	D	C	C	D
MW-05S	Downgradient	C	C	C	C	C	C	C	C	C
MW-05I	Downgradient	C	C	C	D	C	D	D	C	C
MW-05D	Downgradient	C	C	C	C	C	I	D	C	C
MW-06S	Side gradient	D	C	C	D	D	D	C	D	I
MW-06I	Side gradient	C	C	C	C	C	C	I	C	C
MW-06D	Side gradient	C	C	C	D	C	C	D	C	D
MW-07I	Upgradient	C	C	C	C	C	I	I	C	C
MW-11S	Upgradient	C	C	C	C	C	C	D	C	C
MW-11I	Upgradient	C	C	D	C	C	I	I	C	C
MW-11D	Upgradient	I	C	I	I	I	I	C	C	I
MW-12S	Upgradient	I	C	I	I	C	I	I	C	I
MW-12I	Upgradient	C	C	C	C	C	I	D	C	C
MW-12D	Upgradient	C	C	C	C	C	C	I	C	C

I: Increase in concentration (change greater than 20%) in comparison to previous sampling result.
D: Decrease in concentration (change greater than 20%) in comparison to previous sampling result.
C: Consistent in concentration (within 20%) in comparison to previous sampling result.
Parameter exceeds standard/guidance value during the current sampling event.

Table 4-3 (continued)

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY COMPARISON OF 2015 SAMPLING EVENT TO PREVIOUS SAMPLING EVENT FOR INORGANIC PARAMETERS

Well	Location	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide	Iron plus Manganese
MW-01S	Upgradient	C	C	C	I	C	C	I	C	I
MW-01I	Upgradient	D	C	C	C	C	C	C	C	D
MW-01D	Upgradient	I	C	C	I	C	D	C	D	I
MW-02I	Upgradient	C	C	C	I	C	C	C	C	I
MW-02D	Upgradient	I	C	C	I	C	C	D	C	D
MW-03S	Downgradient	C	C	C	C	C	C	I	C	C
MW-04S	Downgradient	C	C	C	C	C	C	D	C	C
MW-04I	Downgradient	I	C	C	D	C	C	C	C	D
MW-04D	Downgradient	C	C	C	D	C	C	C	C	C
MW-05S	Downgradient	C	C	C	C	C	C	I	C	C
MW-05I	Downgradient	D	C	C	D	C	C	C	C	D
MW-05D	Downgradient	I	C	C	I	C	C	C	C	D
MW-06S	Sidegradient	I	C	C	I	C	C	C	C	D
MW-06I	Sidegradient	I	C	C	I	C	C	C	C	I
MW-06D	Sidegradient	C	C	C	I	C	C	C	C	D
MW-07I	Upgradient	I	C	C	I	C	C	C	C	I
MW-11S	Upgradient	C	C	C	C	C	C	C	C	I
MW-11I	Upgradient	I	C	C	C	C	C	I	C	C
MW-11D	Upgradient	I	C	C	I	C	C	I	C	I
MW-12S	Upgradient	I	C	C	I	C	C	I	C	I
MW-12I	Upgradient	I	C	C	I	C	C	C	C	D
MW-12D	Upgradient	C	C	C	C	C	C	C	C	C

I: Increase in concentration (change greater than 20%) in comparison to previous sampling result.
D: Decrease in concentration (change greater than 20%) in comparison to previous sampling result.
C: Consistent in concentration (within 20%) in comparison to previous sampling result.
Parameter exceeds standard/guidance value during the current sampling event.

Aluminum

Eight (8) wells (MW-01D, MW-02D, MW-07I, MW-11S, MW-11I, MW-11D, MW-12S and MW-12D) exhibited an increase in aluminum concentrations. Five (5) wells (MW-01S, MW-02I, MW-03S, MW-06S and MW-06I) exhibited a decrease in aluminum concentrations. The remaining nine (9) wells were consistent.

Antimony

Well MW-04I exhibited an increase in antimony concentration. Five (5) wells (MW-01S, MW-02I, MW-04S, MW-05I and MW-11S) exhibited a decrease in antimony concentrations. The remaining sixteen (16) wells were consistent.

Arsenic

Wells MW-04S and MW-04D exhibited a decrease in arsenic concentrations. The remaining twenty (20) wells were consistent.

Barium

Ten (10) wells (MW-01S, MW-02I, MW-02D, MW-05D, MW-06I, MW-07I, MW-11I, MW-11D, MW-12S and MW-12D) exhibited an increase in barium concentrations. Three (3) wells (MW-01I, MW-05I and MW-06S) exhibited a decrease in barium concentrations. The remaining nine (9) wells were consistent.

Beryllium

Beryllium concentrations in all the wells remained consistent, except for MW-01D which exhibited an increase in beryllium concentration.

Boron

Well MW-05D exhibited an increase in boron concentration. Boron concentrations remained consistent in five (5) wells (MW-02D, MW-04S, MW-04D, MW-06I and MW-12I). The remaining sixteen (16) wells exhibited a decrease in boron concentrations.

Cadmium

Wells MW-06S and MW-11I exhibited a decrease in cadmium concentrations. The remaining twenty (20) wells were consistent.

Calcium

Nine (9) wells (MW-01S, MW-01D, MW-02D, MW-04I, MW-05D, MW-11I, MW-11D, MW-12S and MW-12I) exhibited an increase in calcium concentrations. Five (5) wells (MW-01I, MW-04D, MW-05I, MW-06S and MW-11S) exhibited a decrease in calcium concentrations. The remaining eight (8) wells were consistent.

Hexavalent Chromium

Hexavalent chromium concentrations in all wells remained consistent, except for well MW-01I which exhibited a decrease in hexavalent chromium concentration.

Total Chromium

Wells MW-11D and MW-12S exhibited an increase in total chromium concentrations. Well MW-06S exhibited a decrease in total chromium concentration. The remaining nineteen (19) wells remained consistent.

Cobalt

Cobalt concentrations in all wells remained consistent, except for well MW-01S which exhibited a decrease in cobalt concentration.

Copper

Wells MW-11D and MW-12S exhibited an increase in copper concentrations. Well MW-11I exhibited a decrease in copper concentration. The remaining nineteen (19) wells were consistent.

Iron

Four (4) wells (MW-01S, MW-03S, MW-11D and MW-12S) exhibited an increase in iron concentrations. Six (6) well (MW-01D, MW-02I, MW-04I, MW-05I, MW-06S and MW-06D) exhibited a decrease in iron concentrations. The remaining twelve (12) wells were consistent.

Lead

Wells MW-03S and MW-11D exhibited an increase in lead concentrations. Wells MW-04D and MW-06S exhibited a decrease in lead concentrations. The remaining eighteen (18) wells remained consistent.

Magnesium

Eight (8) wells (MW-01S, MW-02D, MW-04I, MW-05D, MW-07I, MW-11I, MW-11D and MW-12S) exhibited an increase in magnesium concentrations. Four (4) wells (MW-01I,

MW-04D, MW-05I and MW-06S) exhibited a decrease in magnesium concentrations. The remaining ten (10) wells were consistent.

Manganese

Eight (8) wells (MW-01S, MW-01D, MW-02I, MW-06I, MW-07I, MW-11I, MW-12S and MW-12D) exhibited an increase in manganese concentrations. Seven (7) wells (MW-01I, MW-04I, MW-05I, MW-05D, MW-06D, MW-11S and MW-12I) exhibited a decrease in manganese concentrations. The remaining seven (7) wells were consistent.

Mercury

Mercury concentrations in all wells remained consistent, except for well MW-06S which exhibited a decrease in mercury concentrations.

Nickel

Four (4) wells (MW-01D, MW-06S, MW-11D and MW-12S) exhibited an increase in nickel concentrations. Three (3) wells (MW-04S, MW-04D and MW-06D) exhibited a decrease in nickel concentrations. The remaining fifteen (15) wells were consistent.

Potassium

Eleven (11) wells (MW-01D, MW-02D, MW-04I, MW-05D, MW-06S, MW-06I, MW-07I, MW-11I, MW-11D, MW-12S and MW-12I) exhibited an increase in potassium concentrations. Wells MW-01I and MW-05I exhibited a decrease in potassium concentrations. The remaining nine (9) wells were consistent.

Selenium

Selenium concentrations in all wells remained consistent.

Silver

Silver concentrations in all wells remained consistent.

Sodium

Twelve (12) wells (MW-01S, MW-01D, MW-02I, MW-02D, MW-05D, MW-06S, MW-06I, MW-06D, MW-07I, MW-11D, MW-12S and MW-12I) exhibited an increase in sodium concentrations. Three (3) wells (MW-04D, MW-04I and MW-05I) exhibited a decrease in sodium concentrations. The remaining seven (7) wells were consistent.

Thallium

Thallium concentrations in all wells remained consistent.

Vanadium

Vanadium concentrations in all wells remained consistent, except in well MW-01D which exhibited a decrease in vanadium concentration.

Zinc

Six (6) wells (MW-01S, MW-03S, MW-05S, MW-11I, MW-11D and MW-12S) exhibited an increase in zinc concentrations. Wells MW-02D and MW-04S exhibited a decrease in zinc concentrations. The remaining fourteen (14) well remained consistent.

Cyanide

Cyanide concentrations in all wells remained consistent, except for MW-01D which exhibited a decrease in cyanide concentration.

4.2.3 Volatile Organic Compounds

Volatile organic compounds (VOCs) were analyzed and compared against the NYSDEC Class GA groundwater standards or guidance values for the 22 wells sampled during the March 2015 sampling event.

As shown in **Appendix A-3**, twelve (12) of the 22 wells, contained no detectable concentrations of VOCs and nine (9) of the 22 wells, contained trace VOCs (less than 5 ug/l). 1,2-Dichloroethane (1,2-DCA) was detected in exceedance of the NYSDEC Class GA groundwater standard in MW-01D at a low estimated concentration of 0.9 ug/l. 1,2-DCA has a groundwater standard of 0.6 ug/l. Cis-1,2-Dichloroethene (Cis-1,2-DCE) was detected in exceedance of the NYSDEC Class GA groundwater standard in MW-06S at a concentration of 18 ug/l. Cis-1,2-DCE has a groundwater standard of 5 ug/l. In addition, vinyl chloride (VC) was also detected in exceedance of the NYSDEC Class GA groundwater standard in MW-06S at a concentration of 3.8 ug/l. VC has a groundwater standard of 2 ug/l. The remaining wells contained trace concentrations (less than groundwater standards and guidance values) of one or more VOCs. These VOCs included 1,1-dichloroethane, cis-1,2-dichlorothene, chloroform, chlorobenzene, 1,1,1 trichloroethane, tetrachloroethene, and trans-1,2-DCE. All VOCs in these wells were detected at concentrations below the contract required detection limit, and as such, are considered estimated values.

4.3 Volatile Organic Vapor and Combustible Gas Monitoring

The results of the volatile organic vapor and combustible gas monitoring in the headspace of the monitoring wells are presented in **Table 4-4**. The results show that volatile organic vapors were not detected in the headspace of the groundwater monitoring wells. Combustible gas readings for all groundwater monitoring wells were recorded at 0% of the Lower Explosive Limit (LEL).

Table 4-4

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
VOLATILE ORGANIC VAPOR AND COMBUSTIBLE GAS RESULTS
MARCH 2015 SAMPLING EVENT

Well Number	PID (ppm)	Combustible Gas (% LEL)
MW-01D	0.0	0
MW-01I	0.0	0
MW-01S	0.0	0
MW-02D	0.0	0
MW-02I	0.0	0
MW-03S	0.0	0
MW-03I	0.0	0
MW-03D	0.0	0
MW-04D	0.0	0
MW-04I	0.0	0
MW-04S	0.0	0
MW-05D	0.0	0
MW-05I	0.0	0
MW-05S	0.0	0
MW-06D	0.0	0
MW-06I	0.0	0
MW-06S	0.0	0
MW-07D	0.0	0
MW-07I	0.0	0
MW-07S	0.0	0
MW-10D	0.0	0
MW-10I	0.0	0
MW-10S	0.0	0
MW-11D	0.0	0
MW-11I	0.0	0

Table 4-4 (continued)

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
VOLATILE ORGANIC VAPOR AND COMBUSTIBLE GAS RESULTS
MARCH 2015 SAMPLING EVENT

Well Number	PID (ppm)	Combustible Gas (% LEL)
MW-11S	0.0	0
MW-12D	0.0	0
MW-12I	0.0	0
MW-12S	0.0	0
MW-13D	0.0	0
MW-13I	0.0	0
MW-13S	0.0	0
MW-14D	0.0	0
MW-14I	0.0	0
MW-14S	0.0	0

Notes:
PID: Photoionization Detector.
PPM: Parts per million.
% LEL: Percent lower explosive limit for methane.
Volatile organic vapor and combustible gas readings were measured in the headspace of the monitoring wells.

5.0 DATA VALIDATION

Twenty-two (22) groundwater samples, one blind duplicate sample, one matrix spike/matrix spike duplicate (MS/MSD) sample set, four trip blanks and one field blank was collected as part of the March 2015 Post Closure Groundwater Monitoring Program sampling event at the Sonia Road Landfill.

All samples were analyzed for Baseline NYCRR 360 VOCs, inorganic parameters and leachate indicators. Laboratory analyses were performed by American Analytical Laboratories, Farmingdale, NY; subcontracted Biochemical Oxygen Demand (BOD), Total Organic Carbon (TOC) and color to Pace Analytical, Melville, NY. All analyses were performed in accordance with United States Environmental Protection Agency (USEPA) SW-846 and New York State Department of Environmental Conservation (NYSDEC) 6/05 Analytical Services Protocol (ASP) methodologies as specified in NYCRR Part 360.

Four data packages (1503090, 1503098, 1503104 and 1503108) have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/Quality Control (QA/QC) requirements. In accordance with the contract requirements and approved Sampling and Analysis Plan, 10 percent of the environmental samples and all of the QA/QC samples (calibrations, blanks, spikes, etc.) were reviewed, yielding a "10%" validation". While all of the samples were reviewed for transcription errors, calculations were verified for five environmental samples (MW-01I, MW-04D, MW-07I, MW-11S and MW-12D), as well as all QA/QC data, were reviewed for compliance with analytical specifications. Data Validation Checklists were prepared for each data package and are presented in **Appendix C**.

The findings of the review process are summarized below.

- Methylene chloride and acetone were detected in the method, trip and field blanks associated with all samples. Methylene chloride and acetone were qualified as non-detected (UB) for all samples if detected.

- Iron was detected in the field blank associated with all samples. Iron was qualified as non-detected (UB) for samples Blind Duplicate, MW-01D, MW-01I, MW-02D, MW-02I, MW-05D, MW-06D, MW-06I, MW-07I, MW-11I, MW-11S, MW-12I and MW-12D.

- The percent recovery (%R) was above QC limits for potassium in data package 1503098. Potassium was qualified as estimated (J) if detected in the samples in this data package.

- Chloride and sulfate were detected in the field blanks associated with all samples. Chloride was qualified as non-detected (UB) for samples MW-11I and MW-12D. Sulfate was qualified as non-detect (UB) for samples MW-01I, MW-03S and MW-12D.

- The %Rs were below QC limits for ammonia and nitrate in data package 1503098. Ammonia and nitrate were qualified as estimated (J/UJ) in the samples in this data package.

- The percent recovery (%R) was below QC limits for ammonia in data packages 1503104 and 1503108. Ammonia was qualified as estimated (J/UJ) in the samples in these data packages.

- The relative percent difference (RPD) was above the QC limits for BOD in data package 150398. BOD was qualified as estimated (J/UJ) in the samples in this data package.

Blind Duplicate-3/17/15 was a duplicate of sample MW-02I. The matrix spike and matrix spike duplicate set was collected at well MW-03S.

Based on the findings of the data validation process, all results are deemed valid and usable for environmental assessment purposes as qualified above.

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

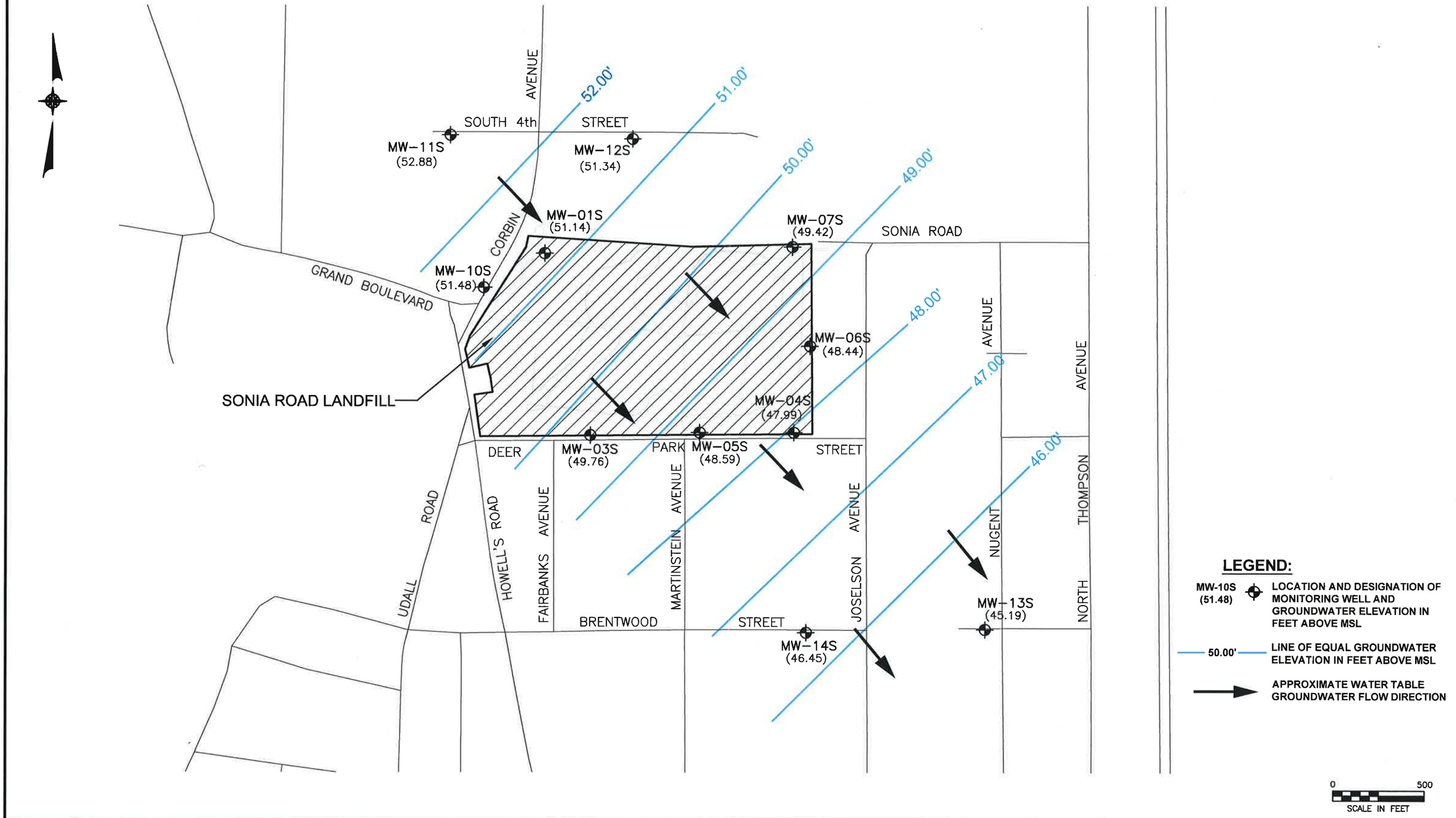
Groundwater level measurements were obtained on March 17, 2015, from the 22 monitoring wells included in the Post-Closure Groundwater Monitoring Program and the 13 additional site-related wells not sampled as part of the program. The depth to groundwater measurements, measuring point elevations, and calculated groundwater elevations for the 35 monitoring wells are summarized in **Table 6-1**.

The March 17, 2015 water level data were used to construct groundwater elevation contour maps for the shallow (water table), intermediate and deep Upper Glacial aquifer wells at and in the immediate vicinity of the Sonia Road Landfill. Water table and potentiometric surface (for the intermediate and deep wells) elevation contour maps are presented on **Figures 6-1, 6-2** and **6-3,** respectively. Groundwater flow in the vicinity of the landfill is toward the southeast for the zones of the Upper Glacial aquifer screened by the shallow, intermediate and deep wells. This flow direction is consistent with historic data for the site.

Table 6-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
MARCH 17, 2015

Well	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point(feet)	Groundwater Elevation (feet above msl)
MW-01S	66.01	14.87	51.14
MW-01I	65.36	14.24	51.12
MW-01D	64.53	13.39	51.14
MW-02I	78.24	27.90	50.34
MW-02D	78.43	28.31	50.12
MW-03S	70.76	21.00	49.76
MW-03I	70.77	21.25	49.52
MW-03D	70.50	21.06	49.44
MW-04S	71.10	23.11	47.99
MW-04I	69.31	21.42	47.89
MW-04D	69.03	21.09	47.94
MW-05S	70.28	21.69	48.59
MW-05I	70.26	21.65	48.61
MW-05D	70.96	22.12	48.84
MW-06S	74.45	26.01	48.44
MW-06I	74.52	26.10	48.42
MW-06D	75.02	26.60	48.42
MW-07S	72.83	23.41	49.42
MW-07I	73.43	24.01	49.42
MW-07D	75.04	25.68	49.36
MW-10S	56.65	5.17	51.48
MW-10I	56.16	5.00	51.16
MW-10D	56.34	5.26	51.08
MW-11S	59.87	6.99	52.88
MW-11I	60.38	7.20	53.18
MW-11D	60.19	7.15	53.04
MW-12S	58.79	7.45	51.34
MW-12I	58.92	7.56	51.36
MW-12D	58.61	7.26	51.35
MW-13S	70.51	25.32	45.19
MW-13I	70.30	25.30	45.00
MW-13D	70.37	25.28	45.09
MW-14S	64.55	18.10	46.45
MW-14I	64.57	18.22	46.35
MW-14D	64.58	18.16	46.42



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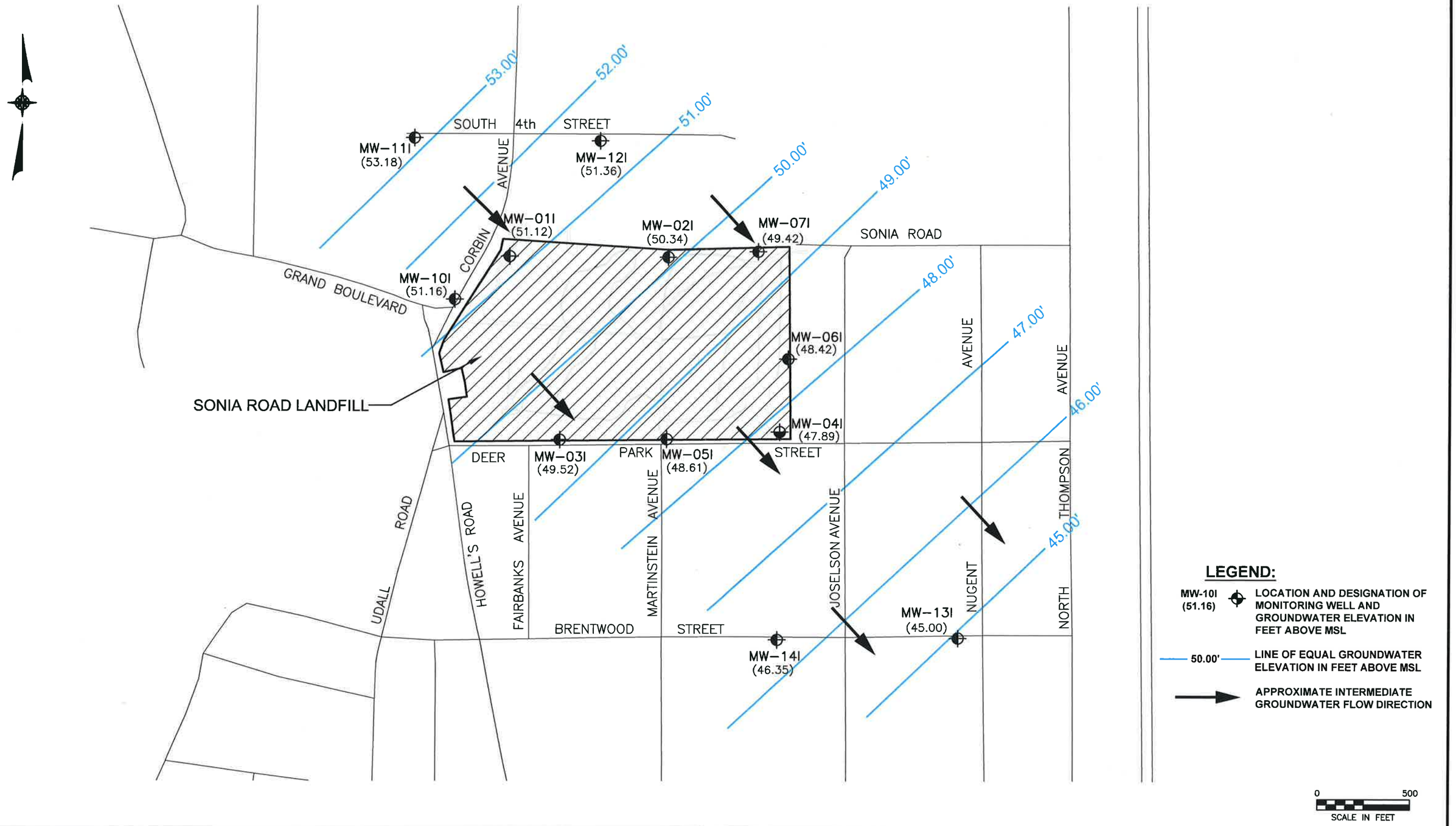
D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

WATER TABLE CONTOUR MAP
MARCH 17, 2015

FIGURE 6-1



D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

POTENTIOMETERIC SURFACE ELEVATION CONTOUR MAP FOR INTERMEDIATE UPPER GLACIAL AQUIFER
MARCH 17, 2015

FIGURE 6-2

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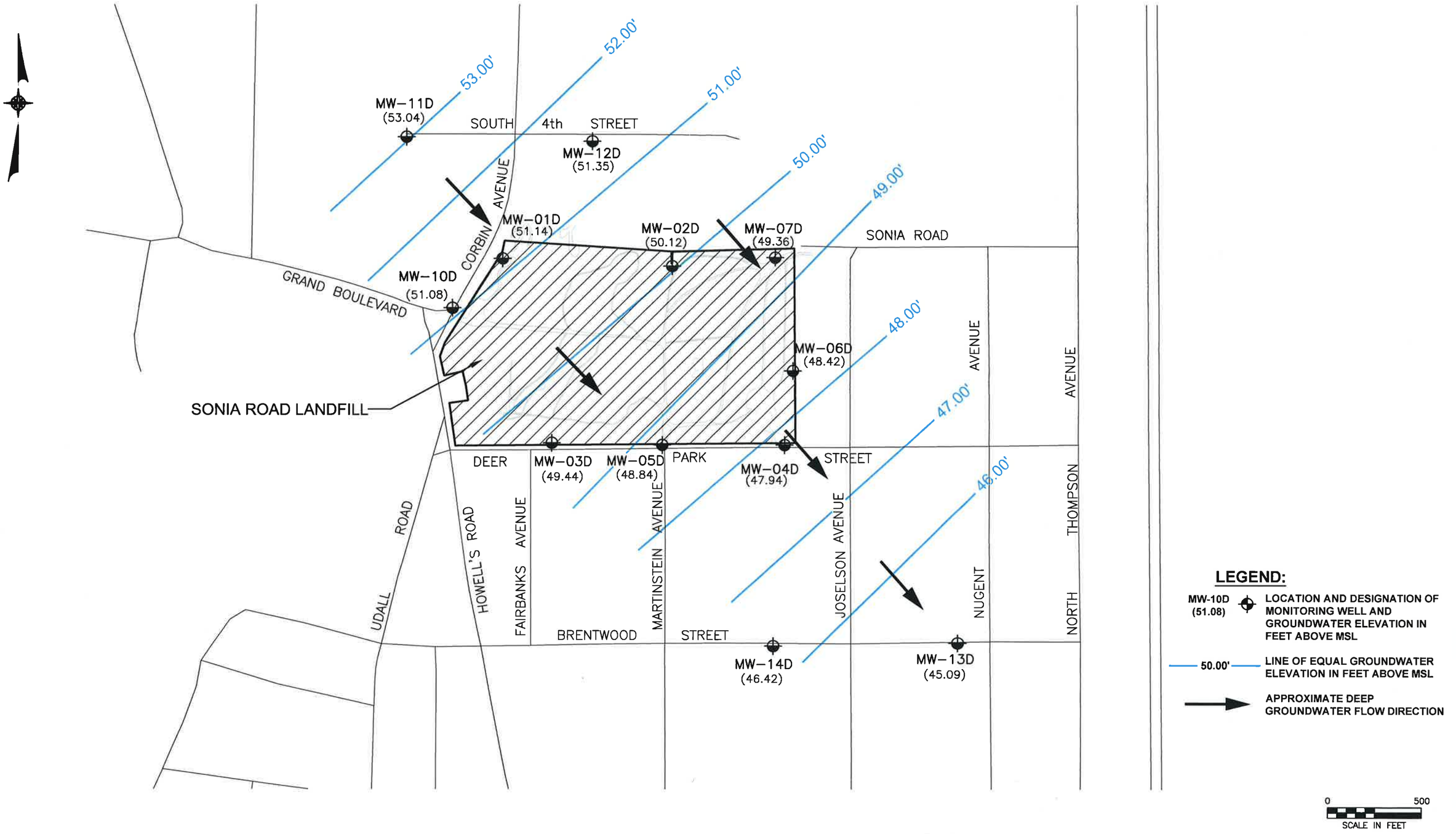

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

POTENTIOMETERIC SURFACE ELEVATION CONTOUR MAP FOR DEEP UPPER GLACIAL AQUIFER
MARCH 17, 2015

FIGURE 6-3

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7.0 FINDINGS AND RECOMMENDATIONS

7.1 Findings

Groundwater Flow

Based on groundwater level measurements obtained during the March 2015 sampling event and the water table and potentiometric surface elevation contour maps prepared for the Site, groundwater flow in the vicinity of the Sonia Road Landfill is toward the southeast for the zones within the Upper Glacial aquifer screened by the shallow, intermediate and deep wells. This flow direction is consistent with historic data for the site.

Groundwater Quality

Based on a comparison of the March 2015 sample results to the previous sampling event (November 2013), as well as review of the historical trend graphs in **Appendix B**, groundwater quality in the vicinity of the Sonia Road Landfill has not changed substantially.

The majority of monitoring wells sampled (15 out of 22), exhibited one or more of the following inorganic parameters: antimony (4 wells), iron, (9 wells), manganese (15 wells) and sodium (2 wells) at concentrations exceeding their respective groundwater standard/guidance value. The detected concentrations of the above inorganic parameters are likely not indicative of landfill-influenced groundwater, since concentrations of those parameters exceeding groundwater standards were detected in monitoring wells located upgradient and downgradient of the landfill.

With regard to leachate indicators, ammonia was detected at concentrations exceeding the groundwater standard in upgradient well MW-12I and downgradient well MW-04I. Since ammonia was detected in both an upgradient and downgradient well, it appears unlikely that the source of the detected ammonia in the downgradient groundwater is solely from the Sonia Road

Landfill. In addition, ammonia concentrations for well cluster 4 (S,I,D) as depicted in historical trend graphs in **Appendix B**, exhibit an overall decrease for each of these wells.

Slightly more than half of the monitoring wells (13 out of 22), exhibited total phenols at concentrations which exceeded the groundwater standard. The detected concentrations of total phenols are likely not indicative of landfill-influenced groundwater, since concentrations of total phenols were detected in monitoring wells located upgradient, as well as downgradient of the landfill.

With regard to VOCs, 1,2-DCA slightly exceeded the groundwater standard in upgradient well MW-01D. Cis-1,2-DCE and VC exceeded their respective groundwater standards in downgradient well MW-06S. No other VOCs were detected above groundwater standards or guidance values in any of the remaining twenty (20) monitoring wells.

7.2 Recommendations

Based on the results from the March 2015 sampling event and comparison of these results to historic data for the Sonia Road Landfill, it is recommended to continue to sample the groundwater monitoring wells on a 15-month schedule, as approved by the NYSDEC, and in accordance with the SAP.

APPENDIX A-1

Monitoring Well Sample Results- Leachate Indicator Parameters

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01D 11/28/06 (mg/l)	MW-01D 2/21/07 (mg/l)	MW-01D 5/25/07 (mg/l)	MW-01D 8/17/07 (mg/l)	MW-01D 11/9/07 (mg/l)	MW-01D 02/11/08 (mg/l)	MW-01D 5/15/08 (mg/l)	MW-01D 8/5/08 (mg/l)	MW-01D 11/3/08 (mg/l)	MW-01D 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5	20	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	77.0	55.2	48.2	34.9	33.4	38.3	42.8	38.8	32.7	30.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.68	0.10 U	0.37	0.98	0.57	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	10	2 U	2 U	6	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	67.3	38.3	71.6	66.2	107	39.2	10 U	10 U	86.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	1,510	689	1,730	1,430	49.5	709	366	195	182	144
Hardness (as CaCO3)	-	-	(mg/l)	200	120	240	180	22.0	80.0	46.0	19.0	26.0	20.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.58	0.61	2.8	4.25	0.10 U	12.2	12.0	11.0	11.5	14.9
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	84	36.3	81.6	75.0	5.0 U	42.8	20.9	14.8	7.32	10.6
Total Organic Carbon	-	-	(mg/l)	2.5	11.5	2.5	1.4	12.7	1.0	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	2,840	1,240	2,730	2,350	212	1190	729	446	399	388
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.49	3.65	1.66	1.01	3.65	0.68	0.30	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01D 8/12/09 (mg/l)	MW-01D 2/4/10 (mg/l)	MW-01D 5/26/11 (mg/l)	MW-01D 2/28/12 (mg/l)	MW-01D 11/12/2013 (mg/l)	MW-01D 03/17/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5	30	40	15	1	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	22.9	25.6	27.0 D	14.4	13.1	13.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.15	.1 U	0.0500 U	0.0500 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	2 U	4 U	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	.50 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	18.2	10 U	37.2	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	104	37.1	3.11	20.8	55.0	205
Hardness (as CaCO3)	-	-	(mg/l)	15.0	56.0	38	20	9.34	25.4
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	11.4	4.43	1.03 D	3.37 D	3.36 J	5.42 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	12.5	0.005 U	0.005 U	0.0120 UB	0.0100 U
Sulfate	250 ST		(mg/l)	16.9	5 U	5 U	12.4	12.6	33.3
Total Organic Carbon	-	-	(mg/l)	1	2.7	2.8	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	279	136	50	1820	173	454 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1	0.65 U	1.97	0.86	1.37	0.400 U

NOTES:

NA: Not analyzed

U* or UB: Analyzed for but not detected, value shown is instrument detection limit

J: Estimated value

D: Diluted.

UJ* or UJ: Value was not detected above quantitation limit but was an appoximate concentration as determined by data validation.

: Concentration exceeds Standard/Guidance Value

U* or UB: Analyte considered undetected based on data validation criteria.

J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01I 11/28/06 (mg/l)	MW-01I 2/21/07 (mg/l)	MW-01I 5/25/07 (mg/l)	MW-01I 8/15/07 (mg/l)	MW-01I 11/9/07 (mg/l)	MW-01I 2/11/08 (mg/l)	MW-01I 5/15/08 (mg/l)	MW-01I 8/5/08 (mg/l)	MW-01I 11/3/08 (mg/l)	MW-01I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	37.4	25.5	25.2	24.3	14.8	15	12.8	17.7	13.6	7.95
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.65	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	13	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	16.7	20.7	19.7	14.6	12.1	30.9	35.6	5.90	5.12	4.86
Hardness (as CaCO3)	-	-	(mg/l)	55.0	50.0	50.0	42.0	35	46	50.0	28.0	24.0	130
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.30	1.01	1.11	1.82	2.66	0.1 U	0.1 U	1.77	1.38	0.83
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.3	16.2	14.6	15.0	17.4	11.9	11.9	19.4	14.7	18.4
Total Organic Carbon	-	-	(mg/l)	1 U	2.4	1.5	1 U	1.4	1 U	1 U	1.1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	100	90	95	94	96	89	134	77	53	58
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.10	0.97	0.94	1.53	0.58	0.93	0.72	0.77	0.20	0.34

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01I 8/12/09 (mg/l)	MW-01I 2/4/10 (mg/l)	MW-01I 5/26/11 (mg/l)	MW-01I 2/28/12 (mg/l)	MW-01I 11/12/2013 (mg/l)	MW-01I 03/17/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5	10	5 U	15	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.0	8.90	6.40	10.20	6.06	5.00
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1U	.10 U	1.47	0.280	0.0500 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	6.97	8.25	11.7	19.2	120	46.0
Hardness (as CaCO3)	-	-	(mg/l)	24.0	25.0	22 D	22	95.3	30.3
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.94	1.27	0.80	0.83	0.910 J	0.256
Phenols, total	0.001 ST	-	(mg/l)	24.0	5 U	0.005 U	0.005 U	0.0100 U	0.0580
Sulfate	250 ST		(mg/l)	21.9	13.2	9.89	6.86	3.34	9.79 UB
Total Organic Carbon	-	-	(mg/l)	1	1 U	1 U	1U	1	1 U
Total Dissolved Solids	-	-	(mg/l)	58	63	84	72	265	107 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.13	0.55 U	0.10 U	1.46	1.46	0.400 U

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01S 11/28/06 (mg/l)	MW-01S 2/21/07 (mg/l)	MW-01S 5/25/07 (mg/l)	MW-01S 8/15/07 (mg/l)	MW-01S 11/9/07 (mg/l)	MW-01S 2/11/08 (mg/l)	MW-01S 5/15/08 (mg/l)	MW-01S 8/5/08 (mg/l)	MW-01S 11/3/08 (mg/l)	MW-01S 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	30	NA	NA	NA	NA	NA	NA	60.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	198	242	181	200	173	192	152	170	170	146
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.33	0.10 U	0.10 U	0.33	0.17	0.1 U	0.1 U	0.34	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	5	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	21.1	40.9	33.3	40.9	28.2	31.7	11.9	26.8	26.8	10 U
Chloride	250 ST	16887-00-6	(mg/l)	78.1	69.3	125	90.8	86.0	57.1	81.0	70.8	61.8	59.1
Hardness (as CaCO3)	-	-	(mg/l)	320	360	280	270	18.0	230	188	240	200	280
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.19	0.36	0.10 U	0.10 U	0.27	0.1 U	0.20	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	177	141	71.8	56	46.9	65.7	48.0	111	62.7	61.7
Total Organic Carbon	-	-	(mg/l)	10.1	12.0	9.6	9.4	6.8	8.4	6.1	9.7	7.8	6.0
Total Dissolved Solids	-	-	(mg/l)	604	562	498	459	395	379	386	477	365	329
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.84	1.38	1.35	1.26	0.75	0.54	0.50	0.68	0.48	0.41

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-01S 8/12/09 (mg/l)	MW-01S 2/4/10 (mg/l)	MW-01S 5/26/11 (mg/l)	MW-01S 2/28/12 (mg/l)	MW-01S 11/12/2013 (mg/l)	MW-01S 03/17/2015 (mg/l)
Color (APHA Units)	-	-	(units)	50	20	30	55	15	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	168	157	137 D	120 D	120	144
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.41	0.7	0.543	0.126
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	2 U	4 U	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	32.7	19.4	18.6	29.3	11.3	7.35 J
Chloride	250 ST	16887-00-6	(mg/l)	106	46.4	175 D	60.9	42.0	47.0
Hardness (as CaCO3)	-	-	(mg/l)	200	170	220 D	220 D	133	158
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.14	0.33	0.16	.1 U	0.100 U	0.442
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.00560 UB	0.0100 U
Sulfate	250 ST		(mg/l)	86.0	47.1	57.8 D	39.8	36.9	43.7
Total Organic Carbon	-	-	(mg/l)	8.6	6.8	6.4	5.9	4.6	4.5
Total Dissolved Solids	-	-	(mg/l)	421	322	499	336	262	300 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.81	0.74 U	0.63 U*	0.66	2.05	0.231 J

NOTES:

NA: Not analyzed

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J: Estimated value

D: Diluted.

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: Concentration exceeds Standard/Guidance Value

U* or UB: Analyte considered undetected based on data validation criteria.

J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02D 11/30/06 (mg/l)	MW-02D 2/22/07 (mg/l)	MW-02D 5/25/07 (mg/l)	MW-02D 8/14/07 (mg/l)	MW-02D 11/13/07 (mg/l)	MW-02D 2/12/08 (mg/l)	MW-02D 5/19/08 (mg/l)	MW-02D 8/4/08 (mg/l)	MW-02D 11/3/08 (mg/l)	MW-02D 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.3	8.2	7.8	8.4	7.2	8.6	6.7	6.9	6.85	6.85
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	6.3	6.7	5.8	5.6	6.2	5.7	4.86	4.66	4.98	4.64
Hardness (as CaCO3)	-	-	(mg/l)	28	40.0	25	26	22	28	22.0	21.0	22.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.64	0.44	0.31	0.34	0.30	0.14	0.1 U	0.1 U	0.18	0.11
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	17.9	19.3	19.3	19.1	13.4	17.0	16.1	15.3	14.7	11.7
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	2.3	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	61	67	59	62	51	68	55	53	47	42
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.18	0.55	0.50	0.50	0.16	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02D 8/14/09 (mg/l)	MW-02D 2/8/10 (mg/l)	MW-02D 5/31/11 (mg/l)	MW-02D 2/28/12 (mg/l)	MW-02D 11/12/2013 (mg/l)	MW-02D 03/17/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5 U	5 U	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	8.30	7.60	9.60	70.6 D	12.1	25.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.10 U	1.81	0.0500 U	0.0500 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	10 U	4 U	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	11.3	5.38	5.92	38.4	25.0	32.0
Hardness (as CaCO3)	-	-	(mg/l)	23.0	19.0	23	100	36.2	69.5
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.45	0.46	2.05 D	0.1 U	1.41 J	1.22 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0190 UB	0.0120
Sulfate	250 ST		(mg/l)	17.5	11.3	13.4	20.8	11.7	18.2
Total Organic Carbon	-	-	(mg/l)	1	1 U	1.0 U	1.5	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	62	56	61	183	95.0	119 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1U	0.23	0.10 U	1.88	0.817	0.400 U

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02I 11/30/06 (mg/l)	MW-02I 2/22/07 (mg/l)	MW-02I 5/25/07 (mg/l)	MW-02I 8/14/07 (mg/l)	MW-02I 11/13/07 (mg/l)	MW-02I 2/12/08 (mg/l)	MW-02I 5/19/08 (mg/l)	MW-02I 8/4/08 (mg/l)	MW-02I 11/3/08 (mg/l)	MW-02I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	31.4	20.9	31.0	41.0	49.8	35.0	34.0	34.7	30.1	23.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.53	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.18
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	1035	10 UJ	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	36.8	37.9	35.4	40.3	28.3	16.2	19.1	15.2	14.8	16.5
Hardness (as CaCO3)	-	-	(mg/l)	76.0	64.0	68.0	68.0	54	54	45.0	40.0	38.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.62	1.74	0.84	1.2	0.93	1.96	0.1 U	1.58	1.47	2.03
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	18.4	23.6	46.6	32.1	24.4	12.8	9.05	8.07	8.98	13.4
Total Organic Carbon	-	-	(mg/l)	1.2	1.3	1.8	1.4	2.3	1 U	1 U	1.1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	129	159	146	194	139	95	101	86	73	86
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.82	0.71	0.69	0.68	1.92	0.13	0.14	0.50	0.51	0.25

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02I 8/14/09 (mg/l)	MW-02I 2/8/10 (mg/l)	MW-02I 5/31/11 (mg/l)	MW-02I 2/28/12 (mg/l)	MW-02I 11/12/2013 (mg/l)	MW-02I 03/17/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5	5 U	1	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	28.1	29.6	44.9	11.7	52.5	50.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	2.95	0.1 U	4.08	0.886
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10	10 U	10 U	10 U	3.44 J	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	26.7	20.0	16.9	14.9	34.0	42.5
Hardness (as CaCO3)	-	-	(mg/l)	44.0	42.0	44	34	73.9	78.2
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.35	1.80	0.42	1.76	0.900 J	1.92 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	23.4	0.005 U	0.005 U	0.0140 UB	0.0100 U
Sulfate	250 ST		(mg/l)	19.1	9.82	19	91.7	17.8	23.8
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.2	1 U	1.1	1.1
Total Dissolved Solids	-	-	(mg/l)	103	105	98	77	140	149 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.13	1.74	3.22	2.03	6.38	1.12

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)
Color (APHA Units)	-	-	(units)										
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)										
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	A	A	A	A	A	A	A	A	A	A
Biochemical Oxygen Demand	-	-	(mg/l)	B	B	B	B	B	B	B	B	B	B
Bromide	2 GV	24959-67-9	(mg/l)	A	A	A	A	A	A	A	A	A	A
Chemical Oxygen Demand	-	-	(mg/l)	N	N	N	N	N	N	N	N	N	N
Chloride	250 ST	16887-00-6	(mg/l)	D	D	D	D	D	D	D	D	D	D
Hardness (as CaCO3)	-	-	(mg/l)	O	O	O	O	O	O	O	O	O	O
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	N	N	N	N	N	N	N	N	N	N
Phenols, total	0.001 ST	-	(mg/l)	E	E	E	E	E	E	E	E	E	E
Sulfate	250 ST	14808-79-8	(mg/l)	D	D	D	D	D	D	D	D	D	D
Total Organic Carbon	-	-	(mg/l)										
Total Dissolved Solids	-	-	(mg/l)										
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)										

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-02S (mg/l)	MW-02S (mg/l)	MW-02S (mg/l)
Color (APHA Units)	-	-	(units)			
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)			
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	A	A	A
Biochemical Oxygen Demand	-	-	(mg/l)	B	B	B
Bromide	2 GV	24959-67-9	(mg/l)	A	A	A
Chemical Oxygen Demand	-	-	(mg/l)	N	N	N
Chloride	250 ST	16887-00-6	(mg/l)	D	D	D
Hardness (as CaCO3)	-	-	(mg/l)	O	O	O
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	N	N	N
Phenols, total	0.001 ST	-	(mg/l)	E	E	E
Sulfate	250 ST		(mg/l)	D	D	D
Total Organic Carbon	-	-	(mg/l)			
Total Dissolved Solids	-	-	(mg/l)			
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)			

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HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-03S 11/29/06 (mg/l)	MW-03S 2/22/07 (mg/l)	MW-03S 6/1/07 (mg/l)	MW-03S 8/14/07 (mg/l)	MW-03S 11/14/07 (mg/l)	MW-03S 2/11/08 (mg/l)	MW-03S 5/15/08 (mg/l)	MW-03S 8/5/08 (mg/l)	MW-03S 11/5/08 (mg/l)	MW-03S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	100	NA	NA	NA	NA	NA	NA	50	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	274	288	326	288	259	228	278	240	217	236
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	2.60	2.88	2.96	2.96	2.22	1.17	1.61	1.73	1.3	1.16
Biochemical Oxygen Demand	-	-	(mg/l)	9	21	12	12	19	16	11	11	14.3	14.4
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	43.7	33.3	28.2	33.3	40.9	16.9	10 U	21.8	24.3	13.3
Chloride	250 ST	16887-00-6	(mg/l)	47.7	45.8	43.5	37.5	38.2	37.2	36.3	34.0	33.8	34.9
Hardness (as CaCO3)	-	-	(mg/l)	300	320	340	270	234	240	260	220	220	450
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.13	0.1 U	0.1 U	0.1 U	0.15	0.13
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	11.9	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.3	8.8	9.8	7.9	7.4	6.7	7.1	7.2	6.8	5.7
Total Dissolved Solids	-	-	(mg/l)	404	364	410	360	347	293	337	330	278	329
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.60	4.52	4.09	4.57	3.67	2.77	2.70	3.41	2.83	1.90

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-03S 8/14/09 (mg/l)	MW-03S 2/4/10 (mg/l)	MW-03S 6/1/11 (mg/l)	MW-03S 8/28/12 (mg/l)	MW-03S 11/13/2013 (mg/l)	MW-03S 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	200	200	150 D	125 D	25	250
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	304	259	210 D	186 D	222	201
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.67	1.27	2.27	1.75 D	1.70	0.88 J
Biochemical Oxygen Demand	-	-	(mg/l)	9	16	9	14	22	13 J
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	30.3	21.8	25.9	29.9	4.07 J	14.6
Chloride	250 ST	16887-00-6	(mg/l)	48.8	53.8	50	49.4	56.0	42.0
Hardness (as CaCO3)	-	-	(mg/l)	300	240	220 D	270 D	183	175
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.24	0.10 U	.1 U	0.100 U	1.89 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.00663 UB	0.00989 J
Sulfate	250 ST		(mg/l)	9.30	5 U	5 U	5 U	4.48	3.49 UB
Total Organic Carbon	-	-	(mg/l)	8.9	6.4	7.5	6.2	6.3	6
Total Dissolved Solids	-	-	(mg/l)	419	338	304	324	333	305 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.40	3.55	2.69	2.15	4.82	1.22

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Color (APHA Units)	-	-	(units)	70	30	NA	NA	NA	NA	NA	NA	80.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	49.8	40.0	35.6	U*	39.8	40.7	33.6	25.9	23.2	20.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.90	0.10 U	0.10 U	0.89	0.10 U	0.56	0.73	0.52	0.3	0.36
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	10.4	10.4	7.6	U*	9.9	10.7	8.38	6.23	8.47	20.2
Hardness (as CaCO3)	-	-	(mg/l)	64	55.0	60	75	54.0	65.0	56.0	35.0	40.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.76	0.73	10 U	1.0	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	16.5	21.5	19.8	17.0	19	21.6	18.9	13.8	11.5	10.3
Total Organic Carbon	-	-	(mg/l)	1.6	1.0 U	3.3	1.4	1.1	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	106	106	95	U*	101	96	99	70	64	90
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.60	0.74	0.69	1.9	0.24	0.89	0.79	0.62	0.73	0.64

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-04D 8/12/09 (mg/l)	MW-04D 2/4/10 (mg/l)	MW-04D 5/26/11 (mg/l)	MW-04D 8/27/12 (mg/l)	MW-04D 11/13/2013 (mg/l)	MW-04D 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	140	20	30	10	10	350
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	28.5	18.4	18.8	19.7	110	17.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.39	0.1 U	0.10 U	0.22	0.180	0.167 J
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	8 U	5 J
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10.0 U	7.35 J
Chloride	250 ST	16887-00-6	(mg/l)	39.6	13.0	20.9	17.5	55.0	45.5
Hardness (as CaCO3)	-	-	(mg/l)	54.0	40.0	47	48 D	68.8	50.3
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.50	0.42	0.37	0.100 U	1.79 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	16.3	0.005 U	0.005 U	0.00592 UB	0.0100
Sulfate	250 ST		(mg/l)	16.8	11.0	15.3	12.6	37.0	26.5
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1.8	1.5
Total Dissolved Solids	-	-	(mg/l)	177	72	97	92	209	181 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.50	0.21 U	0.10 U	0.1 U	1.67	0.400 U

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Color (APHA Units)	-	-	(units)	70	20	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	104	68.8	76.4	245	102	98.8	50.6	70.2	48.4	65.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.33	0.10 U	0.10 U	2.63	0.10 U	1.00	0.1 U	1.09	0.5	0.82
Biochemical Oxygen Demand	-	-	(mg/l)	3	2 U	2 U	18	2 U	4	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	13.0	10 U	U*	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	19.8	20.8	21.3	42.1	26.5	48.7	32.0	47.1	39.6	55.1
Hardness (as CaCO3)	-	-	(mg/l)	100	85	85	230	112	130	88.0	116	94.0	200
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.98	0.99	10 U	294	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	7.8	12.3	12.4	5.0 U	10.5	18.4	13.5	10.3	20.5	32.1
Total Organic Carbon	-	-	(mg/l)	2.4	1.4	2.5	6.6	2.2	3.2	1 U	2.2	1.5	1.3
Total Dissolved Solids	-	-	(mg/l)	151	134	158	338	181	217	147	192	144	219
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.71	0.90	0.82	5.24	0.10 U	1.80	1.07	1.23	3.73	1.00

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-04I 8/12/09 (mg/l)	MW-04I 2/4/10 (mg/l)	MW-04I 5/26/11 (mg/l)	MW-04I 8/27/12 (mg/l)	MW-04I 11/13/2013 (mg/l)	MW-04I 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	200	10	70	75 D	15	150
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	243	75.1	52.4 U	141 D	104	63.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.37	0.1 U	0.1 U	0.22	1.42	2.36 DJ
Biochemical Oxygen Demand	-	-	(mg/l)	17 J*	2 U	2 U	6	8 U	4 UJ
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	27.9	10 U	10 U	14.7	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	79.6	48.8	19.1	83.9 D	93.0	58.5
Hardness (as CaCO3)	-	-	(mg/l)	180	92.0	58 D	180 D	76.3	99.3
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.28	0.83	0.1 U	0.1 U	0.0503 J	1.48 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.00780 UB	0.00795 J
Sulfate	250 ST		(mg/l)	11.3 U	19.9	14.8	7.08	22.6	22.4
Total Organic Carbon	-	-	(mg/l)	3.6	1.2	1.1	2.3	2.8	1.9
Total Dissolved Solids	-	-	(mg/l)	337	200	111	326	287	223 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.90	0.64 U	0.15 U*	0.23	3.80	2.50

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-04S 11/30/06 (mg/l)	MW-04S 3/2/07 (mg/l)	MW-04S 5/24/07 (mg/l)	MW-04S 8/10/07 (mg/l)	MW-04S 11/13/07 (mg/l)	MW-04S 2/11/08 (mg/l)	MW-04S 5/15/08 (mg/l)	MW-04S 8/4/08 (mg/l)	MW-04S 11/3/08 (mg/l)	MW-04S 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	80	60	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	338	285	321	316	342	296	300	332	288	311
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	5.80	5.47	5.62	4.99	5.28	3.54	4.80	4.97	2.1	3.15
Biochemical Oxygen Demand	-	-	(mg/l)	13	20	12	18	9	12	11	20	15.9	22.0
Bromide	2 GV	24959-67-9	(mg/l)	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	58.6	25.7	U*	43.4	21.8	26.8	26.8	66.5	10 U
Chloride	250 ST	16887-00-6	(mg/l)	72.9	70.7	71.7	61.2	68.1	57.4	60.2	55.0	49.9	48.6
Hardness (as CaCO3)	-	-	(mg/l)	360	1,100	310	320	290	280	260	268	300	510
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.0	8.2	8.9	8.5	7.9	7.4	7.0	8.1	8.6	4.8
Total Dissolved Solids	-	-	(mg/l)	424	416	435	460	440	417	422	416	385	396
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.14	7.50	8.45	6.49	7.03	5.59	5.79	6.04	4.73	4.27

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-04S 8/12/09 (mg/l)	MW-04S 2/4/10 (mg/l)	MW-04S 5/31/11 (mg/l)	MW-04S 8/27/12 (mg/l)	MW-04S 11/13/2013 (mg/l)	MW-04S 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	120	60	300 D	75 D	30	250
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	350	297	292 D	290 D	338	323
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	2.61	2.66	5.73 D	3.64	3.97	1.82 J
Biochemical Oxygen Demand	-	-	(mg/l)	19 J*	14	17 J*	17	32	27 J
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.50 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	23.0	36.0	28.6	26	26.2	20.2
Chloride	250 ST	16887-00-6	(mg/l)	48.4	49.9	52.4 D	52.7 D	45.0	44.0
Hardness (as CaCO3)	-	-	(mg/l)	290	275	300 D	310 D	245	277
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.11	0.10 U*J*	.1 U	0.0773 J	2.64 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0107 UB	0.0160
Sulfate	250 ST		(mg/l)	10.2	5 U	5.00 U	5 U	2.00 U	2.00 U
Total Organic Carbon	-	-	(mg/l)	6.3	5.4	6.6	5.8	6.7	8.2
Total Dissolved Solids	-	-	(mg/l)	398	378	432	448	394	459 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.38	4.79	6.03 D	4.30 D	8.92	3.90

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05D 11/30/06 (mg/l)	MW-05D 2/21/07 (mg/l)	MW-05D 5/25/07 (mg/l)	MW-05D 8/14/07 (mg/l)	MW-05D 11/13/07 (mg/l)	MW-05D 2/11/08 (mg/l)	MW-05D 5/15/08 (mg/l)	MW-05D 8/5/08 (mg/l)	MW-05D 11/5/08 (mg/l)	MW-05D 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	77.0	42.3	73	59.8	31.5	48.5	19.2	37.4	27.1	19.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.90	0.10 U	0.10 U	0.46	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	20.6	20.6	18.1	20.6	19.4	19.4	10 U	11.9	10 U
Chloride	250 ST	16887-00-6	(mg/l)	63.7	61.0	48.5	44.2	42.6	82.6	65.9	46.7	37.4	35.8
Hardness (as CaCO3)	-	-	(mg/l)	190	160	200	180	120	180	152	132	150	220
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.16	2.84	1.57	2.4	4.33	1.60	3.64	5.60	7.65	9.56
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	112	85.5	157	103	77.1	82.7	80.9	105	90.6	53.2
Total Organic Carbon	-	-	(mg/l)	2.9	2.9	3.6	3.3	2.9	2.4	3.2	2.0	1.4	1 U
Total Dissolved Solids	-	-	(mg/l)	344	303	348	369	275	351	296	292	262	237
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.46	1.00	1.33	1.3	0.58	0.96	0.94	0.52	0.27	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05D 8/17/09 (mg/l)	MW-05D 2/8/10 (mg/l)	MW-05D 6/1/11 (mg/l)	MW-05D 8/28/12 (mg/l)	MW-05D 11/13/2013 (mg/l)	MW-05D 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	10	5 U	5	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	23.5	12.4	13.4	14.6 D	9.09	12.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.13	.1 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	12	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	67.5	46.4	34.5	9.32	13.0	22.5
Hardness (as CaCO3)	-	-	(mg/l)	110	82.0	70	19	25.5	45.2
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.45	5.28	2.3 D	1.6	1.07	0.948 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0216 UB	0.0240
Sulfate	250 ST		(mg/l)	84.0	29.3	49.9 D	20.1	29.4	38.3
Total Organic Carbon	-	-	(mg/l)	1.0	1.2	1.2	1 U	1.2	1 U
Total Dissolved Solids	-	-	(mg/l)	300	179	163	98	110	122 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.41	1.37	0.19	0.62	1.07	0.645

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SONIA ROAD LANDFILL
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CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05I 11/30/06 (mg/l)	MW-05I 2/21/07 (mg/l)	MW-05I 5/25/07 (mg/l)	MW-05I 8/14/07 (mg/l)	MW-05I 11/13/07 (mg/l)	MW-05I 2/11/08 (mg/l)	MW-05I 5/15/08 (mg/l)	MW-05I 8/5/08 (mg/l)	MW-05I 11/5/08 (mg/l)	MW-05I 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	20	NA	NA	NA	NA	NA	NA	40.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	79.5	72.5	63.3	70.5	57	57.8	69.4	71.8	42.6	47.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.85	0.10 U	0.10 U	1.52	0.10 U	0.28 UJ	0.53	0.1 U	0.1 U	0.1 UJ*
Biochemical Oxygen Demand	-	-	(mg/l)	3	2 U	7	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	25.7	10 U	10.5	18.1	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	35.2	33.7	59.1	62.3	61.6	52.9	51.4	18.1	21.0	22.6
Hardness (as CaCO3)	-	-	(mg/l)	136	120	130	180	124	110	96.0	96.0	14.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.46	0.11	0.1 U	1.78	0.1 U	0.1 U	0.1 U	0.1 U	0.11
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	76.0	59.3	56.8	52.8	50.0	36.1	36.8	67.3	32.3	38.0
Total Organic Carbon	-	-	(mg/l)	3.3	3.1	3.9	3.4	3.4	3	2.9	3.1	1.4	1.0
Total Dissolved Solids	-	-	(mg/l)	231	207	267	286 J	297	212	223	203	126	151
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.26	1.05	2.45	2.32	0.41	1.28	0.74	0.48	0.18	0.16 J*

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05I 8/17/09 (mg/l)	MW-05I 2/8/10 (mg/l)	MW-05I 5/31/11 (mg/l)	MW-05I 8/28/12 (mg/l)	MW-05I 11/13/2013 (mg/l)	MW-05I 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	10	60	250 D	100 D	25	150
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	42.3	38.3	57.6 D	40.8	67.7	65.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.13	0.66	0.570	0.684 J
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2	2 U	2 U	8 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	26.5	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	37.6	28.0	27.0	12.5	70.0	25.0
Hardness (as CaCO3)	-	-	(mg/l)	88.0	64.0	90 D	59	96.5	57.5
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.63	0.10 U	.1 U	0.100 U	0.236
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	16.7	0.005 U	0.005 U	0.0110 UB	0.0100 U
Sulfate	250 ST		(mg/l)	32.7	22.5	28.7	12.9	70.6	29.6
Total Organic Carbon	-	-	(mg/l)	1.3	2.6	2.3	1 U	3.2	1.9
Total Dissolved Solids	-	-	(mg/l)	196	126	164	100	300	152 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.23	1.67	0.20	0.68	1.70	1.41

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D&B ENGINEERS AND ARCHITECTS, P.C.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05S 11/30/06 (mg/l)	MW-05S 2/21/07 (mg/l)	MW-05S 6/1/07 (mg/l)	MW-05S 8/14/07 (mg/l)	MW-05S 11/13/07 (mg/l)	MW-05S 2/11/08 (mg/l)	MW-05S 5/15/08 (mg/l)	MW-05S 8/5/08 (mg/l)	MW-05S 11/5/08 (mg/l)	MW-05S 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	50	NA	NA	NA	NA	NA	NA	60.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	392	389	386	420	351	328	302	324	277	266
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	6.24	6.07	6.89	7.86	6.46	4.01	5.20	5.75	4.0	3.40
Biochemical Oxygen Demand	-	-	(mg/l)	18	12	12	23	16	10	9	2 U	15.2	15.5
Bromide	2 GV	24959-67-9	(mg/l)	2.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16.0	38.3	38.3	51	43.4	16.9	36.7	26.8	29.3	10.9
Chloride	250 ST	16887-00-6	(mg/l)	60.6	58.4	48.8	46.2	49	45.6	36.3	38.5	38.3	34.2
Hardness (as CaCO3)	-	-	(mg/l)	340	360	360	440	340	310	220	290	300	460
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.22	0.54	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.20	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.8	10.3	11.1	10.9	9.5	7.9	8.1	1.4	8.9	5.8
Total Dissolved Solids	-	-	(mg/l)	460	451	454	502	456	395	363	403	371	372
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.46	8.54	9.15	9.63	8.4	6.90	6.71	7.46	5.77	5.01

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-05S 8/17/09 (mg/l)	MW-05S 2/8/10 (mg/l)	MW-05S 5/31/11 (mg/l)	MW-05S 8/29/12 (mg/l)	MW-05S 11/13/2013 (mg/l)	MW-05S 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	40	50	200 D	150 D	25	250
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	334	195	264 D	272 D	294	259
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	2.56	0.50	5.26 D	5.18 D	4.28	1.85 J
Biochemical Oxygen Demand	-	-	(mg/l)	15	18	2	18 UJ	22	11
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	32.7	21.8	29.2	26	7.55 J	24.0
Chloride	250 ST	16887-00-6	(mg/l)	49.3	35.0	46.6	39.8	47.0	43.0
Hardness (as CaCO3)	-	-	(mg/l)	320	280	270 D	330 D	208	226
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.18	0.17	0.1 UJ	0.100 U	2.02 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5.4	0.005 U	0.005 U	0.00571 UB	0.0100 U
Sulfate	250 ST		(mg/l)	11.6	22.8	5 U	5 U	2.56	2.00 U
Total Organic Carbon	-	-	(mg/l)	8.7	4.8	7.4	1.6	7	8.9
Total Dissolved Solids	-	-	(mg/l)	496	313	357	383	956	355 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.62	5.79	5.66 D	5.42 D	7.66	4.27

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06D 12/1/06 (mg/l)	MW-06D 2/22/07 (mg/l)	MW-06D 5/24/07 (mg/l)	MW-06D 8/10/07 (mg/l)	MW-06D 11/9/07 (mg/l)	MW-06D 2/11/08 (mg/l)	MW-06D 5/15/08 (mg/l)	MW-06D 8/4/08 (mg/l)	MW-06D 11/3/08 (mg/l)	MW-06D 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	19.9	10.1	6.0	U*	12.2	27.4	17.8	29.8	30.9	29.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.14	0.10 U	0.10 U	0.01 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	3.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	23.1	10 U	10 U	14.4	19.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	12.7	14.7	14.1	U*	13.9	16.8	15.8	23.9	25.5	29.3
Hardness (as CaCO3)	-	-	(mg/l)	52	43.0	24	56	30.0	42.0	48.0	72.0	64.0	150
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.74	0.73	0.70	U*	0.7	0.1 U	0.37	0.60	0.53	1.38
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.7	17.9	16.7	16.6	17.7	17.3	16.9	19.8	19.4	14.0
Total Organic Carbon	-	-	(mg/l)	1 U	1.0	1.2	1.0 U	1.7	1.0	1 U	1.4	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	82	74	72	U*	74	85	97	117	109	131
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.26	0.71	0.63	0.50	0.19	0.10	0.18	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06D 8/11/09 (mg/l)	MW-06D 2/4/10 (mg/l)	MW-06D 5/26/11 (mg/l)	MW-06D 8/27/12 (mg/l)	MW-06D 11/12/2013 (mg/l)	MW-06D 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5 U	15	1 U	350
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	32.3	13.6	16.8	10.9	14.1	11.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.1 U	0.23	0.868	0.817 J
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 UJ
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	25.0	28.0	24.0	24.8	19.0	17.5
Hardness (as CaCO3)	-	-	(mg/l)	40.0	36.0	36 D	36 D	25.1	25.2
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.75	0.68	0.36	0.68	1.55 J	1.54 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.142
Sulfate	250 ST		(mg/l)	24.5	20.1	26.9	21	14.7	12.8
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	130	101	99	107	87.0	93.0 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.1 U	.5 U	2.40	0.870

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HISTORIC AND CURRENT SAMPLE RESULTS
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CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06I 12/1/06 (mg/l)	MW-06I 2/22/07 (mg/l)	MW-06I 5/24/07 (mg/l)	MW-06I 8/10/07 (mg/l)	MW-06I 11/9/07 (mg/l)	MW-06I 2/11/08 (mg/l)	MW-06I 5/15/08 (mg/l)	MW-06I 8/4/08 (mg/l)	MW-06I 11/3/08 (mg/l)	MW-06I 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	65.2	27.5	24.7	U*	33	43.0	31.0	37.0	36.8	40.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	4.15	4.61	0.10 U	3.34	0.56 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	98.7	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	31.5	31.8	32.3	29.9	36.4	26.3	16.8	25.5	16.7	17.9
Hardness (as CaCO3)	-	-	(mg/l)	68	70.0	72	76	76	58	52.0	56.0	56.0	150 J*
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.64	4.61	5.37	2.79	6.02	2.12	2.48	4.20	6.12	1.65
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	21.0	22.1	19.9	24.1	21.2	14.1	11.6	9.42	9.38	9.31
Total Organic Carbon	-	-	(mg/l)	1.1	1.3	1.0	1.3	1.2	1 U	1.0	1 U	1.0	1.1
Total Dissolved Solids	-	-	(mg/l)	144	147	161	166	184	108	111	137	105	92
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6.21	1.93	1.28	5.36	0.81 J	2.34	1.53	1.48	1.27	1.66

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06I 8/11/09 (mg/l)	MW-06I 2/4/10 (mg/l)	MW-06I 5/26/11 (mg/l)	MW-06I 8/27/12 (mg/l)	MW-06I 11/12/2013 (mg/l)	MW-06I 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	10	10	5 U	5	1 U	350
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	26.3	24.9	37.1	39.3	34.3	48.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.26	0.35	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 UJ
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 U	1.33 J	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	30.7	23.2	33.9	27.2	23.0	46.5
Hardness (as CaCO3)	-	-	(mg/l)	45.0	45.0	80 D	52 D	39.8	46.6
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	1.11 J*	0.86 D	2.08 U	2.32 J	0.166 J
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.0110
Sulfate	250 ST		(mg/l)	11.1	9.46	56.2 D	15	8.66	26.6
Total Organic Carbon	-	-	(mg/l)	1.0	1 U	1 U	1 U	1 U	1.3
Total Dissolved Solids	-	-	(mg/l)	124	98	188	129	99.0	188 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.41	0.25 U	0.35 U*	0.28 U	0.961	0.400 U

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CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06S 12/1/06 (mg/l)	MW-06S 2/22/07 (mg/l)	MW-06S 5/24/07 (mg/l)	MW-06S 8/10/07 (mg/l)	MW-06S 11/9/07 (mg/l)	MW-06S 2/11/08 (mg/l)	MW-06S 5/15/08 (mg/l)	MW-06S 8/4/08 (mg/l)	MW-06S 11/3/08 (mg/l)	MW-06S 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	80	80	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	327	216	258	166	289	291	222	209	286	209
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	6.08	4.42	4.65	3.04	5.15	3.42	4.43	4.23	3.7	2.60
Biochemical Oxygen Demand	-	-	(mg/l)	14	9	10	4	140	8	3	2 U	8.6	10.3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	35.8	25.7	U*	38.3	24.3	11.9	21.8	26.8	10 U
Chloride	250 ST	16887-00-6	(mg/l)	24.1	28.8	41.0	33.0	32.4	41.9	46.3	30.7	39.3	34.8
Hardness (as CaCO3)	-	-	(mg/l)	312	240	260	160	500	260	210	190	360	480
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.48	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5.0 U	5.0 U	5.0 U	5.1	5.0 U	5.0 U	8.50	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	9.1	6.6	9.5	5.0	8.0	7.1	6.3	4.9	8.5	4.5
Total Dissolved Solids	-	-	(mg/l)	364	246	331	233	348	368	327	268	344	324
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.50	6.48	7.96	U*	6.56	5.98	5.80	4.87	5.22	3.72

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-06S 8/11/09 (mg/l)	MW-06S 2/4/10 (mg/l)	MW-06S 5/26/11 (mg/l)	MW-06S 8/27/12 (mg/l)	MW-06S 11/13/2013 (mg/l)	MW-06S 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	100	70	100 D	75	20	250
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	220	77.7	259 D	223 D	293	96.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.41 J*	1.46	5.90 D	3.89	2.60	0.222 J
Biochemical Oxygen Demand	-	-	(mg/l)	8 J*	8	10 J*	13	16	5 J
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	25.4	21.8	20.0	25.3	10.0 U	3.26 J
Chloride	250 ST	16887-00-6	(mg/l)	21.9	23.0	27.9	49.5	27.0	31.0
Hardness (as CaCO3)	-	-	(mg/l)	200	180	240	250 D	180	96.1
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.50	0.20	0.10 U	0.1 U	0.100 U	1.40 DJ
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.0110
Sulfate	250 ST		(mg/l)	7.40	5 U	5 U	5 U	1.99 J	28.2
Total Organic Carbon	-	-	(mg/l)	5.4	3.3	8.1 J*	4.1	4	2.7
Total Dissolved Solids	-	-	(mg/l)	277	228	329	378	276	218 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.08	3.37	7.07 D	0.5 U	5.08	0.303 J

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CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-07I 11/28/06 (mg/l)	MW-07I 2/22/07 (mg/l)	MW-07I 5/24/07 (mg/l)	MW-07I 8/10/07 (mg/l)	MW-07I 11/14/07 (mg/l)	MW-07I 2/11/08 (mg/l)	MW-07I 5/19/08 (mg/l)	MW-07I 8/5/08 (mg/l)	MW-07I 11/5/08 (mg/l)	MW-07I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	20.4	14.7	27.9	U*	33.8	26.4	35.6	40.2	49.6	40.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.36	0.10 U	0.10 U	1.68	1.76	1.22	0.93	0.86	0.2	0.32
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	4	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	15.5	10 U	10 U	10 U	10 U	10 U	10 U	14.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	57.5	49.7	43.7	35.0	37.7	46.0	44.3	44.6	49.0	36.5
Hardness (as CaCO3)	-	-	(mg/l)	65.0	54.0	55.0	56.0	44.0	75	62.0	68.0	76.0	160
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.91	1.47	1.52	10 U	1.05	2.74	0.1 U	1.32	1.24	0.75
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	10	11.5	28.9	24.1	21.9	14.7	10.1	6.75	6.98	11.4
Total Organic Carbon	-	-	(mg/l)	1 U	1.2	1.7	3	1.4	1 U	1.1	8.9	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	190	148	147	162	326	126	149	163	157	123
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.52	0.87	1.47	U*	1.98	2.04	1.18	0.88	0.24	0.58

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-07I 8/14/09 (mg/l)	MW-07I 2/8/10 (mg/l)	MW-07I 5/26/11 (mg/l)	MW-07I 8/27/12 (mg/l)	MW-07I 11/12/2013 (mg/l)	MW-07I 03/18/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	5 U	5 U	I U	150
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	29.5	22.0	42.3	30.5	23.2	22.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.13	0.1 U	0.87	0.51	0.288	0.191 J
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	7	2 U	2 U	4 U	2 UJ
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	.5 UJ	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	74.0	43.3	67.8 D	44.3 D	33.0	50.0
Hardness (as CaCO3)	-	-	(mg/l)	68.0	41.0	120 D	58 D	38.4	43.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.77	2.60	1.51 D	2.78 D	1.08 J	0.920 J
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	5 U	0.0100 U	0.0100 U
Sulfate	250 ST		(mg/l)	20.6	12.9	28.1	7.7	9.37	15.0
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.1	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	243	136	298	167	117	151 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.70	1.78	0.99 U*	1.36	1.93	0.363 J

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11D 11/29/06 (mg/l)	MW-11D 2/28/07 (mg/l)	MW-11D 6/1/07 (mg/l)	MW-11D 8/17/07 (mg/l)	MW-11D 11/14/07 (mg/l)	MW-11D 2/12/08 (mg/l)	MW-11D 5/14/08 (mg/l)	MW-11D 8/6/08 (mg/l)	MW-11D 11/5/08 (mg/l)	MW-11D 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	10	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	8.6	9.0	20.6	10.0	8.0	5.6	5.2	4.2	5.30	3.90
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.7	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	30.7	10 U	10.5	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	19.6	25.0	21.9	22.9	23.1	21.4	19.6	20.6	20.7	15.6
Hardness (as CaCO3)	-	-	(mg/l)	40.0	44.0	52.0	50.0	42.0	36.0	36.0	30.0	34.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	3.43	5.86	5.38	6.05	6.57	5.48	5.90	5.87	28.6	4.16
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	20.9	21.7	27.8	21.8	18.7	18.6	16.7	15.8	16.4	19.3
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	133	130	155	166	169	128	121	115	103	211
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.46	0.63	1.07	0.1 U	0.2	0.15	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11D 8/13/09 (mg/l)	MW-11D 2/5/10 (mg/l)	MW-11D 5/27/11 (mg/l)	MW-11D 8/29/12 (mg/l)	MW-11D 11/14/2013 (mg/l)	MW-11D 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	250	5 U	15	1 U	100
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.55	101	95.0 D	55.4 D	11.1	18.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.14	0.1 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	16	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	136	10 U	5.34 J	4.52 J
Chloride	250 ST	16887-00-6	(mg/l)	19.9	39.0	10.3	60 D	21.0	25.0
Hardness (as CaCO3)	-	-	(mg/l)	27.0	105	270 D	460 DJ	43.6	62.8
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.77	2.22	0.10 U	0.42	4.25	4.86 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.0254	0.005 U	0.0100 U	0.0100 U
Sulfate	250 ST		(mg/l)	24.4	15.9	16.3	38.1	28.7	46.9
Total Organic Carbon	-	-	(mg/l)	1U	2.5	3.3	1.6	1 U	1.4
Total Dissolved Solids	-	-	(mg/l)	104	197	138 D	252	161	166 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	7.58	0.77	0.5 U	2.02	1.48

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11I 11/29/06 (mg/l)	MW-11I 2/28/07 (mg/l)	MW-11I 6/1/07 (mg/l)	MW-11I 8/16/07 (mg/l)	MW-11I 11/14/07 (mg/l)	MW-11I 2/12/08 (mg/l)	MW-11I 5/14/08 (mg/l)	MW-11I 8/6/08 (mg/l)	MW-11I 11/5/08 (mg/l)	MW-11I 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	11.8	5.8	8.8	4.4	4.9	3.4	3.4	2.8	3.05	1.45
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.29	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	4.9	5.3	6.3	5.2	4.8	7.1	22.5	12.3	10.1	9.10
Hardness (as CaCO3)	-	-	(mg/l)	16.0	12.0	19.0	18.0	24.0	18.0	36.0	15.0	60.0	90.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.78	0.70	1.12	0.53	0.62	0.60	2.38	0.65	0.30	0.20
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	11.0	13.1	14.5	16.9	18.9	15.1	8.93	11.5	12.7	11.1
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	58	47	53	71	78	60	104	63	53	82
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.28	0.62	0.72	0.1 U	0.10 U	0.1 U	0.1 U	0.23	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11I 8/13/09 (mg/l)	MW-11I 2/5/10 (mg/l)	MW-11I 5/27/11 (mg/l)	MW-11I 8/29/12 (mg/l)	MW-11I 11/14/2013 (mg/l)	MW-11I 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	150 D	5 U	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	2.05	2.95	2.10	2.45	5.00 U	4.00 J
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U	0.15 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	8.38	5.77	4.64	50.9 D	8.00	7.00 UB
Hardness (as CaCO3)	-	-	(mg/l)	13	11.0	5 U	23	8.72	13.2
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.23	0.16	0.10 U	0.55	0.101	0.100
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.00929 J
Sulfate	250 ST		(mg/l)	16.7	10.6	9.22	12.2	9.51	14.7
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.0 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	64	47	33	138	49.0	41.0 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.1 U	0.5 U	1.31	0.275 J

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11S 11/29/06 (mg/l)	MW-11S 2/23/07 (mg/l)	MW-11S 6/1/07 (mg/l)	MW-11S 8/16/07 (mg/l)	MW-11S 11/14/07 (mg/l)	MW-11S 2/12/08 (mg/l)	MW-11S 5/14/08 (mg/l)	MW-11S 8/6/08 (mg/l)	MW-11S 11/5/08 (mg/l)	MW-11S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	30	NA	NA	NA	NA	NA	NA	20.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	140	136	136	151	151	152	148	129	108	100
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.64	0.10 U	0.10 U	2.06	1.19	0.70	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	4	4	2 U	2 U	2 U	6	3	4.2	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16.0	51.0	89	23.1	28.2	21.8	71.4	41.7	14.4	10.9
Chloride	250 ST	16887-00-6	(mg/l)	46.6	39.8	53.9	62.8	60.3	41.0	53.3	64.9	84.5	49.1
Hardness (as CaCO3)	-	-	(mg/l)	130	140	180	160	128	122	200	156	180	240
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.59	0.41	1.09	0.93	0.63	0.64	0.85	0.68	0.46	0.35
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	31.4	27.7	51.1	63.4	47.8	35.0	38.2	54.9	38.1	33.3
Total Organic Carbon	-	-	(mg/l)	3.4	3.8	8.0	6.6	5.9	4.1	5.7	5.4	3.8	2.6
Total Dissolved Solids	-	-	(mg/l)	277	276	322	373	345	283	323	369	317	265
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.04	3.82	4.8	3.36	2.7	3.05	1.90	4.21	2.92	0.92

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-11S 8/13/09 (mg/l)	MW-11S 2/5/10 (mg/l)	MW-11S 5/27/11 (mg/l)	MW-11S 8/29/12 (mg/l)	MW-11S 11/14/2013 (mg/l)	MW-11S 03/19/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	10	5 U	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	118	150	84 D	105 D	158	101
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.64	0.13 U	0.0500 U	0.596 J
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	23.0	10 U	10 U	10 U	10.0 U	10.5
Chloride	250 ST	16887-00-6	(mg/l)	61.6	92.0	64.4 D	82.3 D	53.5	49.5
Hardness (as CaCO3)	-	-	(mg/l)	145	170	130 D	148 D	146	107
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.21	1.42	0.65	1.27	0.279	0.384
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.00564 UB	0.0100 U
Sulfate	250 ST		(mg/l)	63.3	49.2	37.0	41.1	32.4	22.9
Total Organic Carbon	-	-	(mg/l)	3.8	5.0	3.2	3.6	4.5	3.3
Total Dissolved Solids	-	-	(mg/l)	286	380	276	321	323	227 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.01 UJ*	1.19 U	0.57	0.5 U	2.06	1.06

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12D 11/29/06 (mg/l)	MW-12D 2/23/07 (mg/l)	MW-12D 6/1/07 (mg/l)	MW-12D 8/16/07 (mg/l)	MW-12D 11/14/07 (mg/l)	MW-12D 2/12/08 (mg/l)	MW-12D 5/14/08 (mg/l)	MW-12D 8/6/08 (mg/l)	MW-12D 11/5/08 (mg/l)	MW-12D 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	1 U	23.9	12.3	8.8	7.8	8.8	10.1	10	9.75	7.95
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.10	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	23.1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	5.5	6.9	7.7	10.6	20.5	21.7	27.6	31.0	29.3	33.6
Hardness (as CaCO3)	-	-	(mg/l)	26.0	50.0	32.0	40.0	52.0	50.0	56.0	52.0	52.0	130
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.67	0.70	1.84	2.3	2.25	1.55	1.67	1.67	2.04	2.05
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.8	16.4	18.8	22.0	25.8	28.7	25.0	24.0	21.1	20.1
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.3	1 U	1 U	1 U	109	1 U
Total Dissolved Solids	-	-	(mg/l)	71	70	69	85	128	112	128	140	1 U	127
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.14	0.95	0.55	0.1 U	0.10 U	0.1 U	0.1 U	0.18	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12D 8/13/09 (mg/l)	MW-12D 2/5/10 (mg/l)	MW-12D 5/27/11 (mg/l)	MW-12D 8/29/12 (mg/l)	MW-12D 11/14/2013 (mg/l)	MW-12D 03/20/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	5 U	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.15	12.8	16	9.4	9.09	5.00
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U	0.1 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	12	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	40.1	26.4	8.80	9.06	8.00	10.0 UB
Hardness (as CaCO3)	-	-	(mg/l)	53.0	42.0	30	22	22.8	22.2
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.79	1.79	2.70 D	2.94 D	1.46	1.70 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.0200
Sulfate	250 ST		(mg/l)	30.8	20.8	15.7	10.2	17.0	9.15 UB
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.0 U	0.1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	119	110	73	70	76.0	56.0 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.44	0.5 U	1.77	0.363 J

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U* or UB: Analyte considered undetected based on data validation criteria.

J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12I 11/29/06 (mg/l)	MW-12I 2/23/07 (mg/l)	MW-12I 6/1/07 (mg/l)	MW-12I 8/16/07 (mg/l)	MW-12I 11/14/07 (mg/l)	MW-12I 2/12/08 (mg/l)	MW-12I 5/14/08 (mg/l)	MW-12I 8/6/08 (mg/l)	MW-12I 11/5/08 (mg/l)	MW-12I 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	21.8	58.8	4	24.6	17.8	20.2	22.4	31.1	23.7	34.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	3.71	1.02	0.10 U	2.42	0.64	0.23	3.96	3.92 J*	0.2	2.32
Biochemical Oxygen Demand	-	-	(mg/l)	5	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	78.8	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	12.9	21.7	12.6	14.8	18.1	14.2	17.9	12.2	10.7	23.1
Hardness (as CaCO3)	-	-	(mg/l)	24.0	84.0	14.0	13.0	22.0	23.0	24.0	23.0	26.0	140
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.61	0.11	1.46	1.03	2.14	1.92	1.48	1.61	1.72	1.48
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	26.4	31.1	20.8	8.0	5.0 U	11.7	14.80	14.3	15.2	14.0
Total Organic Carbon	-	-	(mg/l)	1.1	21.3	1.1	1.0 U	1.0 U	1 U	1 U	1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	97	124	74	62	54	72	84	79	58	105
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.67	3.99	3.95	3.11	3.32	3.84	4.45	5.58	3.31	3.81

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12I 8/13/09 (mg/l)	MW-12I 2/5/10 (mg/l)	MW-12I 5/27/11 (mg/l)	MW-12I 8/29/12 (mg/l)	MW-12I 11/14/2013 (mg/l)	MW-12I 03/20/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	10	20	1	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	17.0	1 U	2.80	23.6 D	27.3	11.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.64	0.1 U	0.74	1.75	2.80	5.80 DJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	10	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	12	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	46.1	20.0	12.6	31.8	40.5	34.5
Hardness (as CaCO3)	-	-	(mg/l)	30.0	24.0	26	38	58.9	106
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.48	3.88	3.32 D	0.79	0.455	0.578
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.0100 U
Sulfate	250 ST		(mg/l)	23.2	11.0	7.03	31	39.9	58.9
Total Organic Carbon	-	-	(mg/l)	1 U	1.0	2.1	1.3	1.3	2.1
Total Dissolved Solids	-	-	(mg/l)	155	77	74	110	177	179 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6.49	1.13 U	2.18	2.03	4.98	7.31 D

NOTES:

NA: Not analyzed

U* or UB: Analyzed for but not detected, value shown is instrument detection limit

J: Estimated value

D: Diluted.

UJ* or UJ: Value was not detected above quantitation limit but was an appoximate concentration as determined by data validation.

: Concentration exceeds Standard/Guidance Value

U* or UB: Analyte considered undetected based on data validation criteria.

J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12S 11/29/06 (mg/l)	MW-12S 2/23/07 (mg/l)	MW-12S 6/1/07 (mg/l)	MW-12S 8/16/07 (mg/l)	MW-12S 11/14/07 (mg/l)	MW-12S 2/12/08 (mg/l)	MW-12S 5/14/08 (mg/l)	MW-12S 8/6/08 (mg/l)	MW-12S 11/5/08 (mg/l)	MW-12S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	NA	NA	NA	NA	NA	NA	30.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	73.0	71.2	60.6	60.8	67.2	68	67.2	76.2	86.8	68.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 UJ*	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6.0	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	40.9	10 U	10 U	10 U	10 U	10 U	34.2	19.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	25.2	25.5	27.7	17.8	23.9	32.9	28.5	32.4	44.1	38.0
Hardness (as CaCO3)	-	-	(mg/l)	110	80.0	72.0	64.0	80.0	82	70.0	88.0	85.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.33	2.30	2.32	1.71	2.03	1.46	1.54	1.12	1.37	0.79
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	22.8	25.0	21.6	33.2	29.9	33.2	32.0	34.6	36.2	28.3
Total Organic Carbon	-	-	(mg/l)	1.5	1.4	2.0	1.5	1.1	1.4	1.5	1.9	212	1 U
Total Dissolved Solids	-	-	(mg/l)	189	183	159	167	193	196	185	199	2.0	195
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.16	0.75	0.69	0.1 U	0.10 U	0.14	0.10	0.85	0.22	0.13

CONSTITUENT	NYSDEC Class GA Groundwater Standards and Guidance Values	CAS #	SITE : DATE : UNITS	MW-12S 8/13/09 (mg/l)	MW-12S 2/5/10 (mg/l)	MW-12S 5/27/11 (mg/l)	MW-12S 8/29/12 (mg/l)	MW-12S 11/14/2013 (mg/l)	MW-12S 03/20/2015 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	20	15	1 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	63.9	81.6	88.0 D	288 D	107	93.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U	0.21 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	18.6	19.3	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(mg/l)	48.6	42.1	49.0	42.4	48.0	245
Hardness (as CaCO3)	-	-	(mg/l)	90.0	80.0	120 D	88 D	43.2	122
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.81	1.34	1.22	0.37	0.347	1.06 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U	0.005 U	0.00671 UB	0.00727 J
Sulfate	250 ST		(mg/l)	49.4	29.0	37.8	16.8	26.9	38.1
Total Organic Carbon	-	-	(mg/l)	1.4	1.2	3.3	5.1	1.8	2.1
Total Dissolved Solids	-	-	(mg/l)	200	192	233	227	258	532 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.56 U	0.63	0.15	1.48	0.418

NOTES:

NA: Not analyzed

U* or UB: Analyzed for but not detected, value shown is instrument detection limit

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D: Diluted.

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: Concentration exceeds Standard/Guidance Value

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D&B ENGINEERS AND ARCHITECTS, P.C.

APPENDIX A-2

Monitoring Well Sample Results - Inorganic Parameters

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 11/9/2007 (ug/l)	MW-01D 2/11/2008 (ug/l)	MW-01D 5/15/2008 (ug/l)	MW-01D 8/5/2008 (ug/l)	MW-01D 11/3/2008 (ug/l)	MW-01D 2/24/2009 (ug/l)	MW-01D 8/12/2009 (ug/l)	MW-01D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	75.1 B	NA	1,130	268
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	6.2 B
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	59.8 B	NA	35.8 B	30.2 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.10 B	NA	0.13 U	0.91 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	54.5 BN	NA	52.0 B	32.0 B
Cadmium	5 ST	7440-43-9	ug/l	2.0 B	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.60 B	4.0 B
Calcium	-	7440-70-2	ug/l	5,160	24,200	11,900	5,180	3,420 B	3,680 B	4,810 B	11,100
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.1 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	2.6 B	2.1 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	1.9 B	NA	1.5 B	1.4 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	3.1 B	NA	3.3 B	10.6 B
Iron	300 ST	7439-89-6	ug/l	1,280	97.2 B	180	276	78.6 B	69.6 B	1,040	315 J*
Lead	25 ST	7439-92-1	ug/l	4.9 J	1.5 B	2.3 U	2.3 U	1.3 U	1.3 U	33	3.8
Magnesium	35,000 GV	7439-95-4	ug/l	1,320 B	5,250	2,840 B	1,330 B	811 B	892 B	1,210 B	2,900 B
Manganese	300 ST	7439-96-5	ug/l	106	990	352	184	126	137	123	72.7
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.7 B	NA	2.0 B	2.9 B
Potassium	-	7440-09-7	ug/l	33,400 J	33,400 J	2,360 B	2,040 B	1,550 B	1,750 B	1,840 B	6370
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 B
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	23,700	462,000	250,000	159,000	150,000	130,000	78,100	15,100
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	4.0 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	2.1 B	1.9 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	8.3 B	NA	30.8	49.7
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	1,386	1,087.2	532	460	204.6	206.6	1,163	387.7

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte as determined by data validation.

UJ: Value was not detected above quantitation limit but was an appoximate

ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 5/26/2011 (ug/l)	MW-01D 8/28/2012 (ug/l)	MW-01D 11/12/2013 (ug/l)	MW-01D 03/17/2015 (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)
Aluminum	-	7429-90-5	ug/l	3,070	133 B	39.2	48.6				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	22.4 B	16.3 B	43.8	172				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	5.5 B	66.3 B	44	20 U				
Cadmium	5 ST	7440-43-9	ug/l	3.3 B	0.6 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	9,050	7,140	2,670	7750				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	8.9 B	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	6.9 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	1.8 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	12.0 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	3,780	104	20.1 UB	14.2 UB				
Lead	25 ST	7439-92-1	ug/l	20.4	18.5	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	2,410 B	1510 B	650	1470				
Manganese	300 ST	7439-96-5	ug/l	104	23	24.1	866				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	3.9 B	1.7 B	20 U	6.98 J				
Potassium	-	7440-09-7	ug/l	5,000	6,760	3470	7950				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	2,980 B	26,300	13,000	31700				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	8.2 B	.6 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	76.4	29.8	11 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	47.6 UB	6.38 J				
Iron + Manganese	500 ST*	-	ug/l	3,884	127	44.2	866				

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte as determined by data validation.

N: Matrix spike sampe recovery not within control limits.

UJ: Value was not detected above quantitation limit but was an appoximate

ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 11/9/2007 (ug/l)	MW-01I 2/11/2008 (ug/l)	MW-01I 5/15/2008 (ug/l)	MW-01I 8/5/2008 (ug/l)	MW-01I 11/3/2008 (ug/l)	MW-01I 2/24/2009 (ug/l)	MW-01I 8/12/2009 (ug/l)	MW-01I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	12.5 U	118 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	6.7 B	NA	8.0 B	7.9 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	62.8 BN	NA	52.2 B	47.9 B
Cadmium	5 ST	7440-43-9	ug/l	0.55 B	0.32 U	0.45 B	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	9,220	12,200	13,600	8,380	6,510	6,160	6,620	6,500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02U	NA	0.60 B	1.2 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	1.5 B	NA	0.70 B	2.4 B
Iron	300 ST	7439-89-6	ug/l	122	24.2 U	31.7 B	21.4 B	27.6 B	13.3 B	31.8 B	390 J*
Lead	25 ST	7439-92-1	ug/l	1.5 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	10.4	2.0 B
Magnesium	35,000 GV	7439-95-4	ug/l	2,800	3,420 B	3,960 B	2,280 B	1,830 B	1,740 B	1,750 B	2,060 B
Manganese	300 ST	7439-96-5	ug/l	178	463	343	336	148	64.8	107	112
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	14.5	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.7 B	NA	0.82 U	2.4 B
Potassium	-	7440-09-7	ug/l	2,020 J	1,650 B	1,950 B	1,970 B	1,390 B	1,130 B	1,400 B	1,580 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	10,200	12,300	15,400	11,400	8,450	6,950	6,450	5,790
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	4.2 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	9.9 B	NA	10.1 B	46.8
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	300	487.2	375	357.4	175.6	78.1	138.8	502

NOTES:

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Concentration exceeds Standard/Guidance Value.

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ST: Standard.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 5/26/2011 (ug/l)	MW-01I 8/28/2012 (ug/l)	MW-01I 11/12/2013 (ug/l)	MW-01I 03/17/2015 (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	38.2 B	10.8 J	9.19 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	4.9 B	10.1 B	83	52.3				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	24.4 B	33.8 B	83	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	5,290	6,230	27,400	8930				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.2 U	97.3	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.3 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.9 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	71.0 B	13.8 B	8.88 UB	5.75 UB				
Lead	25 ST	7439-92-1	ug/l	1.5 U	6.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	1,940 B	1340 B	6,560	1940				
Manganese	300 ST	7439-96-5	ug/l	9.6 B	1440	1,720	1180				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	2.1 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	1620 B	4150 B	6,850	5360				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	6,510	1,820	8,930	8060				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.9 B	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	0.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	9.1 B	23.7	9.84 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10 U	48 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	80.6	1453.8	1,728.88	1180				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 11/9/2007 (ug/l)	MW-01S 2/11/2008 (ug/l)	MW-01S 5/15/2008 (ug/l)	MW-01S 8/5/2008 (ug/l)	MW-01S 11/3/2008 (ug/l)	MW-01S 2/24/2009 (ug/l)	MW-01S 8/14/2009 (ug/l)	MW-01S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	63.5 B	NA	197 B	44.6 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	3.5 B	NA	11.2	3.2 B
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	45.7 B	NA	103 B	48.6 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	125 BN	NA	76.5 B	107
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.50 B	0.34 U
Calcium	-	7440-70-2	ug/l	63,100	71,000	60,800	79,700	62,900	58,000	64,100	55,300
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.49 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.80 B	1.0 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	2.0 B	NA	2.7 B	1.6 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	3.3 B	NA	2.1 B	2.4 B
Iron	300 ST	7439-89-6	ug/l	5,240	2,370	7,210	8,300	6,500	6,150	24,700	4,040 J*
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	2.1 B	2.3 U	2.5 B	1.3 U	1.3 U	11.9	2.1 B
Magnesium	35,000 GV	7439-95-4	ug/l	9,110	11,000	8,960	11,700	9,990	8,690	8,020	7,650
Manganese	300 ST	7439-96-5	ug/l	735	465	950	1080	799	1,030	1,190	591
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	13,900 J	11,800	12,600	14,700	15,900	12,400	13,100	13,500
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	59,800	54,300	57,400	58,100	56,200	51,000	66,100	52,800
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	4.1 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.90 B	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	14.8 B	NA	78.3	30.6
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	5,975	2,835	8,160	9,380	7,299	7,180	25,890	4,631

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 5/26/2011 (ug/l)	MW-01S 8/28/2012 (ug/l)	MW-01S 11/12/2013 (ug/l)	MW-01S 03/17/2015 (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	53.8 B	13.4 J	10.2 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	12.5 J	5.41 J				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	43.7 B	44 B	49.3	67.6				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	64.1 B	80.5 B	49	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	61,800	61,600	44,700	53000				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.02 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.9 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.88 B	1.7 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	2.4 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	2,480	3,910	1,690	3670				
Lead	25 ST	7439-92-1	ug/l	1.5 U	5.4	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	8,650	6,620	5,270	6270				
Manganese	300 ST	7439-96-5	ug/l	1,000	723	377	1660				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	1.4 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	16,500	16,200	13,300	11400				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	90,200	49,100	7,860	12400				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.5 B	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	0.58 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	13.8	46	14 UB	6.97 J				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	41.6 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	3,480	4,633	2,067	5330				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 11/13/2007 (ug/l)	MW-02D 2/12/2008 (ug/l)	MW-02D 5/19/2008 (ug/l)	MW-02D 8/4/2008 (ug/l)	MW-02D 11/3/2008 (ug/l)	MW-02D 2/24/2009 (ug/l)	MW-02D 8/14/2009 (ug/l)	MW-02D 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	181 B	132 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	3.3 B	NA	225	4.2 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.20 B	0.30 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	13.5 BN	NA	196	18.8 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 B	0.60 B	0.27 U	0.27 U	0.35 U	0.35 U	1.1 B	0.34 U
Calcium	-	7440-70-2	ug/l	5,460	5,540	4,990 B	4,830 B	4,620B	4,600 B	95,700	4,150 B
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.2 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.4 B	2.2 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	1.0 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	1.8 B	NA	1.4 B	1.8 B
Iron	300 ST	7439-89-6	ug/l	446	50.4	23.8 B	90.2 B	19.7 B	30.7 B	26,900	215
Lead	25 ST	7439-92-1	ug/l	2.2 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	17.5	2.7 B
Magnesium	35,000 GV	7439-95-4	ug/l	2,630 B	2,570 B	2,380 B	2,330 B	2,290 B	2,230 B	14,000	2,130 B
Manganese	300 ST	7439-96-5	ug/l	11.6 B	1.8 B	1.7 B	4.2 B	1.0 B	1.2 B	4,920	5.2 B
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	ug/l	997 JB	642 B	637 B	874 B	654 B	622 B	13,200	759 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	4,240 B	4,950 B	4,960 B	4,630 B	5,010	4,500 B	29,300	4,890 B
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	10.5 B	NA	27.5	21.9
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	457.6	52.2	25.5	94.4	20.7	31.9	31,820	220.2

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 5/31/2011 (ug/l)	MW-02D 8/28/2012 (ug/l)	MW-02D 11/12/2013 (ug/l)	MW-02D 03/17/2015 (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)
Aluminum	-	7429-90-5	ug/l	36.7 B	45.1 B	20 U	24.1				
Antimony	3 GV	7440-36-0	ug/l	6.0 B	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	5.3 B	72.8 B	15.2 J	28.1				
Beryllium	3 GV	7440-41-7	ug/l	0.73 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	23.6 B	35.6 B	15 J	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	5,380	34,500	7,980	16600				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.2 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.70 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.4 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	39.0 B	37.7 B	29.9 UB	47.6 UB				
Lead	25 ST	7439-92-1	ug/l	2.1 B	4	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	2,720 B	3340 B	3,950	6810				
Manganese	300 ST	7439-96-5	ug/l	2.4 B	43.3	20 U	20 U				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UN	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	2.3 B	1 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	1290 B	5330	826	1580				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	7,690	20,400	3,390	5710				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	0.76 B	.3 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	21.6	18.5 B	12.1 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	43 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	41.4	81.0	29.9	0				

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POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 11/13/2007 (ug/l)	MW-02I 2/12/2008 (ug/l)	MW-02I 5/19/2008 (ug/l)	MW-02I 8/4/2008 (ug/l)	MW-02I 11/3/2008 (ug/l)	MW-02I 2/24/2009 (ug/l)	MW-02I 8/14/2009 (ug/l)	MW-02I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	81.1 B	39.3 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	32.3 B	NA	38.2 B	37.8 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	106 BN	NA	53.3 B	51.6 B
Cadmium	5 ST	7440-43-9	ug/l	0.35 B	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	18,200	18,600	16,300	14,000	13,500	13,800	15,500	14,700
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.9 B	0.60 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	2.0 B	NA	1.2 B	2.1 B
Iron	300 ST	7439-89-6	ug/l	183	24.2 U	20.3 B	10.0 B	13.7 B	26.0 B	42.1 B	63.7 B
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	4.1	3.3
Magnesium	35,000 GV	7439-95-4	ug/l	2,230 B	1,560 B	1,390 B	1,150 B	1,080 B	1,260 B	1,250 B	1,550 B
Manganese	300 ST	7439-96-5	ug/l	332	20.3	23.3	20.6	26.9	39.6	38.4	28.2
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	3,430 JB	1,590 B	1,670 B	3,900 B	4,610 B	3,600 B	3,940 B	3,990 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	22,400	16,000	15,000	11,900	11,500	10,800	10,600	10,400
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	5.6 B	NA	6.8 B	12.6 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	515	44.5	43.6	30.6	40.6	65.6	80.5	91.9

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 5/31/2011 (ug/l)	MW-02I 8/28/2012 (ug/l)	MW-02I 11/12/2013 (ug/l)	MW-02I 03/17/2015 (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)
Aluminum	-	7429-90-5	ug/l	32.3 B	49.5 B	7.35 J	5.15 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	6.58 J	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	45.0 B	5.4 B	62.9	83.7				
Beryllium	3 GV	7440-41-7	ug/l	0.26 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	36.9 B	20.6 B	63	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	13,900	7,540	25,400	26600				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.1 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.0 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	110	35.2 B	20 U	6.53 UB				
Lead	25 ST	7439-92-1	ug/l	2.1 B	8	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	1,620 B	3270 B	2,550	2860				
Manganese	300 ST	7439-96-5	ug/l	25.6	2.4 B	14.8 J	79.2				
Mercury	0.7 ST	7439-97-6	ug/l	0.12 BNU*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.8 B	2.3 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	3790 B	978 B	5,050	5110				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	18,600	7,630	4,130	10900				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	0.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	17.8 B	20.8	12.6 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	45.4 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	135.6	37.6	14.8	79.2				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)
Aluminum	-	7429-90-5	ug/l								
Antimony	3 GV	7440-36-0	ug/l								
Arsenic	25 ST	7440-38-2	ug/l								
Barium	1,000 ST	7440-39-3	ug/l								
Beryllium	3 GV	7440-41-7	ug/l								
Boron	1,000 ST	7440-42-8	ug/l								
Cadmium	5 ST	7440-43-9	ug/l								
Calcium	-	7440-70-2	ug/l	W	W	W	W	W	W	W	W
Chromium Hexavalent	50 ST	18540-29-9	ug/l	E	E	E	E	E	E	E	E
Chromium Total	50 ST	7440-47-3	ug/l	L	L	L	L	L	L	L	L
Cobalt	-	7440-48-4	ug/l	L	L	L	L	L	L	L	L
Copper	200 ST	7440-50-8	ug/l								
Iron	300 ST	7439-89-6	ug/l	A	A	A	A	A	A	A	A
Lead	25 ST	7439-92-1	ug/l	B	B	B	B	B	B	B	B
Magnesium	35,000 GV	7439-95-4	ug/l	A	A	A	A	A	A	A	A
Manganese	300 ST	7439-96-5	ug/l	N	N	N	N	N	N	N	N
Mercury	0.7 ST	7439-97-6	ug/l	D	D	D	D	D	D	D	D
Nickel	100 ST	7440-02-0	ug/l	O	O	O	O	O	O	O	O
Potassium	-	7440-09-7	ug/l	N	N	N	N	N	N	N	N
Selenium	10 ST	7782-49-2	ug/l	E	E	E	E	E	E	E	E
Silver	50 ST	7440-22-4	ug/l	D	D	D	D	D	D	D	D
Sodium	20,000 ST	7440-23-5	ug/l								
Thallium	0.5 GV	7440-28-0	ug/l								
Vanadium	-	7440-62-2	ug/l								
Zinc	2,000 ST	7440-66-6	ug/l								
Cyanide	200 ST	0057-12-5	ug/l								
Iron + Manganese	500 ST*	-	ug/l								

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)
Aluminum	-	7429-90-5	ug/l								
Antimony	3 GV	7440-36-0	ug/l								
Arsenic	25 ST	7440-38-2	ug/l								
Barium	1,000 ST	7440-39-3	ug/l								
Beryllium	3 GV	7440-41-7	ug/l								
Boron	1,000 ST	7440-42-8	ug/l								
Cadmium	5 ST	7440-43-9	ug/l								
Calcium	-	7440-70-2	ug/l	W	W	W	W	W	W	W	W
Chromium Hexavalent	50 ST	18540-29-9	ug/l	E	E	E	E	E	E	E	E
Chromium Total	50 ST	7440-47-3	ug/l	L	L	L	L	L	L	L	L
Cobalt	-	7440-48-4	ug/l	L	L	L	L	L	L	L	L
Copper	200 ST	7440-50-8	ug/l								
Iron	300 ST	7439-89-6	ug/l	A	A	A	A	A	A	A	A
Lead	25 ST	7439-92-1	ug/l	B	B	B	B	B	B	B	B
Magnesium	35,000 GV	7439-95-4	ug/l	A	A	A	A	A	A	A	A
Manganese	300 ST	7439-96-5	ug/l	N	N	N	N	N	N	N	N
Mercury	0.7 ST	7439-97-6	ug/l	D	D	D	D	D	D	D	D
Nickel	100 ST	7440-02-0	ug/l	O	O	O	O	O	O	O	O
Potassium	-	7440-09-7	ug/l	N	N	N	N	N	N	N	N
Selenium	10 ST	7782-49-2	ug/l	E	E	E	E	E	E	E	E
Silver	50 ST	7440-22-4	ug/l	D	D	D	D	D	D	D	D
Sodium	20,000 ST	7440-23-5	ug/l								
Thallium	0.5 GV	7440-28-0	ug/l								
Vanadium	-	7440-62-2	ug/l								
Zinc	2,000 ST	7440-66-6	ug/l								
Cyanide	200 ST	0057-12-5	ug/l								
Iron + Manganese	500 ST*	-	ug/l								

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-03S 11/14/2007 (ug/l)	MW-03S 2/11/2008 (ug/l)	MW-03S 5/15/2008 (ug/l)	MW-03S 8/5/2008 (ug/l)	MW-03S 11/5/2008 (ug/l)	MW-03S 2/25/2009 (ug/l)	MW-03S 8/14/2009 (ug/l)	MW-03S 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	183 B	277
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 B	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	166 B	NA	221	251
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	134 B	NA	183	160
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	1.4 B	0.41 B	0.27 U	0.35 U	0.35 U	0.80 B	0.34 U
Calcium	-	7440-70-2	ug/l	73,600 J	67,300	76,100	69,500	66,200	73,600	93,600	75,700
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.02 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	1.3 B	NA	0.80 B	1.5 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	1.4 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	2.5 B	NA	2.0 B	0.83 U
Iron	300 ST	7439-89-6	ug/l	24,600	17,200	25,200	21,500	18,500	24,300	26,800	25,400 J*
Lead	25 ST	7439-92-1	ug/l	1.4 U	1.4 U	2.3 B	2.3 U	1.3 U	1.3 U	17.9	2.4 B
Magnesium	35,000 GV	7439-95-4	ug/l	11,200 J	10,400	11,900	11,400	10,300	11,100	13,800	11,800
Manganese	300 ST	7439-96-5	ug/l	5,920 J	5,110	5,050	4,530	5,190	5,000	4,780	5,420
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	1.4
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	2.1 B	NA	0.82 U	2.4 B
Potassium	-	7440-09-7	ug/l	12,500	10,700	12,400	13,300	12,400	12,200	12,900	13,900
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.85 B	NA	0.33 B	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	29,100 J	27,200	28,900	27,600	25,200	27,800	28,400	36,400
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	1.2 B	NA	0.77 U	3.4 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	1.5 U	NA	30.4	39.3
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	30,520	22,310	30,250	26,030	23,690	29,300	31,380	30,820

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-03S 6/1/2011 (ug/l)	MW-03S 8/28/2012 (ug/l)	MW-03S 11/13/2013 (ug/l)	MW-03S 03/18/2015 (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)
Aluminum	-	7429-90-5	ug/l	40.4	66 B	13 J	10.1 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	145 B	202	199	196				
Beryllium	3 GV	7440-41-7	ug/l	0.24 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	126	202	97	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	57,600	64,500	58,900	57600				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.6 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	0.55 U	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	17,100	19,900	13,600	16400				
Lead	25 ST	7439-92-1	ug/l	6.3	4.8	15 U	14.5 J				
Magnesium	35,000 GV	7439-95-4	ug/l	9,270	8,370	8640	7590				
Manganese	300 ST	7439-96-5	ug/l	4,530	5,440	5,100	4790				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UN	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	2.0 B	1.6 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	12,500	11,100	12,400	11400 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 U*J*	4.5 B	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.54 BN	.48 B	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	34,100	33,100	12,200	12200				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	6.4 B	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	1.8 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	18.0 B	13.1 B	12.8 UB	32.9				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	47.1 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	21,630	25,340	18,700	21190				

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HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 11/13/2007 (ug/l)	MW-04D 02/1108 (ug/l)	MW-04D 5/15/2008 (ug/l)	MW-04D 8/4/2008 (ug/l)	MW-04D 11/3/2008 (ug/l)	MW-04D 2/23/2009 (ug/l)	MW-04D 8/12/2009 (ug/l)	MW-04D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	12.5 U	35.6 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.6 B	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	12.9	NA	12.5	3.1 B
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	21.6 B	NA	44.9 B	23.6 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	40.6 BN	NA	28.1 B	39.1 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.58 B	0.27 U	0.47 B	0.35 U	0.48 B	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	16,600	15,700	12,700	9,450	9,600	12,500	18,400	10,600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.57 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.51 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88U	NA	1.6 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	2.6 B	NA	0.62 U	3.6 B
Iron	300 ST	7439-89-6	ug/l	4,130	21,100	16,800	12,700	13,000	17,700	24,400	4,240 J*
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3 U	4.0	1.3 U	13.2	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	2,570 B	2,350 B	1,950 B	1,490 B	1,460 B	1,850 B	2,380 B	1,490 B
Manganese	300 ST	7439-96-5	ug/l	251	680	506	403	419	552	915	253
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	4,360 J	3,830 B	3,720 B	3,800 B	3870 B	3,720 B	4,680 B	3650 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	7,480	9,590	9,100	7,280	7,150	7,130	10,800	5,900
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	6.2 B	NA	11.2 B	24.5
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	4,381	21,780	17,306	13,103	13,419	18,252	25,315	4,493

NOTES:

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Concentration exceeds Standard/Guidance Value.

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GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 5/26/2011 (ug/l)	MW-04D 8/27/2012 (ug/l)	MW-04D 11/13/2013 (ug/l)	MW-04D 03/18/2015 (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	51.5 B	15.1 J	20 U				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	5.75 J				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	17.1 J	16.9 J				
Barium	1,000 ST	7440-39-3	ug/l	27.0 B	1.3 U	115	86				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	25.7 B	41.1 B	85	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	12,900	13,100	22,300	16200				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	0.89 B	0.02 U	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.62 B	1.2 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.6 B	0.52 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	1,570	2,630	40,800	37300				
Lead	25 ST	7439-92-1	ug/l	1.5 U	8.5	5.82 J	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	1,870 B	2000 B	3,180	2410				
Manganese	300 ST	7439-96-5	ug/l	81	226	2,190	2510				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	8.5 B	3.0 B	5.25 J	20 U				
Potassium	-	7440-09-7	ug/l	4520 B	4780 B	6,090	5130 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.4 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	9,120	10,000	12,900	9640				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.56 U	0.32 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	51.2	26.1	15.7 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10 U	41.7 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	1,651	2,856	42,990	39810				

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 11/13/2007 (ug/l)	MW-04I 02/1108 (ug/l)	MW-04I 5/15/2008 (ug/l)	MW-04I 8/5/2008 (ug/l)	MW-04I 11/3/2008 (ug/l)	MW-04I 2/23/2009 (ug/l)	MW-04I 8/12/2009 (ug/l)	MW-04I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	12.5	24.6 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	11.8	NA	12.5	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	33.6 B	NA	103 B	35.9 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	81.8 BN	NA	125	94.3 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.58 B	0.27 U	0.27 U	0.35 U	0.35 U	0.40 B	0.34 U
Calcium	-	7440-70-2	ug/l	36,400	42,300	24,600	32,600	28,100	33,300	61,000	30,000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.45 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.44 U
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.80 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	3.3B	NA	0.62 U	3.1 B
Iron	300 ST	7439-89-6	ug/l	1,610	30,900	20,400	25,900	21,400	25,700	53,000	1,720 J*
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	10.7	2.0 B
Magnesium	35,000 GV	7439-95-4	ug/l	3,800 B	4,560	2,700 B	3,760 B	3,060 B	3,520 B	6,110	3,250 B
Manganese	300 ST	7439-96-5	ug/l	75.1	999	765	1,100	1,060	1,230	3,060	366
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	7,640 J	7,430	5,510	7,140	6600	8,460	9,960	8,490
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	14,600	26,600	14,400	19,600	17,500	34,700	53,000	31,000
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	6.1 B	NA	15.2 B	16.0 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	1,685	31,899	21,165	27,000	22,460	26,930	56,060	2,086

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 5/26/2011 (ug/l)	MW-04I 8/27/2012 (ug/l)	MW-04I 11/13/2013 (ug/l)	MW-04I 03/18/2015 (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	38.2 B	7.13 J	6.67 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	7.58 J				
Arsenic	25 ST	7440-38-2	ug/l	11.4	10.2	12.4 J	11.1 J				
Barium	1,000 ST	7440-39-3	ug/l	24.3 B	38.6 B	134	116				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	113	72.4 B	71	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	16,200	48,800	26,800	35300				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.8 B	10.6	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.55 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.6 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	16,600	36,400	19,700	15300				
Lead	25 ST	7439-92-1	ug/l	5.1	1.8 B	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	2,040 B	4530 B	2,250	2700				
Manganese	300 ST	7439-96-5	ug/l	1,180	4,690	2,700	1550				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	.64 U	20 U	20 U				
Potassium	-	7440-09-7	ug/l	4510 B	5,450	13,100	19700 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	3.7 B	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.49 B	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	19,600	54,200	20,800	9350				
Thallium	0.5 GV	7440-28-0	ug/l	3.4 B	3.2 B	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	1.0 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	17.6 B	47.1	15.1 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	43.5 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	17,780	41,090	22,400	16850				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 11/13/2007 (ug/l)	MW-04S 2/11/2008 (ug/l)	MW-04S 2/11/2008 (ug/l)	MW-04S 8/4/2008 (ug/l)	MW-04S 11/3/2008 (ug/l)	MW-04S 2/23/2009 (ug/l)	MW-04S 8/12/2009 (ug/l)	MW-04S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	2630	NA	42.3 B	1540
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.6 B	NA	2.5 U	2.4 B
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	11.0	NA	6.5 B	7.5 B
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	306	NA	284	304
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.21 B	NA	0.13 U	0.32 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	195 BN	NA	154	179
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	1.0 B	0.27 U	0.73 B	0.63 B	0.35 U	0.50 B	0.34 U
Calcium	-	7440-70-2	ug/l	98,000	93,300	91,900	94,900	95,400	96,400	93,800	92,200
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	5.1 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	2.3 B	3.7 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	1.4 B	NA	0.90 B	1.4 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	15.0 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6	ug/l	51,600	43,400	46,400	46,300	53,700	49,800	45,300	48,800 J*
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	3.0 B	3.1	1.3 U	17.7	5.0
Magnesium	35,000 GV	7439-95-4	ug/l	12,800	11,100	11,100	11,700	11,400	11,000	9,290	10,700
Manganese	300 ST	7439-96-5	ug/l	2,490	2,300	2,290	2,240	2,250	2,350	2,270	2,580
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	4.9 B	NA	0.82 U	3.7 B
Potassium	-	7440-09-7	ug/l	1,880 J	16,300	17,600	18,600	18,200	16,600	15,500	16,200
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	2.7 BN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	42,700	42,500	43,200	41,000	39,500	38,700	32,400	35,900
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	10.5 B	NA	0.77 U	8.3 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	15.7 B	NA	13.5 B	17.6 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	54,090	45,700	48,690	48,540	55,950	52,150	47,570	51,380

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 5/31/2011 (ug/l)	MW-04S 8/27/2012 (ug/l)	MW-04S 11/13/2013 (ug/l)	MW-04S 03/18/2015 (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)
Aluminum	-	7429-90-5	ug/l	28.0 B	73.9 B	17.5 J	14.6 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	7.92 J	20 U				
Arsenic	25 ST	7440-38-2	ug/l	2.7 B	8.1 B	10.2 J	25 U				
Barium	1,000 ST	7440-39-3	ug/l	298	379	282	293				
Beryllium	3 GV	7440-41-7	ug/l	0.19 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	181	213	158	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	90,100	129,000	84,500	96400				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.02 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.7 B	13.3	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	1.1 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	0.55 U	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	39,000	60,200	37,200	39100				
Lead	25 ST	7439-92-1	ug/l	11.3	9.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	10,700	12,400	8,300	8880				
Manganese	300 ST	7439-96-5	ug/l	2,250	3,240	2,520	2800				
Mercury	0.7 ST	7439-97-6	ug/l	0.19 BNU*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	2.2 B	.64 U	5.04 J	20 U				
Potassium	-	7440-09-7	ug/l	18,400	20,600	15,200	17200 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.75 BN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	39,300	51,000	11,500	13300				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	2.9 B	1.5 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	13.5	10.2 B	17 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	45.4 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	41,250	63,440	39,720	41900				

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POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 8/14/2007 (ug/l)	MW-05D 2/11/2008 (ug/l)	MW-05D 5/15/2008 (ug/l)	MW-05D 8/5/2008 (ug/l)	MW-05D 11/5/2008 (ug/l)	MW-05D 2/26/2009 (ug/l)	MW-05D 8/17/2009 (ug/l)	MW-05D 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	43.2 B	NA	108 B	1700
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	48.4 B	NA	42.9 B	25.4 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	46.1 B	NA	36.6 B	42.0 B
Cadmium	5 ST	7440-43-9	ug/l	0.99 B	0.88 B	0.52 B	0.62 B	0.43 B	0.72 B	0.70 B	4.8 B
Calcium	-	7440-70-2	ug/l	24,700	41,500	32,000	32,500	28,600	28,200	27,500	17,500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.96 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.90 B	4.3 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	2.2 B	NA	2.1 B	1.4 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	2.7 B	NA	1.4 B	7.4 B
Iron	300 ST	7439-89-6	ug/l	315	85.0 B	926	12.5 B	48.6 B	10.2 B	21.2 B	2,650
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	2.2 B	8.0	2.3 U	1.3 U	1.5 B	20.6	21.1
Magnesium	35,000 GV	7439-95-4	ug/l	6,890	12,800	10,500	10,500	8,930	7,600	7,760	7,960
Manganese	300 ST	7439-96-5	ug/l	9,980	13,800	3,290	10,200	7,760	7,740	6,820	1,870
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	6.5 B	NA	7.9 B	6.1 B
Potassium	-	7440-09-7	ug/l	5,710 J	5,920	5,840	6,170	5,100	4,600 B	3,940 B	3,050 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	1.3 B	NA	0.81 B	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	33,600	41,000	37,700	41,100	35,300	29,200	26,800	22,300
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	4.2 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	4.3 B	NA	8.0 B	206
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	10,295	13,885	4,216	10,213	7,809	7,750.2	6,830.2	4,520

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 6/1/2011 (ug/l)	MW-05D 8/28/2012 (ug/l)	MW-05D 11/13/2013 (ug/l)	MW-05D 03/19/2015 (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)
Aluminum	-	7429-90-5	ug/l	196 B	36.3 D	20 U	20 U				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	27.0 B	9.3 B	27.7	45.1				
Beryllium	3 GV	7440-41-7	ug/l	0.17 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	31.4 B	29.1 B	24	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	14,900	4290 B	6,230	11100				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.2 B	8.4	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	1..2 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.8 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	295	31.9 B	12.7 UB	13.5 UB				
Lead	25 ST	7439-92-1	ug/l	5.6	9	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	7,380	1560 B	2,420	4260				
Manganese	300 ST	7439-96-5	ug/l	1,560	25	352	244				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UNU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	19.0 B	5.6	20 U	20 U				
Potassium	-	7440-09-7	ug/l	2850 B	1400 B	1,620	2670				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	4.7 B	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	23,500	18,500	5,450	6850				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3..2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.68 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	40.6	12 B	11.8 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	43.4 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	1,855	25	352	244				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 11/13/2007 (ug/l)	MW-05I 2/11/2008 (ug/l)	MW-05I 5/15/2008 (ug/l)	MW-05I 8/5/2008 (ug/l)	MW-05I 11/5/2008 (ug/l)	MW-05I 2/26/2009 (ug/l)	MW-05I 8/17/2009 (ug/l)	MW-05I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	105 B	2680
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	4.3 B	NA	3.2 B	3.5 B
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	20.4 B	NA	21.9 B	46.8 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	84.5 B	NA	52.7 B	69.6 B
Cadmium	5 ST	7440-43-9	ug/l	0.38 B	0.35 B	0.27 U	0.27 U	0.35 U	0.35 U	0.50 B	3.0 B
Calcium	-	7440-70-2	ug/l	41,100	30,000	34,300	28,600	16,300	22,300	22,800	19,300
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.57 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.60 B	5.0 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.3 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	1.2 B	NA	0.80 B	7.7 B
Iron	300 ST	7439-89-6	ug/l	1,750	8,920	10,700	8,490	5,020	7,920	8,890	9,230
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	6.9	14.8
Magnesium	35,000 GV	7439-95-4	ug/l	6,340	4,350 B	5,350	4,580 B	2,480 B	3,360 B	3,660	3450 B
Manganese	300 ST	7439-96-5	ug/l	398	2,290	2,880	2,410	1,580	2,520	3,150	1,840
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.28	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	3.1 B
Potassium	-	7440-09-7	ug/l	12,400 J	13,300	12,100	13,800	9250	7,510	7,650	9,130 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.44 B	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	33,700	30,000	26,300	28,100	21,600	21,400	17,000	16,700
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	5.7 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	5.0 B	NA	9.5 B	386
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	2,148	11,210	13,580	10,900	6,600	10,440	12,040	11,070

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 5/31/2011 (ug/l)	MW-05I 8/28/2012 (ug/l)	MW-05I 11/13/2013 (ug/l)	MW-05I 03/19/2015 (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)
Aluminum	-	7429-90-5	ug/l	36.4 B	42.9 B	7.67 J	9.05 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	6.59 J	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.8 B	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	34.1 B	20.6 B	107	65.2				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	54.4 B	43.9 B	51	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.6 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	20,500	15,600	32,800	19700				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.5 B	7.9	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	0.55 U	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	12,600	4,330	6,110	3180				
Lead	25 ST	7439-92-1	ug/l	4.9	1.9 B	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	3,830 B	1840 B	3,510	2010				
Manganese	300 ST	7439-96-5	ug/l	5,070	1,730	2,450	1170				
Mercury	0.7 ST	7439-97-6	ug/l	0.16 BNU*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.7 B	1.1 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	10,600	9,200	26,200	21200				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	19,300	10,400	14,100	8190				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.98 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	7.1 B	13 B	11.1 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	40.3 UBJ	10 U				
Iron + Manganese	500 ST*	- -	ug/l	17,670	6,060	8,560	4350				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 11/13/2007 (ug/l)	MW-05S 2/11/2008 (ug/l)	MW-05S 5/15/2008 (ug/l)	MW-05S 8/5/2008 (ug/l)	MW-05S 11/5/2008 (ug/l)	MW-05S 2/26/2009 (ug/l)	MW-05S 8/17/2009 (ug/l)	MW-05S 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	85.0 B	NA	214	541
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	3.4 B	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	300	NA	322	199 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.55 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	223 B	NA	279	146
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	1.2 B	0.27 U	0.78 B	0.35 U	0.35 U	0.90 B	0.34 U
Calcium	-	7440-70-2	ug/l	96,400	97,500	83,500	97,300	91500	89,400	103,000	62,600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.8 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.3 B	2.6 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	3.4 B	NA	1.4 B	5.5 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	4.5 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6	ug/l	55,300	42,500	38,400	42,100	40,000	36,900	41,000	20,500
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3 B	1.3 U	1.3 U	18.5	4.5
Magnesium	35,000 GV	7439-95-4	ug/l	12,500	12,300	10,900	12,800	11,700	11,400	13,000	8,300
Manganese	300 ST	7439-96-5	ug/l	42,400	4,850	4,100	4,480	4,550	4,420	4,710	2,520
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	5.9 B	NA	0.82 U	4.4 B
Potassium	-	7440-09-7	ug/l	15,300 J	14,300	13,400	15,400	14900	12,900	13,800	10,800 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.65 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	31,800	32,900	28,400	30,600	28,500	25,900	27,800	2,400
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	4.4 B	NA	3,9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	3.4 B	NA	0.77 U	3.8 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	1.5 U	NA	14.3 B	22.7
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	97,700	47,350	42,500	46,580	44,550	41,320	45,710	23,020

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 5/31/2011 (ug/l)	MW-05S 8/29/2012 (ug/l)	MW-05S 11/13/2013 (ug/l)	MW-05S 03/19/2015 (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)
Aluminum	-	7429-90-5	ug/l	39.8 B	1050	19 J	19.6 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 B	1.8 B	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.3 B	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	283	272	268	275				
Beryllium	3 GV	7440-41-7	ug/l	0.26 B	.3 B	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	197	163 B	144	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.9 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	79,500	78,600	69,500	75600				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.1 B	11.5	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	1.0 B	1.5 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	0.55 U	11.1 B	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	29,200	35,900	24,800	25300				
Lead	25 ST	7439-92-1	ug/l	9.5	11.7	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	10,600	8,880	8,360	8950				
Manganese	300 ST	7439-96-5	ug/l	4,280	5,280	4,770	5460				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UN	0.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	4.6 B	5.6 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	15,400	12,900	12,900	14500				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UN	.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	30,600	27,900	10,400	11800				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	2.7 B	8.6 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	13..9 B	82.5	13.3 UB	5.51 J				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	47.2 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	29,210	35,912	29,570	30,760				

NOTES:

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Concentration exceeds Standard/Guidance Value.

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ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 11/9/2007 (ug/l)	MW-06D 2/11/2008 (ug/l)	MW-06D 5/15/2008 (ug/l)	MW-06D 8/4/2008 (ug/l)	MW-06D 11/3/2008 (ug/l)	MW-06D 2/23/2009 (ug/l)	MW-06D 8/11/2009 (ug/l)	MW-06D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	38.6 B	26.4 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	40.5 B	NA	49.5	3.5 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	151 BN	NA	186	157
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.33 B	0.27 U	0.39 B	0.35U	0.35 U	0.30 B	0.34 U
Calcium	-	7440-70-2	ug/l	5,670	7,010	6,330	8,040	7920	8,540	8,130	7,860
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	2.3B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.60 B	0.72 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	9.5 B	NA	11.1 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	2.7 B	NA	0.62 U	2.2 B
Iron	300 ST	7439-89-6	ug/l	1,010	4,600	2,210	5,190	5,920	6,670	6,080	232 J*
Lead	25 ST	7439-92-1	ug/l	6.5 J	1.4 U	2.7 B	2.3 U	1.3 U	1.3 U	14.9	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	2,340 B	3,410 B	3,070 B	4,540 B	4,270 B	4,580 B	4,250 B	4,430 B
Manganese	300 ST	7439-96-5	ug/l	1,300	9,690	6,440	10,100	9,930	11,100	9,010	581
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	6.8 B	NA	7.2 B	1.4 U
Potassium	-	7440-09-7	ug/l	1,580 J	1,290 B	1,400 B	1,910 B	1,780 B	1,800 B	2,030 B	1,910 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.5	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	1.7 B	NA	0.34 B	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	9,930	10,500	11,300	15,200	17,300	16,100	18,100	15,600
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	2.4 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	1.5 U	NA	10.8 B	9.6 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	2,310	14,290	8,650	15,290	15,850	17,770	15,090	813

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 5/26/2011 (ug/l)	MW-06D 8/27/2012 (ug/l)	MW-06D 11/12/2013 (ug/l)	MW-06D 03/18/2015 (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	36.7 B	20 U	20 U				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	31.6 B	1.3 U	54.1	49.9				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	105	120	54	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	5,960	7,260	6,130	5360				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	.02 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.8 B	7	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	10.7 B	2 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.6 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	159	1,060	122	10.3 UB				
Lead	25 ST	7439-92-1	ug/l	1.6 B	8.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	3,580 B	3610 B	3,370	2870				
Manganese	300 ST	7439-96-5	ug/l	3,370	761	3,190	2220				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	4.8 B	1.9 B	8.11 J	6.67 J				
Potassium	-	7440-09-7	ug/l	2,000 B	1560 B	2,060	2020 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	18,500	17,800	3,260	4460				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	7.4 B	103	15.8 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	42.1 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	3,529	1,821	3,312	2220				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 11/9/2007 (ug/l)	MW-06I 2/11/2008 (ug/l)	MW-06I 5/15/2008 (ug/l)	MW-06I 8/4/2008 (ug/l)	MW-06I 11/3/2008 (ug/l)	MW-06I 2/23/2009 (ug/l)	MW-06I 8/11/2009 (ug/l)	MW-06I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	22.5 B	29.5 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.3 B
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	34.1 B	NA	39.1 B	40.2 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	91.8 BN	NA	99.2 B	74.6 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	22,800	20,600	17,600	20,800	18,300	16,000	17,100	14,600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.2 B	0.67 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	1.2 B	1.2 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	10.9 B	NA	11.8 B	14.2 B
Iron	300 ST	7439-89-6	ug/l	660	406	1,530	124	146	20.0 B	1,960	875 J*
Lead	25 ST	7439-92-1	ug/l	1.8 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	7.0	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	1,940 B	1,870 B	1,680 B	2,120 B	1,850 B	1,610 B	1,580 B	1,560 B
Manganese	300 ST	7439-96-5	ug/l	190	224	172	198	198	180	202	182
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.16 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	7,120 J	4,010 B	3,400 B	4,120 B	4,470 B	3,760 B	4,020 B	3,520 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	3.1 B
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	18,000	16,900	13,600	14,500	17,000	13,800	14,800	12,700
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	5.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	8.0 B	NA	19.7 B	22.8
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	850	630	1,702	322	344	200	222	1,057

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 5/26/2011 (ug/l)	MW-06I 8/27/2012 (ug/l)	MW-06I 11/12/2013 (ug/l)	MW-06I 03/18/2015 (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	97.4 B	5.36 J	20 U				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	53.0 B	46.8 B	58.3	138				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	32.3 B	56.1 B	58	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	23,900	19,700	13,500	16000				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.0 B	8.5	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.49 U	2.8 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.9 B	22.7 B	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	90.1 B	3,940	7.46 UB	9.48 UB				
Lead	25 ST	7439-92-1	ug/l	1.5 U	6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	4,030 B	1900 B	1,450	1630				
Manganese	300 ST	7439-96-5	ug/l	530	643	556	802				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	2.8 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	3,610 B	4920 B	8,220	16700 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	29,700	19,200	4,110	14500				
Thallium	0.5 GV	7440-28-0	ug/l	3.7 B	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.56 U	.4 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	13.3 B	95.4	10.7 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	46.3 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	620.1	4,583.0	563.46	802				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 11/9/2007 (ug/l)	MW-06S 2/11/2008 (ug/l)	MW-06S 5/15/2008 (ug/l)	MW-06S 8/4/2008 (ug/l)	MW-06S 11/3/2008 (ug/l)	MW-06S 2/23/2009 (ug/l)	MW-06S 8/11/2009 (ug/l)	MW-06S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	157 B	NA	165 B	40.5 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	3.7 B	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	6.8 B	NA	35.0 J*	6.3 B
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	320	NA	261	246
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	273 BN	NA	184	162
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	1.4 B	0.27 U	0.67 B	1.0 B	0.35 U	1.1 B	0.34 U
Calcium	-	7440-70-2	ug/l	78,900	91,000	77,600	64,000	97,600	79,700	68,500	58,500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.9 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	2.3 B	2.3 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	1.7 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	7.4 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6	ug/l	51,100	53,000	51,200	42,700	65,100	51,600	93,800 J*	50,600 J*
Lead	25 ST	7439-92-1	ug/l	1.4 UJ	1.4 U	2.3 U	2.3	1.3 U	1.3 U	13.8	2.5 B
Magnesium	35,000 GV	7439-95-4	ug/l	10,200	10,500	8,810	6 ,950	10,700	8,570	6,440	5,920
Manganese	300 ST	7439-96-5	ug/l	609	1,140	716	790	668	461	491	538
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82U	2.5 B
Potassium	-	7440-09-7	ug/l	11,200 J	10,100	10,500	8,880	12,200	9,410	8,210	9650
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	20,000	24,000	27,600	24,600	31,600	23,800	18,700	16,300
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	7.2 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	3.5 B	NA	5.9 B	4.6 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	8.0 B	NA	23.0	11.8 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	51,709	54,140	51,916	43,490	65,768	52,061	94,291	51,138

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POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 5/26/2011 (ug/l)	MW-06S 8/27/2012 (ug/l)	MW-06S 11/13/2013 (ug/l)	MW-06S 03/18/2015 (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	32.4 B	11.6 J	8 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	372	418	220	206				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	244	245	161	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.38 B	.18 U	.10 U	10 U				
Calcium	-	7440-70-2	ug/l	74,800	115,000	64,000	33800				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	3.0 B	15.5	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.62 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	0.55 U	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	36,400	82,300	46,400	17300				
Lead	25 ST	7439-92-1	ug/l	8.7	9.3	5.63 J	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	9,920	9,710	5,020	2820				
Manganese	300 ST	7439-96-5	ug/l	494	664	500	341				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	.64 U	5.5 J	20 U				
Potassium	-	7440-09-7	ug/l	11,900	14,200	8,360	16500 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	21,700	39,000	7,990	11100				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.6 B	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	2.7 B	2.1 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	17.7 B	11.3 B	17 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	39.7 UBJ	10 U				
Iron + Manganese	500 ST*	-	ug/l	73,294	165,264	46,900	17641				

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 11/9/2007 (ug/l)	MW-07I 2/11/2008 (ug/l)	MW-07I 5/19/2008 (ug/l)	MW-07I 8/5/2008 (ug/l)	MW-07I 11/5/2008 (ug/l)	MW-07I 2/24/2009 (ug/l)	MW-07I 8/14/2009 (ug/l)	MW-07I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	40.6 B	28.8 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	36.3 B	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	33.5 B	NA	75.0 B	57.5 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	33.7 B	NA	51.9 B	23.2 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.40 B	0.34 U
Calcium	-	7440-70-2	ug/l	73,600 J	18,700	20,900	21,600	28,400	19,800	24,800	14,000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.52 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	5.3 B	0.58 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	1.0 B	NA	0.62 U	2.4 B
Iron	300 ST	7439-89-6	ug/l	24,600	24.2 U	13.2 B	30.8 B	7.6 B	9.4 B	26.6 B	62.6 B
Lead	25 ST	7439-92-1	ug/l	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	2.1 U	2.1 B
Magnesium	35,000 GV	7439-95-4	ug/l	11,200 J	2,350 B	2,230 B	2,070 B	1,730 B	1,050 B	1,760 B	1,550 B
Manganese	300 ST	7439-96-5	ug/l	5,920 J	663	434	428	282	212	347	414
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	3.0 B	1.4 U
Potassium	-	7440-09-7	ug/l	12,500	3,770 B	2,930 B	3,330 B	3,460 B	6,790	8,840	5630 J*
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	95.7	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	29,100 J	23,300	23,400	22,500	26,700	20,900	35,000	23,200
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	20.0	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	7.8 B	NA	7.6 B	14.9 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	30,520	687	447.2	458.8	289.6	221.4	356.4	476.6

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 5/26/2011 (ug/l)	MW-07I 8/27/2012 (ug/l)	MW-07I 11/12/2013 (ug/l)	MW-07I 03/18/2015 (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	46.7 B	5.13 J	6.44 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	46.3 B	23.7 B	37.5	67.7				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	51.0 B	45.7 B	37	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	.18 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	38,000	21,900	12,700	14200				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.6 B	8.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.9 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	31.8 B	20.1 B	13.5 UB	8.62 UB				
Lead	25 ST	7439-92-1	ug/l	1.5 U	3.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	6,020	1980 B	1,650	1850				
Manganese	300 ST	7439-96-5	ug/l	971	506	1,600	2320				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U*J*	.8 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	3440 B	2850 B	1,790	2420 J				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	22,900	442	5,870	12700				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	3.2 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	8.1 B	57.7	10.8 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	44.3 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	971	506	1,613.50	2320				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 11/14/2007 (ug/l)	MW-11D 2/12/2008 (ug/l)	MW-11D 5/14/2008 (ug/l)	MW-11D 8/6/2008 (ug/l)	MW-11D 11/5/2008 (ug/l)	MW-11D 2/25/2009 (ug/l)	MW-11D 8/13/2009 (ug/l)	MW-11D 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	659	NA	494	16700
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	10.5
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	36.5 B	NA	20.0 B	120 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.21 B	NA	0.20 B	0.72 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	64.9 B	NA	57.8 B	42.6 B
Cadmium	5 ST	7440-43-9	ug/l	0.41 B	0.45 B	0.27 U	0.50 B	0.35 U	0.35 U	0.26 U	0.82 B
Calcium	-	7440-70-2	ug/l	11,300 J	9,390	7,730	7,600	7,350	6,450	8,020	43,500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.6 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.5 B	38.5
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	9.9 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	0.98 B	NA	0.80 B	42.8
Iron	300 ST	7439-89-6	ug/l	956	264	116	107	27.7 B	42.0 B	128	19000 J*
Lead	25 ST	7439-92-1	ug/l	4.3	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	21.1	65.6
Magnesium	35,000 GV	7439-95-4	ug/l	3,390 JB	2,740 B	2,510 B	2,730 B	2,530 B	2,130 B	1,900	6950
Manganese	300 ST	7439-96-5	ug/l	462 J	328	240	240	242	180	118	375
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	16.4 B	NA	9.2 B	23.3 B
Potassium	-	7440-09-7	ug/l	3,450	2,550 B	2,260 B	2,600 B	2,260 B	2,090 B	2,440 B	14,900
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	5.3 U	3.0 B
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	17,400 J	17,800	17,700	17,800	18,300	16,700	35,000	39,400
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	20.0	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	39.8 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	11.2 B	NA	7.6 B	209
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	1,418	592	356	347	270	222	160	19,375

NOTES:

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 5/27/2011 (ug/l)	MW-11D 8/29/2012 (ug/l)	MW-11D 11/14/2013 (ug/l)	MW-11D 03/19/2015 (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)
Aluminum	-	7429-90-5	ug/l	29,600	330	692	2550				
Antimony	3 GV	7440-36-0	ug/l	3.1 B	2.8 B	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	18.3	1.8 B	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	261	48.0 B	77.6	120				
Beryllium	3 GV	7440-41-7	ug/l	1.0 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	30.0 B	41 B	48	20 U				
Cadmium	5 ST	7440-43-9	ug/l	1.8 B	0.3 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	75,500	27,800	11,400	16300				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	73.1	1.0 B	20 U	8.39 J				
Cobalt	-	7440-48-4	ug/l	18.5 B	0.4 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	124	2.5 B	20 U	13.8 J				
Iron	300 ST	7439-89-6	ug/l	37,000	765	424	2020				
Lead	25 ST	7439-92-1	ug/l	174	20.6	15 U	18.2				
Magnesium	35,000 GV	7439-95-4	ug/l	17,000	5,800	3,660	5370				
Manganese	300 ST	7439-96-5	ug/l	1,020	150	147	131				
Mercury	0.7 ST	7439-97-6	ug/l	0.22 J*	0.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	57.7	15.2 B	17.9 J	25.8				
Potassium	-	7440-09-7	ug/l	13,700	7,370	3,780	5320				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	15,900	40,000	6,830	8650				
Thallium	0.5 GV	7440-28-0	ug/l	5.1 B	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	74.7	3.0 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	535	34.1	30.8 UB	160				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	43.4 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	38,020	915	571	2151				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 11/14/2007 (ug/l)	MW-11I 2/12/2008 (ug/l)	MW-11I 5/14/2008 (ug/l)	MW-11I 8/6/2008 (ug/l)	MW-11I 11/5/2008 (ug/l)	MW-11I 2/25/2009 (ug/l)	MW-11I 8/13/2009 (ug/l)	MW-11I 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	70.4 B	86.2 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	7.6 B	NA	2.9 U	6.2 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	28.2 B	NA	4.3 U	22.7 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.39 B
Calcium	-	7440-70-2	ug/l	5,980 J	5,370	9,040	5,030	5,030	4,340 B	49.0 B	3,260 B
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.80 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.88 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	0.65 U	NA	0.90 B	2.0 B
Iron	300 ST	7439-89-6	ug/l	25.1	24.2 U	280	6.6 U	10 B	13.7 B	10.9 B	125 J*
Lead	25 ST	7439-92-1	ug/l	1.4	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	2.1 U	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	1,420 J	1,260 B	2,440 B	1,450 B	1,700 B	1,390 B	43 U	895 B
Manganese	300 ST	7439-96-5	ug/l	100 J	47.0	92.2	28.3	11.8 B	8.6 B	0.40 B	111
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	1.9 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	ug/l	1,410	1,410 B	1,970 B	1,890 B	1,600 B	1,420 B	57 U	1,480 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	0.54 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	1.9 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	5,510 J	5,430	7,860	6,770	5,500	4,960 B	55 U	4,510 B
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	0.74 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	6.0 B	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	0.13 U	NA	6.7 U	16.8 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10 U	10.0U
Iron + Manganese	500 ST*	-	ug/l	125.1	71.2	372.2	34.9	21.8	22.3	11.3	236

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ST: Standard.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 5/27/2011 (ug/l)	MW-11I 8/29/2012 (ug/l)	MW-11I 11/14/2013 (ug/l)	MW-11I 03/19/2015 (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)
Aluminum	-	7429-90-5	ug/l	8.2 U	30.0 B	20 U	11.2 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	1.9 B	42 B	13.4 J	17.7 J				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	0.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	10.9 B	19.5 B	13	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	0.10 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	968 B	7,740	2,480	3640				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	1.6 B	0.34 U	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.49 U	0.28 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	1.6 B	.52 U	7.89 J	20 U				
Iron	300 ST	7439-89-6	ug/l	37.9 B	3.7 B	15 UB	21.2 UB				
Lead	25 ST	7439-92-1	ug/l	1.5 U	7.8	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	242 B	1660 B	612	989				
Manganese	300 ST	7439-96-5	ug/l	25.8	188.0	34.1	40.8				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	1.4 U	20 U	20 U				
Potassium	-	7440-09-7	ug/l	1050 B	4210 B	2140	2910				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	7,660	24,700	1,500	1770				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	0.56 U	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	10.3 B	6.1 B	12.7 UB	7.61 J				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	43.5 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	63.7	191.7	49.1	40.8				

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 11/14/2007 (ug/l)	MW-11S 2/12/2008 (ug/l)	MW-11S 5/14/2008 (ug/l)	MW-11S 8/6/2008 (ug/l)	MW-11S 11/5/2008 (ug/l)	MW-11S 2/25/2009 (ug/l)	MW-11S 8/13/2009 (ug/l)	MW-11S 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	2730	NA	52.0 B	47.6 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 B	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	57.4 B	NA	32.3 B	41.4 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.14 B	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	68.6 B	NA	55.5 B	73.9 B
Cadmium	5 ST	7440-43-9	ug/l	0.32	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	44,000 J	45,600	55,600	58,100	46,500	43,000	44,300	60,800
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.02 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	109	NA	6.8 B	47.9
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	3.6 B	NA	0.80 B	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	12.6 B	NA	1.9 B	3.6 B
Iron	300 ST	7439-89-6	ug/l	36.0 B	111	5,540	2,280	3,440	990	111	172 J*
Lead	25 ST	7439-92-1	ug/l	1.4 U	1.4 U	8.40	6.9	7.7	3.2	12.4	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	4,990 J	5,050	6,440	6,160	5,880	4,900 B	4,490 B	6,900
Manganese	300 ST	7439-96-5	ug/l	3,120 J	3,020	4,070	2,910	3,070	3,270	3,250	4,450
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	7.3 B	NA	1.8 B	3.1 B
Potassium	-	7440-09-7	ug/l	29,900	19,900	17,100	25,200	25,300	12,900	15,700	19000
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.55 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	54,900 J	36,500	45,300	52,400	56,200	38,300	38,900	56,800
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	7.6 B	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	17.2 B	NA	12.0 B	5.0 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	3,156.0	3,131.0	9,610	5,170	6,510	4,260	3,361	4,622

NOTES:

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Concentration exceeds Standard/Guidance Value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 5/27/2011 (ug/l)	MW-11S 8/29/2012 (ug/l)	MW-11S 11/14/2013 (ug/l)	MW-11S 03/19/2015 (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)
Aluminum	-	7429-90-5	ug/l	133 B	26.1 B	11.2 J	21.1				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.8 U	6.01 J	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	28.5 B	30.0 B	63.7	65.2				
Beryllium	3 GV	7440-41-7	ug/l	.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	38.5 B	52.8 B	62	20 U				
Cadmium	5 ST	7440-43-9	ug/l	.27 U	0.087 U	10 U	10 U				
Calcium	-	7440-70-2	ug/l	39,500	47,500	47,900	33400				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	9.1 B	0.70 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	.68 B	0.30 B	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	3.9 B	2.0 B	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	454	11.3 B	23.3 UB	50.1 UB				
Lead	25 ST	7439-92-1	ug/l	1.5 U	6.2	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	5,940	6,300	6,500	5630				
Manganese	300 ST	7439-96-5	ug/l	2,440	1,140	668	541				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	3.6 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	14,600	8,510	11,100	12900				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	44,100	57,000	14,900	13700				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	.72 B	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	12.5 B	6.0 B	8.65 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	42.9 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	2,894	1,140	691.3	541				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 11/14/2007 (ug/l)	MW-12D 2/12/2008 (ug/l)	MW-12D 5/14/2008 (ug/l)	MW-12D 8/6/2008 (ug/l)	MW-12D 11/5/2008 (ug/l)	MW-12D 2/25/2009 (ug/l)	MW-12D 8/13/2009 (ug/l)	MW-12D 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	12.5 U	101 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	4.7 B	NA	6.6 B	7.5 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	19.5 B	NA	9.5 B	19.0 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	ug/l	11,500 J	11,100	12,000	11,200	11,600	12,500	11,500	9,410
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.80 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	1.1 B	0.65 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	0.65 U	NA	0.90 B	2.9 B
Iron	300 ST	7439-89-6	ug/l	28.8 B	24.2 U	37.4 B	6.6 U	9.2 B	12.6 B	12.4 B	139 J*
Lead	25 ST	7439-92-1	ug/l	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	12.3	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	5,770 J	5,480	6,130	6,260	6,100	6,560	5,420	5190
Manganese	300 ST	7439-96-5	ug/l	1.9 JB	2.7 B	4.7 B	3.0 B	3.1 B	3.6 B	2.6 B	8.9 B
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	ug/l	878 B	945 B	1,030 B	1,340 U	1,060 B	1,150 B	1,210 B	1,400 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	9,580 J	12,000	11,900	13,400	11,700	13,600	15,300	14,800
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	5.2 B	NA	22.3	13.7 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	30.7	26.9	42.1	9.6	12.3	16.2	15.0	147.9

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 5/27/2011 (ug/l)	MW-12D 8/29/2012 (ug/l)	MW-12D 11/14/2013 (ug/l)	MW-12D 03/20/2015 (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)
Aluminum	-	7429-90-5	ug/l	290	70.9 B	20 U	9.22 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	8.0 B	4.3 B	7.67 J	9.53 J				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	0.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	9.0 B	11 B	13	20 U				
Cadmium	5 ST	7440-43-9	ug/l	0.27 U	0.1 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	6,990	5,030	4,950	4710				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.4 B	1.1 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.49 U	.28 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	4.1 B	1.2 B	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	541	83.8 B	11.2 UB	10.5 UB				
Lead	25 ST	7439-92-1	ug/l	2.8 B	7.9	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	3,520 B	2400 B	2,540	2430				
Manganese	300 ST	7439-96-5	ug/l	14.8 B	23.5	20 U	21.2				
Mercury	0.7 ST	7439-97-6	ug/l	0.10U U*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	1.1 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	1,590 B	85.3 U	659	746				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	12,000	8,580	2,810	2780				
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	1.1 B	0.20 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	25.1	12.9 B	10.8 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	36.3 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	555.8	107.3	11.2	21.2				

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 11/14/2007 (ug/l)	MW-12I 2/12/2008 (ug/l)	MW-12I 5/14/2008 (ug/l)	MW-12I 8/6/2008 (ug/l)	MW-12I 11/5/2008 (ug/l)	MW-12I 2/25/2009 (ug/l)	MW-12I 8/13/2009 (ug/l)	MW-12I 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	8.7 U	NA	12.5 U	190 B
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	13.0 B	NA	28.5 B	23.4 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	30.7 B	NA	23.9 B	22.4 B
Cadmium	5 ST	7440-43-9	ug/l	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.97 B
Calcium	-	7440-70-2	ug/l	5,780 J	6,480	7,190	7,480	6,570	11,800	9,260	8,260
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	0.49 U	1.0 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	0.65 U	NA	0.70 B	4.1 B
Iron	300 ST	7439-89-6	ug/l	24.2 U	264	66.6 B	12.0 B	7.8 B	9.2 B	14.9 B	161 J*
Lead	25 ST	7439-92-1	ug/l	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	9.1	1.8 U
Magnesium	35,000 GV	7439-95-4	ug/l	889 JB	960 B	1,120 B	1,040 B	899 B	1,530 B	1,070 B	984 B
Manganese	300 ST	7439-96-5	ug/l	650 J	918	1,040	1,540	1,200	2,650	3,760	457
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	ug/l	2,150 B	2,750 B	3,300 B	3,950 B	3,320 B	3,870 B	5,630	5020
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	10,700 J	11,400	12,400	11,700	10,700	14,900	14,500	9,940
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	2.8 B	NA	29	65.5
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	674	1,182	1,106.6	1552	1207.8	2,659.2	3,769.2	618

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approrximate concentration of the analyte as determined by data validation.

UJ: Value was not detected above quantitation limit but was an appoximate

ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 5/27/2011 (ug/l)	MW-12I 8/29/2012 (ug/l)	MW-12I 11/14/2013 (ug/l)	MW-12I 03/20/2015 (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)
Aluminum	-	7429-90-5	ug/l	562	299	7.24 J	6.86 J				
Antimony	3 GV	7440-36-0	ug/l	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	ug/l	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	ug/l	18.8 B	22.1 B	37.3	56.8				
Beryllium	3 GV	7440-41-7	ug/l	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	ug/l	13.0 B	18.3 B	19	20 U				
Cadmium	5 ST	7440-43-9	ug/l	2.5 B	4.2 B	10 U	10 U				
Calcium	-	7440-70-2	ug/l	6,930	9,490	20,100	34700				
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	ug/l	2.6 B	3.0 B	20 U	20 U				
Cobalt	-	7440-48-4	ug/l	0.49 U	0.28 U	20 U	20 U				
Copper	200 ST	7440-50-8	ug/l	6.4 B	1.9 B	20 U	20 U				
Iron	300 ST	7439-89-6	ug/l	878	343	23.5 UB	13.8 UB				
Lead	25 ST	7439-92-1	ug/l	5.0	5.5	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	ug/l	1210 B	1470 B	4510	4790				
Manganese	300 ST	7439-96-5	ug/l	1,620	3,710	2,830	819				
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	ug/l	1.2 U	1.4 B	20 U	20 U				
Potassium	-	7440-09-7	ug/l	4050 B	6,670	2910	4160				
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*	2.5 BJ	25 U	25 U				
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*	0.60 B	20 U	20 U				
Sodium	20,000 ST	7440-23-5	ug/l	8,910	29,300	6,140	7740				
Thallium	0.5 GV	7440-28-0	ug/l	3.8 B	2.9 U	15 U	15 U				
Vanadium	-	7440-62-2	ug/l	2.3 B	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ug/l	53.4	27	14.7 UB	20 U				
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10	45.1 UB	10 U				
Iron + Manganese	500 ST*	-	ug/l	2,498	4,053	2,853.50	819				

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte as determined by data validation.

N: Matrix spike sampe recovery not within control limits.

UJ: Value was not detected above quantitation limit but was an appoximate

ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 8/16/2007 (ug/l)	MW-12S 11/14/2007 (ug/l)	MW-12S 2/12/2008 (ug/l)	MW-12S 5/14/2008 (ug/l)	MW-12S 8/6/2008 (ug/l)	MW-12S 11/5/2008 (ug/l)	MW-12S 2/25/2009 (ug/l)	MW-12S 8/13/2009 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	NA	6710	NA	12.5 U
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	NA	2.3 U	NA	2.5 U
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	NA	6.0 B	NA	3.0 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	NA	47.1 B	NA	26.7 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	NA	0.38 B	NA	0.13 U
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	NA	55.4 B	NA	38.1 B
Cadmium	5 ST	7440-43-9	ug/l	0.28 U	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U
Calcium	-	7440-70-2	ug/l	24,600	27,000 J	30,400	26,900	29,200	29,900	28,200	30,800
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	NA	0.02 U	NA	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	NA	203	NA	3.2 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	NA	5.4 B	NA	0.76 U
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	NA	12.8 B	NA	0.90 B
Iron	300 ST	7439-89-6	ug/l	21.2 B	132	3,060	884	3,630	10,500	110	64.6 B
Lead	25 ST	7439-92-1	ug/l	1.7 U	1.4 U	1.4 U	2.3 U	2.8 B	5.0	1.3 U	7.9
Magnesium	35,000 GV	7439-95-4	ug/l	2,000 B	1,720 JB	1,860 B	2,210 B	2,490 B	2,770	2,440 B	2,410 B
Manganese	300 ST	7439-96-5	ug/l	2.2 B	2.8 JB	17.7	28.5	139	357	24.4	10.0 B
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	NA	0.13 U	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	NA	19.7 B	NA	2.1 B
Potassium	-	7440-09-7	ug/l	17,900	17,600	14,400	11,200	19,900	20,100	15,300	15,400
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	NA	1.9 U	NA	5.3 U
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	NA	0.54 U	NA	0.33 U
Sodium	20,000 ST	7440-23-5	ug/l	U*	22,000 J	26,300	22,400	28,200	39,800	31,600	24,400
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	NA	1.9 U	NA	3.9 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	NA	15.9 B	NA	0.77 U
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	NA	23.9	NA	8.3 B
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	NA	10.0 U	NA	10.0 U
Iron + Manganese	500 ST*	-	ug/l	23.4	134.8	3,062.8	892.5	3,769	10,857	134.4	74.6

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approrximate concentration of the analyte as determined by data validation.

UJ: Value was not detected above quantitation limit but was an appoximate

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 2/5/2010 (ug/l)	MW-12S 5/27/2011 (ug/l)	MW-12S 8/29/2012 (ug/l)	MW-12S 11/14/2013 (ug/l)	MW-12S 03/20/2015 (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)
Aluminum	-	7429-90-5	ug/l	157 B	1480	64.3 B	13.1 J	56.5			
Antimony	3 GV	7440-36-0	ug/l	2.1 U	2.1 U	1.8 U	6.04 J	6.6 J			
Arsenic	25 ST	7440-38-2	ug/l	2.3 U	1.9 U	1.5 B	25 U	25 U			
Barium	1,000 ST	7440-39-3	ug/l	25.1 B	52.0 B	19.6 B	55.1	163			
Beryllium	3 GV	7440-41-7	ug/l	0.26 U	0.13 U	0.12 U	20 U	20 U			
Boron	1,000 ST	7440-42-8	ug/l	42.9 B	26.5 B	41.0 B	36	20 U			
Cadmium	5 ST	7440-43-9	ug/l	0.34 U	0.27 U	0.10 B	10 U	10 U			
Calcium	-	7440-70-2	ug/l	28,900	35,200	41,600	30,900	43400			
Chromium Hexavalent	50 ST	18540-29-9	ug/l	0.02 U	20 U	0.2 U	10 U	10.0 U			
Chromium Total	50 ST	7440-47-3	ug/l	152	1,350	53.1	20 U	5.39 J			
Cobalt	-	7440-48-4	ug/l	2.4 B	10.1 B	1.4 B	20 U	20 U			
Copper	200 ST	7440-50-8	ug/l	3.2 B	35.6	4.3 B	20 U	5.15 J			
Iron	300 ST	7439-89-6	ug/l	1,100 J*	9,280	524	40.3 UB	94			
Lead	25 ST	7439-92-1	ug/l	1.8 U	9.7	5.9	15 U	15 U			
Magnesium	35,000 GV	7439-95-4	ug/l	2,620 B	3,980 B	3540 B	2,400	3430			
Manganese	300 ST	7439-96-5	ug/l	136	552	596	17.8 J	122			
Mercury	0.7 ST	7439-97-6	ug/l	0.10 U	0.10 UU*J*	0.10 U	0.25 U	0.25 U			
Nickel	100 ST	7440-02-0	ug/l	7.9 B	74.7	11.6 B	7.38 J	19 J			
Potassium	-	7440-09-7	ug/l	19500	18,300	15,300	22,000	27200			
Selenium	10 ST	7782-49-2	ug/l	2.5 U	2.6 UNU*J*	2.4 BJ	25 U	25 U			
Silver	50 ST	7440-22-4	ug/l	0.83 U	0.52 UU*J*	0.29 U	20 U	20 U			
Sodium	20,000 ST	7440-23-5	ug/l	30,800	38,800	29,100	12,500	32100			
Thallium	0.5 GV	7440-28-0	ug/l	3.2 U	2.7 U	2.9 U	15 U	15 U			
Vanadium	-	7440-62-2	ug/l	2.8 B	16.9 B	0.80 B	20 U	20 U			
Zinc	2,000 ST	7440-66-6	ug/l	11.6 B	42.9	37.6	12.7 UB	34			
Cyanide	200 ST	0057-12-5	ug/l	10.0 U	10.0 U	10.0 U	50.7 UB	10 U			
Iron + Manganese	500 ST*	-	ug/l	1,236	9,832	1,120	58.1	216			

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B:Concentration is above instrument detection limit but below contract required detection limit.

U* or UB: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte as determined by data validation.

N: Matrix spike sampe recovery not within control limits.

UJ: Value was not detected above quantitation limit but was an appoximate

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

APPENDIX A-3

Monitoring Well Sample Results - Volatile Organic Compounds

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-01D 2/21/2007 (ug/l)	MW-01D 11/3/2008 (ug/l)	MW-01D 8/12/2009 (ug/l)	MW-01D 2/4/2010 (ug/l)	MW-01D 5/26/2011 (ug/l)	MW-01D 8/28/2012 (ug/l)	MW-01D 11/12/2013 (ug/l)	MW-01D 3/17/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	0.53 J	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	3 J*	5 U	5 U	5 U	3 J	0.65 J	1.0 J	5 ST
1,1-Dichloroethene	000075-35-4	5 U	1 J*	3 J	5 U	5 U	1 J	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	0.90 J	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	U*	U*	5 U	1 BJ	5 U*	5 U	5.0 U	2.7 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	0.52 J	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.5 UB	9.7 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	2 J	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		11	6	3 J	5 U	5 U	4 J	0.65	2.95	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-01I 2/21/2007 (ug/l)	MW-01I 11/3/2008 (ug/l)	MW-01I 8/12/2009 (ug/l)	MW-01I 2/4/2010 (ug/l)	MW-01I 5/26/2011 (ug/l)	MW-01I 8/28/2012 (ug/l)	MW-01I 11/12/2013 (ug/l)	MW-01I 3/17/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 UJ*	5 U	1 J	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 J*	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 UJ*	5 U*	5 U	5.0 U	2.5 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 J*	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 UJ*	5 U	2 J	2.0 U	0.53 J	7 ST
Chloromethane	000074-87-3	5 U	5 J*	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 UB	9.6 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	1 J*	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 J*	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 UJ*	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 UJ*	5 U	3 J	0	0.53	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-01S 2/21/2007 (ug/l)	MW-01S 11/3/2008 (ug/l)	MW-01S 8/12/2009 (ug/l)	MW-01S 2/4/2010 (ug/l)	MW-01S 5/26/2011 (ug/l)	MW-01S 8/28/2012 (ug/l)	MW-01S 11/12/2013 (ug/l)	MW-01S 3/17/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ	5 U*	5 U	5.0 U	2.2 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.7 UB	9.4 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 U	5 U	5 U	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-02D 02/22/07 (ug/l)	MW-02D 11/3/2008 (ug/l)	MW-02D 8/14/2009 (ug/l)	MW-02D 2/8/2010 (ug/l)	MW-02D 5/31/2011 (ug/l)	MW-02D 8/28/2012 (ug/l)	MW-02D 11/12/2013 ug/l)	MW-02D 3/17/2015 ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 UJ	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	2.2 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	1 J*	1 J	1 J	5 U	5 U	0.50 J	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	3.9 UB	9.9 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 UJ	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 UJ	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	1 J*	1 J	5 U	5 U	5 U	0.5	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds Instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-02I 02/22/07 (ug/l)	MW-02I 11/3/2008 (ug/l)	MW-02I 8/14/2009 (ug/l)	MW-02I 2/8/2010 (ug/l)	MW-02I 5/31/2011 (ug/l)	MW-02I 8/28/2012 (ug/l)	MW-02I 11/12/2013 (ug/l)	MW-02I 3/17/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	2.7 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	6.0 UB	8.7 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 U	5 U	5 U	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-03S 2/22/2007 (ug/l)	MW-03S 11/5/2008 (ug/l)	MW-03S 8/14/2009 (ug/l)	MW-03S 2/4/2010 (ug/l)	MW-03S 6/1/2011 (ug/l)	MW-03S 8/28/2012 (ug/l)	MW-03S 11/13/2013 (ug/l)	MW-03S 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	0.56 J	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	0.70 J	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 UJ	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ	5 U*	5 U	5.0 U	4.4 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 UJ	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.9 UB	8.2 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 UJ	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 U	5 U	5 U	1.26	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-04D 02/23/07 (ug/l)	MW-04D 11/3/2008 (ug/l)	MW-04D 8/12/2009 (ug/l)	MW-04D 2/4/2010 (ug/l)	MW-04D 5/26/2011 (ug/l)	MW-04D 8/27/2012 (ug/l)	MW-04D 11/13/2013 (ug/l)	MW-04D 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	4.8 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.7 UB	8.1 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 U	5 U	5 U	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-04I 02/23/07 (ug/l)	MW-04I 11/4/2008 (ug/l)	MW-04I 8/12/2009 (ug/l)	MW-04I 2/4/2010 (ug/l)	MW-04I 5/26/2011 (ug/l)	MW-04I 8/27/2012 (ug/l)	MW-04I 11/13/2013 (ug/l)	MW-04I 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	1 J	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	3.4 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 U,J*	5 U	5 U	5 U	4.2 UB	7.8 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	1 J	5 U	5 U	5 J	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-04S 3/2/2007 (ug/l)	MW-04S 11/3/2008 (ug/l)	MW-04S 8/12/2009 (ug/l)	MW-04S 2/4/2010 (ug/l)	MW-04S 5/31/2011 (ug/l)	MW-04S 8/27/2012 (ug/l)	MW-04S 11/13/2013 (ug/l)	MW-04S 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 UJ	5 UJ	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 UJ	5 UJ	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 J	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ	5 U*	5 U	5.0 U	4.1 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	2 J	2 J*	5 U	2 J	2 J	3 J	0.75 J	0.72 J	5 ST
Chloroethane	000075-00-3	2 J	5 U	5 U	1 J	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.6 UB	7.9 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		4	2 J*	U	5 U	5 U	3 J	0.75	0.72	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-05D 02/21/07 (ug/l)	MW-05D 11/5/2008 (ug/l)	MW-05D 8/17/2009 (ug/l)	MW-05D 2/8/2010 (ug/l)	MW-05D 6/1/2011 (ug/l)	MW-05D 8/28/2012 (ug/l)	MW-05D 11/13/2013 (ug/l)	MW-05D 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	2.8 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.5	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.7 UB	8.3 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	1 J*	5 U	5 U	5 U	5 U	2.0 U	0.56 J	5 ST
Toluene	000108-88-3	5 U	1 J*	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	0.74 J	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 UJ	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	2	U	5 U	5 U	5 U	0	3.8	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-05I 02/21/07 (ug/l)	MW-05I 11/5/2008 (ug/l)	MW-05I 8/17/2009 (ug/l)	MW-05I 2/8/2010 (ug/l)	MW-05I 5/31/2011 (ug/l)	MW-05I 8/28/2012 (ug/l)	MW-05I 11/13/2013 (ug/l)	MW-05I 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U*J*	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	2 BJ	5 U*	5 U	5.0 U	4.6 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	1 J	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	1.4 J	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.1 UB	10 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	0.58 J	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	1 J	5 U	5 U	5 U	0	1.98	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
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E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-05S 02/21/07 (ug/l)	MW-05S 11/5/2008 (ug/l)	MW-05S 8/17/2009 (ug/l)	MW-05S 2/8/2010 (ug/l)	MW-05S 5/31/2011 (ug/l)	MW-05S 8/29/2012 (ug/l)	MW-05S 11/13/2013 (ug/l)	MW-05S 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	2 BJ	5 U*	5 U	5.0 U	2.9 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	3 J*	5 U	2 J	2 J	2 J	2.0 U	0.61 J	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.4 UB	8.1 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	3	U	5 U	2	2	0	0.61	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-06D 02/22/07 (ug/l)	MW-06D 11/3/2008 (ug/l)	MW-06D 8/11/2009 (ug/l)	MW-06D 2/4/2010 (ug/l)	MW-06D 5/26/2011 (ug/l)	MW-06D 8/27/2012 (ug/l)	MW-06D 11/12/2013 (ug/l)	MW-06D 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	3.7 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	1 J	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.4 UB	7.2 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	1 J*	5 U	5 U	1 J	5 U	0.54 J	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	1	U	5 U	1	5 U	0.54	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-06I 02/22/07 (ug/l)	MW-06I 11/4/2008 (ug/l)	MW-06I 8/11/2009 (ug/l)	MW-06I 2/4/2010 (ug/l)	MW-06I 5/26/2011 (ug/l)	MW-06I 8/27/2012 (ug/l)	MW-06I 11/12/2013 (ug/l)	MW-06I 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 UJ*	5 U	5 U*	5 U	5.0 U	3.3 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 UJ*	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	0.51 J	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.7 UB	7.7 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	UJ*	5 U	5 U	5 U	0.51	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-06S 02/22/07 (ug/l)	MW-06S 11/4/2008 (ug/l)	MW-06S 8/11/2009 (ug/l)	MW-06S 2/4/2010 (ug/l)	MW-06S 5/26/2011 (ug/l)	MW-06S 8/27/2012 (ug/l)	MW-06S 11/13/2013 (ug/l)	MW-06S 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	5 UJ*	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	1 J*	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	4 J*	5 U	5 UJ*	2 J	3 J	0.67 J	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ*	5 U*	5 U	5.0 U	3.8 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	1 J	4 J*	5 U	2 J*	3 J	3 J	0.90 J	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	18	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 UJ*	5 U	5 U	4.5 UB	7.7 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	0.77 J	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	3.8	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 UJ*	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		1	8	U	5 UJ*	5	6 J	1.57	22.57	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-07I 02/22/07 (ug/l)	MW-07I 11/4/2008 (ug/l)	MW-07I 8/14/2009 (ug/l)	MW-07I 2/8/2010 (ug/l)	MW-07I 5/26/2011 (ug/l)	MW-07I 8/27/2012 (ug/l)	MW-07I 11/12/2013 (ug/l)	MW-07I 3/18/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	5.0 U	4.0 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 UJ*	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	19	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.2 UB	7.5 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	4 J*	5 U	5 U	5 U	2 J	12	1.4 J	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 UJ*	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	23	U	5 U	5 U	2	12	1.4	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-11D 02/28/07 (ug/l)	MW-11D 11/5/2008 (ug/l)	MW-11D 8/13/2009 (ug/l)	MW-11D 2/5/2010 (ug/l)	MW-11D 5/27/2011 (ug/l)	MW-11D 8/29/2012 (ug/l)	MW-11D 11/14/2013 (ug/l)	MW-11D 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5	3 J*	5 U	5 U	5 U	5 U	0.95 J	0.68 J	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5	3 J*	5 U	5 U	5 U	1 J	1.1 J	0.79 J	5 ST
1,1-Dichloroethene	000075-35-4	2 J	3 J*	5 U	5 U	5 U	5 U	0.67 J	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.3	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	2 BJ	5 U*	5 U	2.4 UB	2.6 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	3.9 UB	8.4 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	1 J*	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	2 J*	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		12	12	U	5 U	5 U	1	5.02	1.47	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-11I 02/28/07 (ug/l)	MW-11I 11/4/2008 (ug/l)	MW-11I 8/13/2009 (ug/l)	MW-11I 2/5/2010 (ug/l)	MW-11I 5/27/2011 (ug/l)	MW-11I 8/29/2012 (ug/l)	MW-11I 11/14/2013 (ug/l)	MW-11I 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.0006 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 UJ	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	5 U	2.4 UB	2.5 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	2 J*	5 U	2 J	5 U	2 J	0.63 J	0.74 J	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	3.6 UB	8.9 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	2 J*	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 UJ	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 UJ	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	4	U	5 U	5 U	2	0.63	0.74	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-11S 02/23/07 (ug/l)	MW-11S 11/4/2008 (ug/l)	MW-11S 8/13/2009 (ug/l)	MW-11S 2/5/2010 (ug/l)	MW-11S 5/27/2011 (ug/l)	MW-11S 8/29/2012 (ug/l)	MW-11S 11/14/2013 (ug/l)	MW-11S 3/19/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	4 J*	5 U	5 U	5 U*	5 U	3.0 UB	2.8 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.1 UB	8.4 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	2 J	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	4	U	5 U	5 U	2	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-12D 02/23/07 (ug/l)	MW-12D 11/4/2008 (ug/l)	MW-12D 8/13/2009 (ug/l)	MW-12D 2/5/2010 (ug/l)	MW-12D 5/27/2011 (ug/l)	MW-12D 8/29/2012 (ug/l)	MW-12D 11/14/2013 (ug/l)	MW-12D 3/20/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ	5 U*	5 U	2.7 UB	2.2 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.9 UB	10 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 UJ*	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	U	5 U	5 U	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-12I 02/23/07 (ug/l)	MW-12I 11/4/2008 (ug/l)	MW-12I 8/13/2009 (ug/l)	MW-12I 2/5/2010 (ug/l)	MW-12I 5/27/2011 (ug/l)	MW-12I 8/29/2012 (ug/l)	MW-12I 11/14/2013 (ug/l)	MW-12I 3/20/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U*J*	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	1 BJ	5 U*	2 JU	2.1 UB	3.1 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.7 UB	10 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U*J*	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	1	5 U	2	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guidance value

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

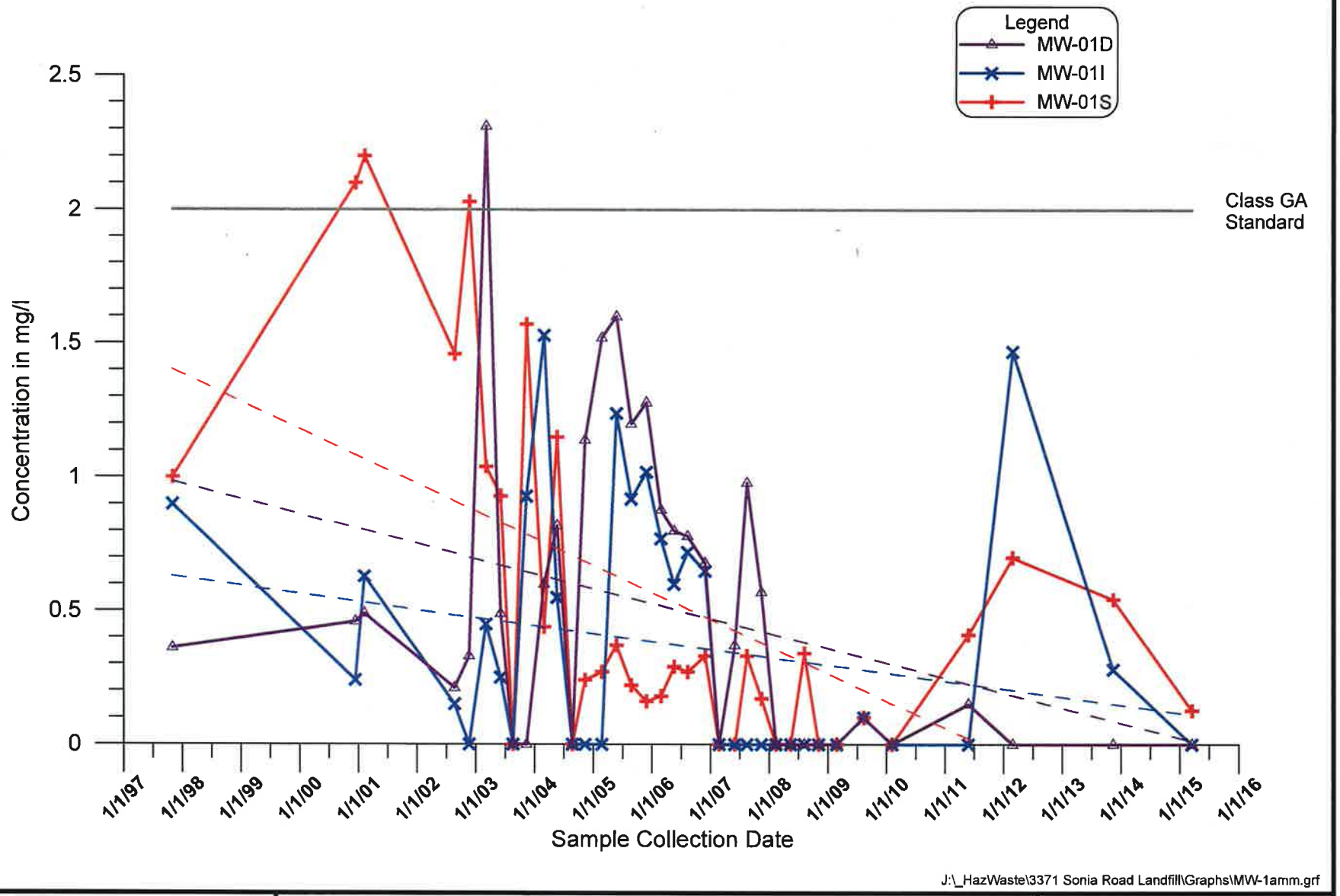
Sample ID Date of Collection Volatile Organic Compounds	CAS #	MW-12S 02/23/07 (ug/l)	MW-12S 11/4/2008 (ug/l)	MW-12S 8/13/2009 (ug/l)	MW-12S 2/5/2010 (ug/l)	MW-12S 5/27/2011 (ug/l)	MW-12S 8/29/2012 (ug/l)	MW-12S 11/14/2013 (ug/l)	MW-12S 3/20/2015 (ug/l)	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,1-Trichloroethane	000071-55-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1,2-Trichloroethane	000079-00-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloroethene	000075-35-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
1,2-Dichlorobenzene	000095-50-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
1,2-Dichloroethane	000107-06-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
1,4-Dichlorobenzene	000106-46-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	3 ST
2-Butanone	000078-93-3	5 U	5 U	5 U	5 U	5 U	1 J	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5.0 U	-
Acetone	000067-64-1	5 U	5 U	5 U	5 U	5 U*	3 JU	2.2 UB	2.9 UB	50 GV
Acrylonitrile	000107-13-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	1 ST
Bromochloromethane	000074-97-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Bromodichloromethane	000075-27-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5 U	5 U	5 U	5 U	5 U*J*	5 U	2.0 U	4.0 U	5 ST
Carbon disulfide	000075-15-0	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chlorobenzene	000108-90-7	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroethane	000075-00-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Chloroform	000067-66-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	7 ST
Chloromethane	000074-87-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Ethylbenzene	000100-41-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Iodomethane	000074-88-4	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	NA	5 ST
Methylene chloride	000075-09-2	5 U	5 U	5 UJ*	5 U	5 U	5 U	4.1 UB	9.6 UB	5 ST
Styrene	000100-42-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Tetrachloroethene	000127-18-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Toluene	000108-88-3	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5 U	5 U	5 U	5 U	5 U	5 U	1.0 U	2.0 U	5 ST
Trichloroethene	000079-01-6	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	-
Vinyl chloride	000075-01-4	5 U	5 U	5 U	5 U	5 U	5 U	2.0 U	2.0 U	2 ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	NA	NA	4.0 U	4.0 U	5 ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5 ST
Xylene (total)	001330-20-7	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	5 ST
TOTAL VOCs		U	U	U	5 U	5 U	4	0	0	-

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria
-: No standard or guildance value

APPENDIX B

Water Quality Graphs



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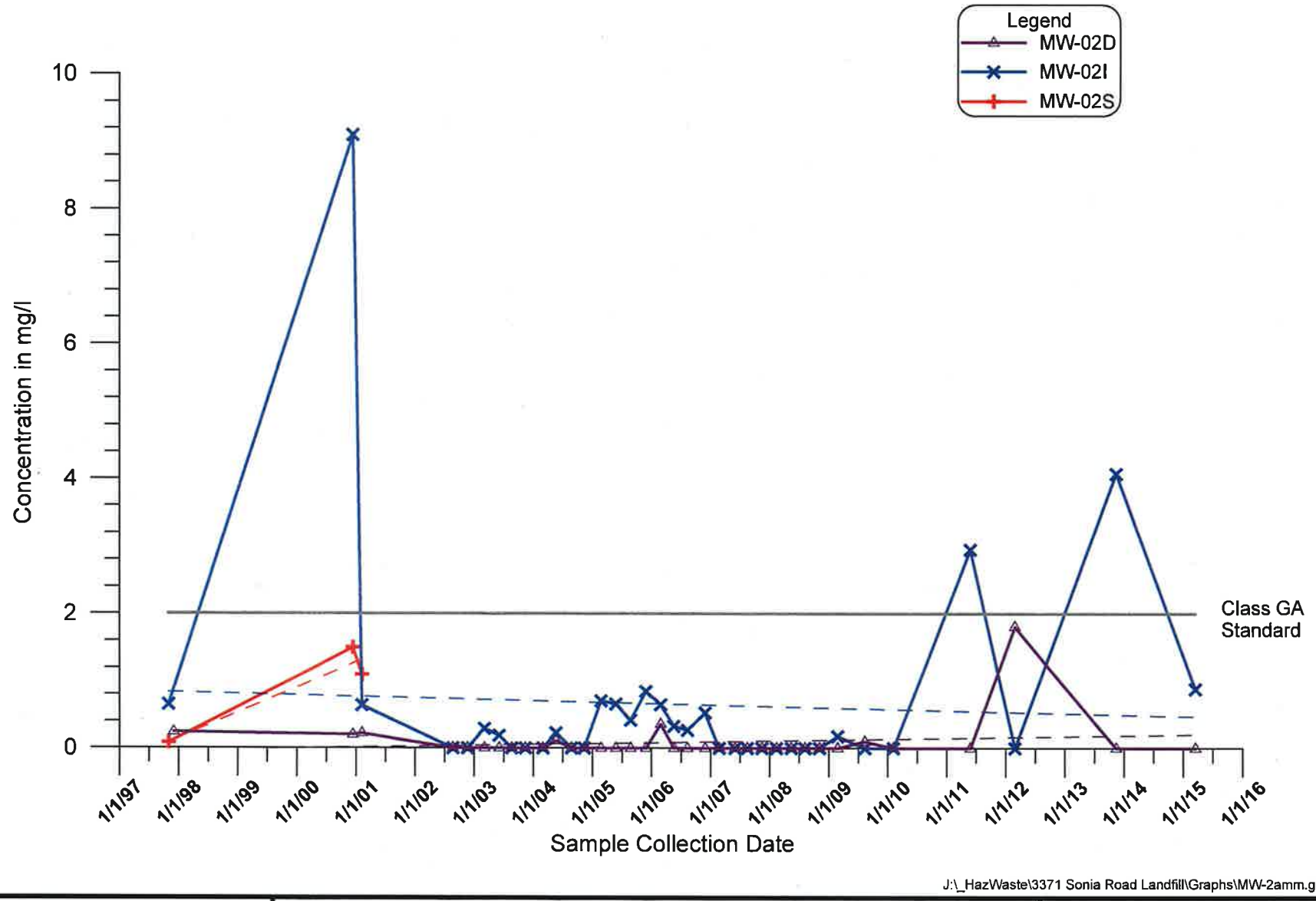
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 1

Appendix B



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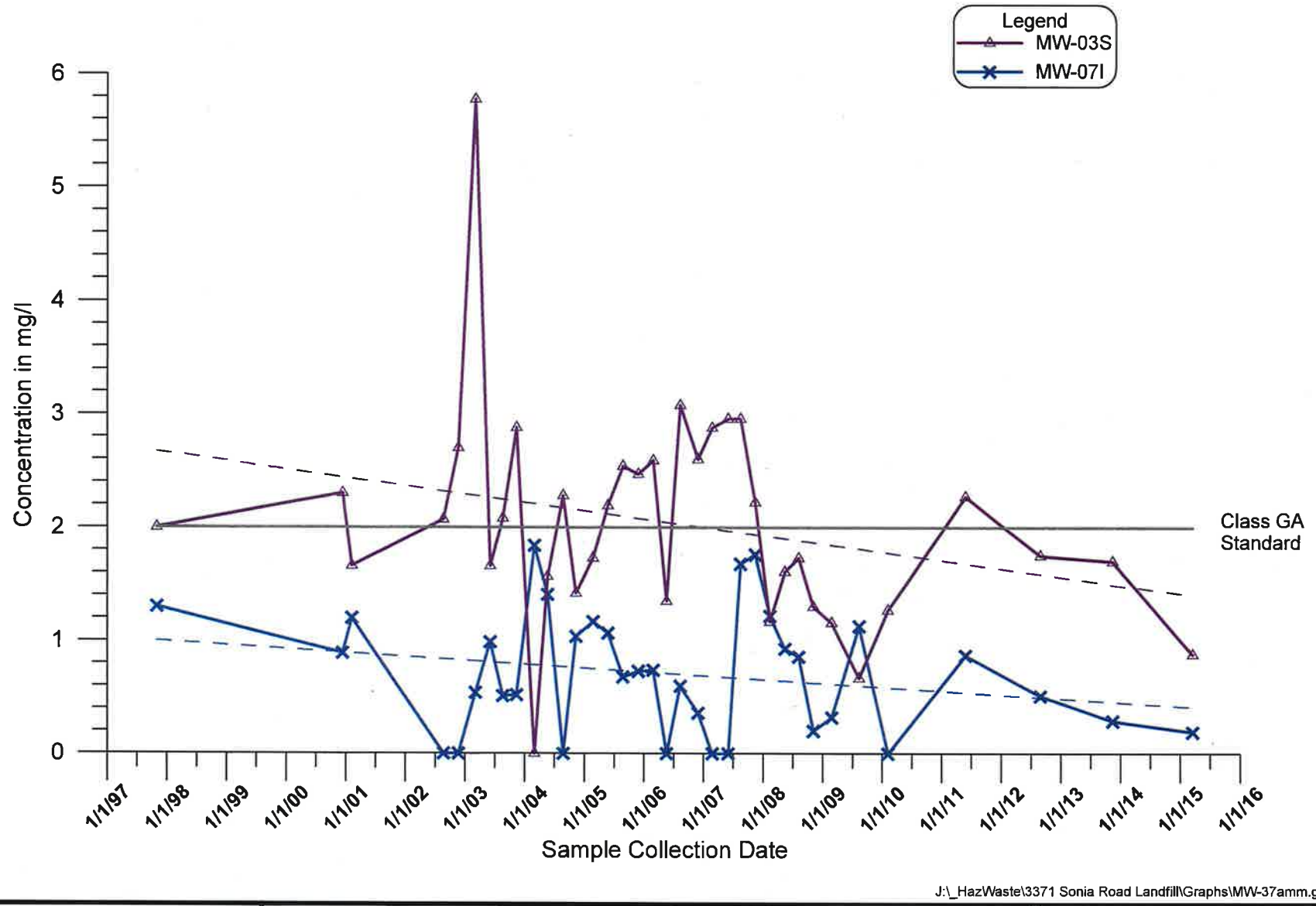
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 2

Appendix B



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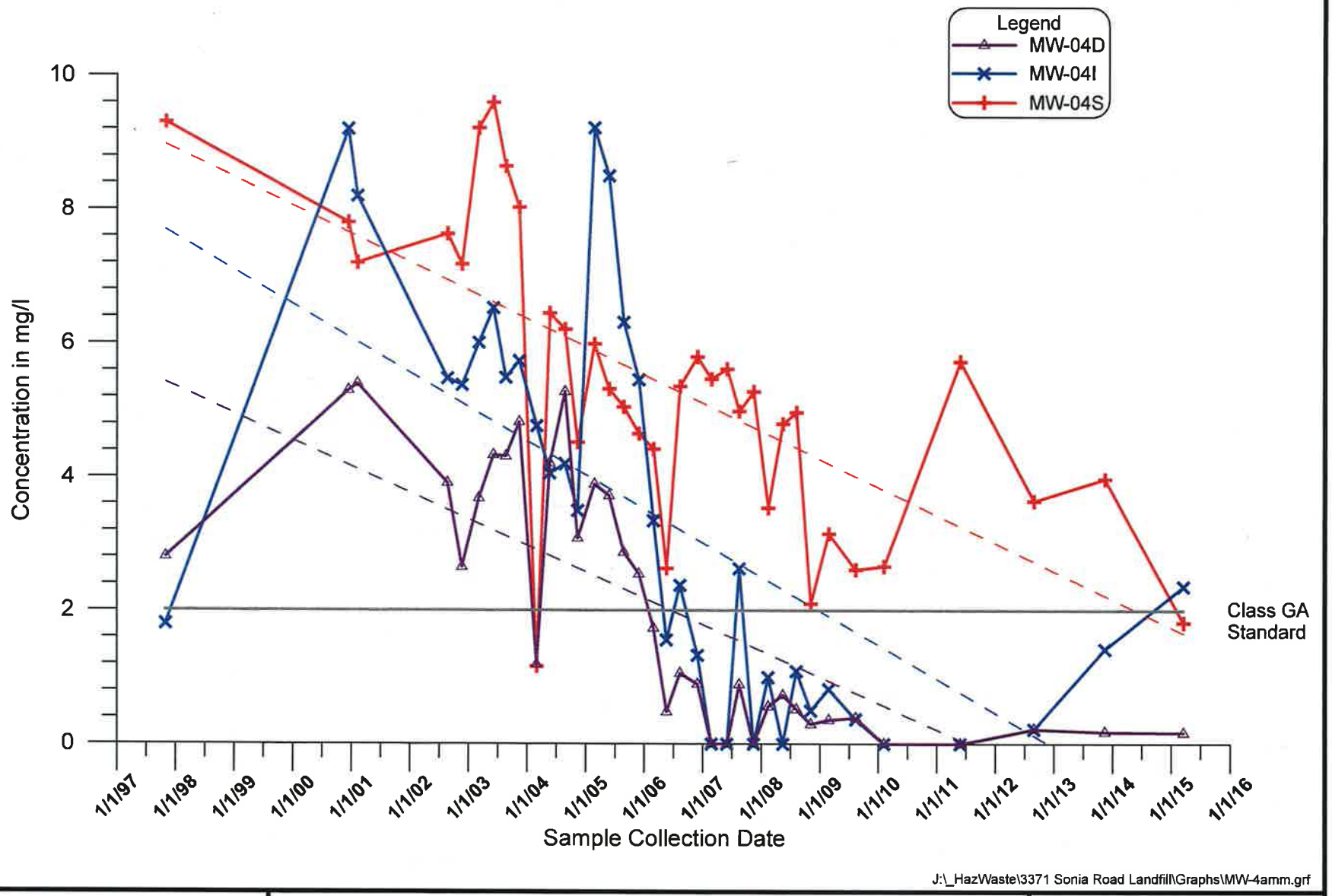
D&B Engineers and Architects, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Wells 3S and 7I

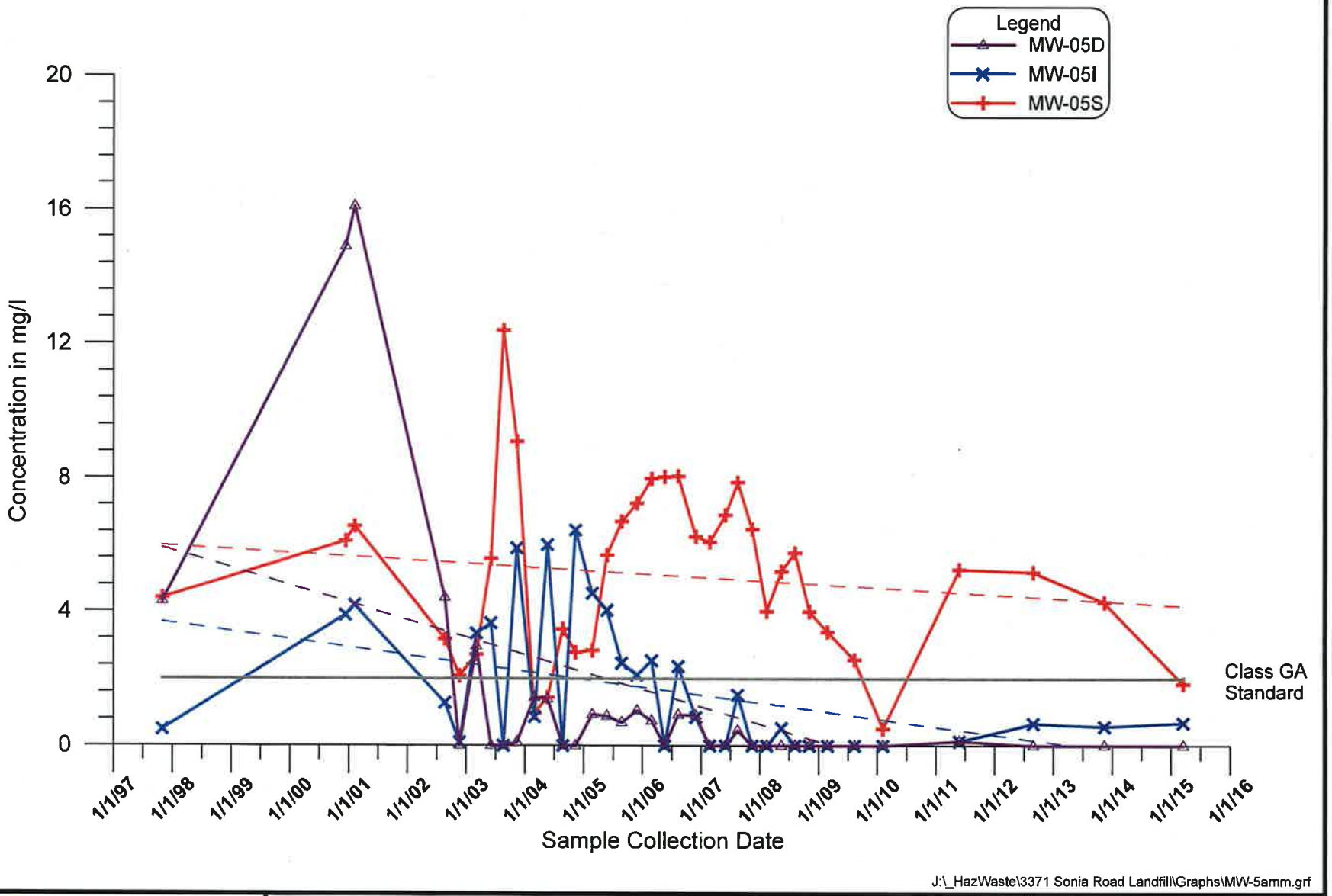
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 4

Appendix
B



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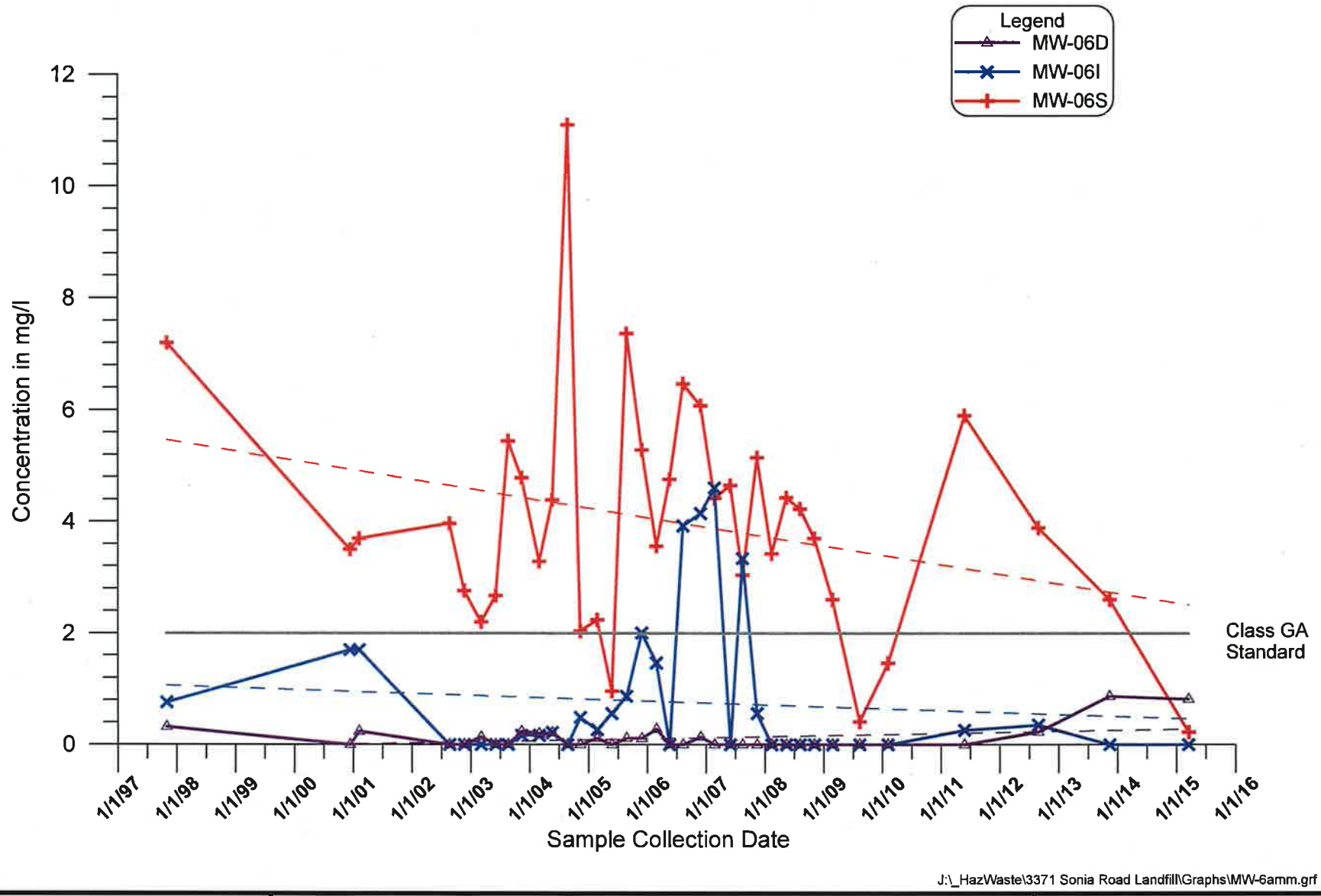
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 5

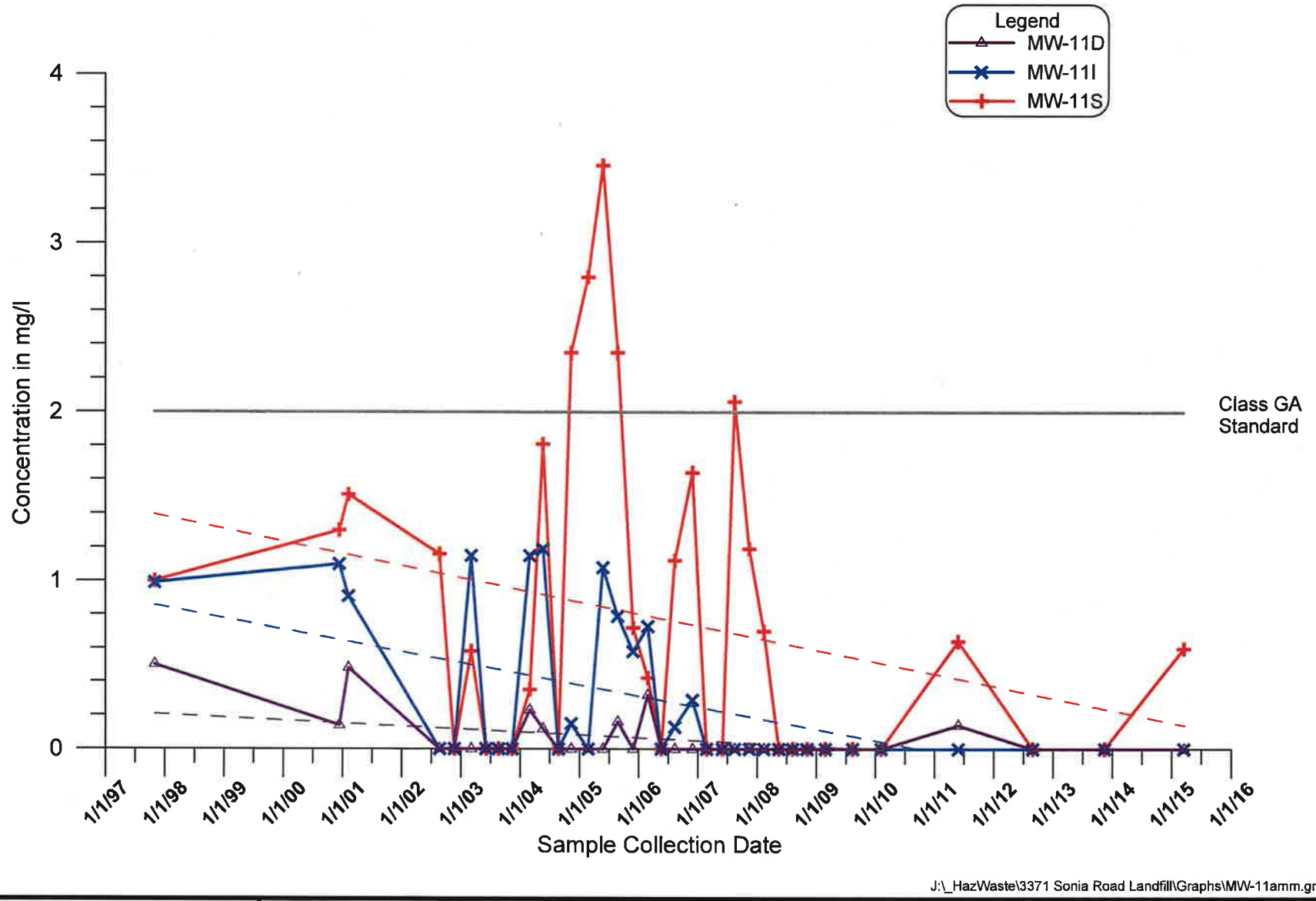
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 6

Appendix B



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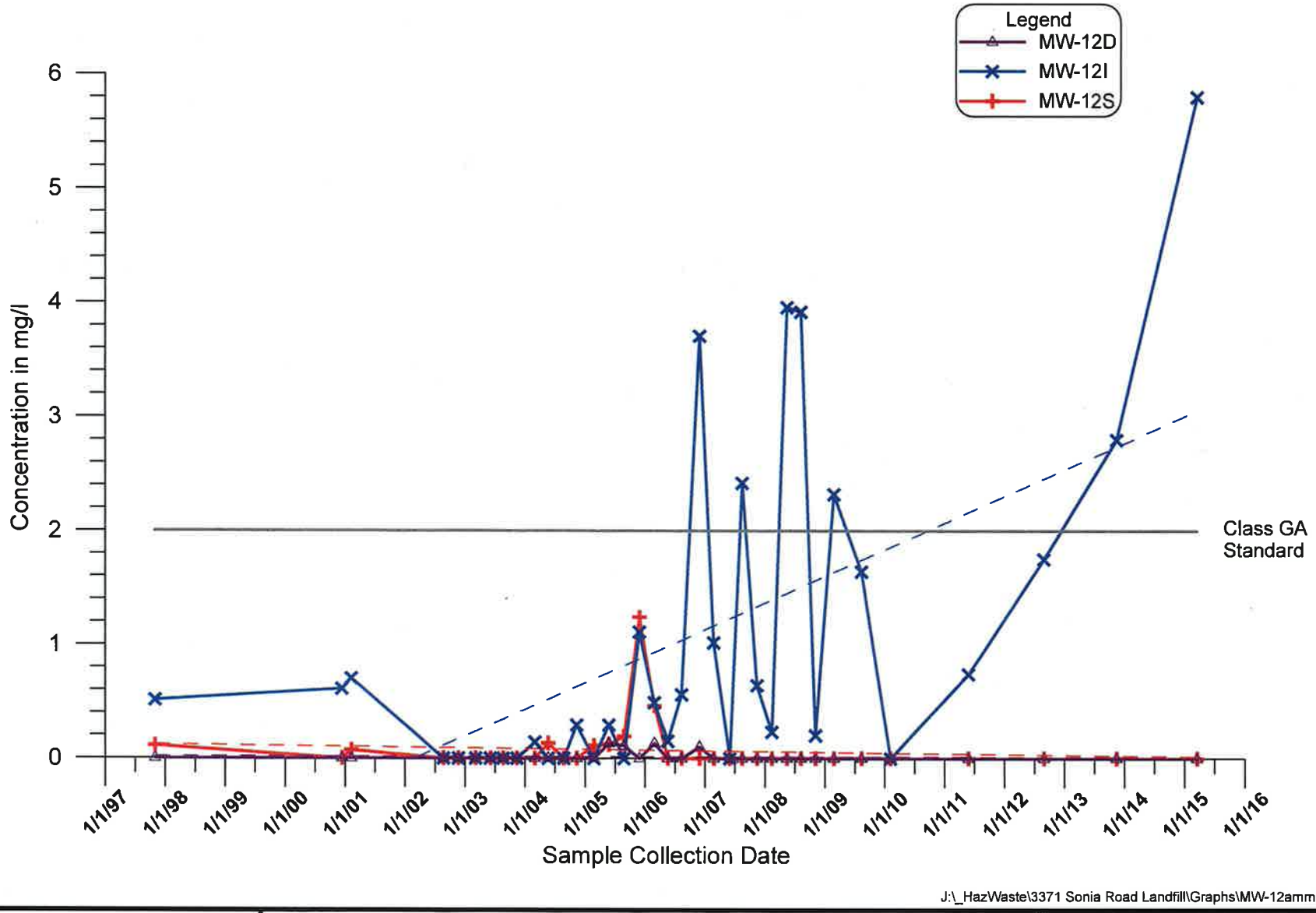
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 11

Appendix B



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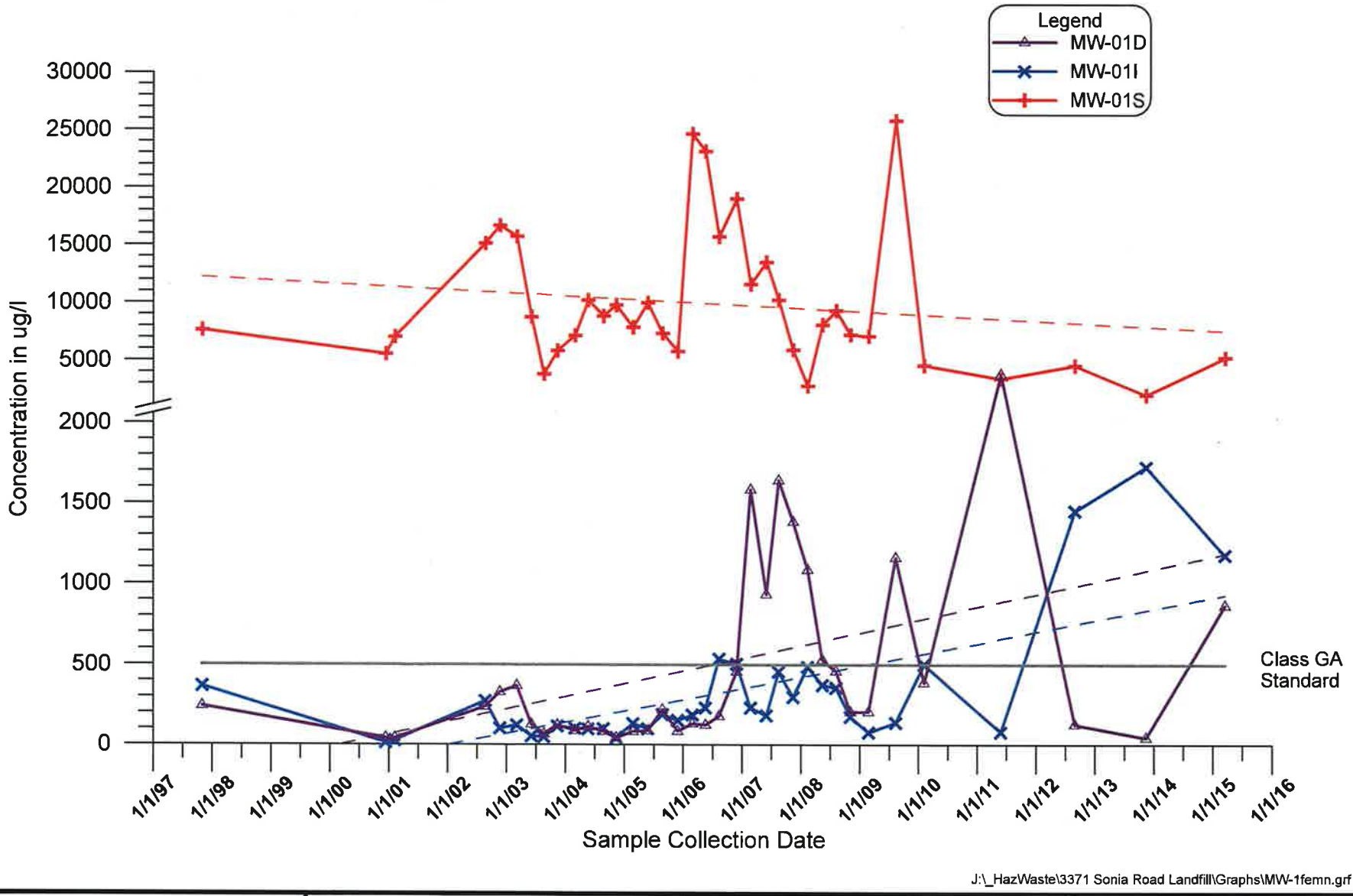
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Ammonia Data for Monitoring Well Cluster 12

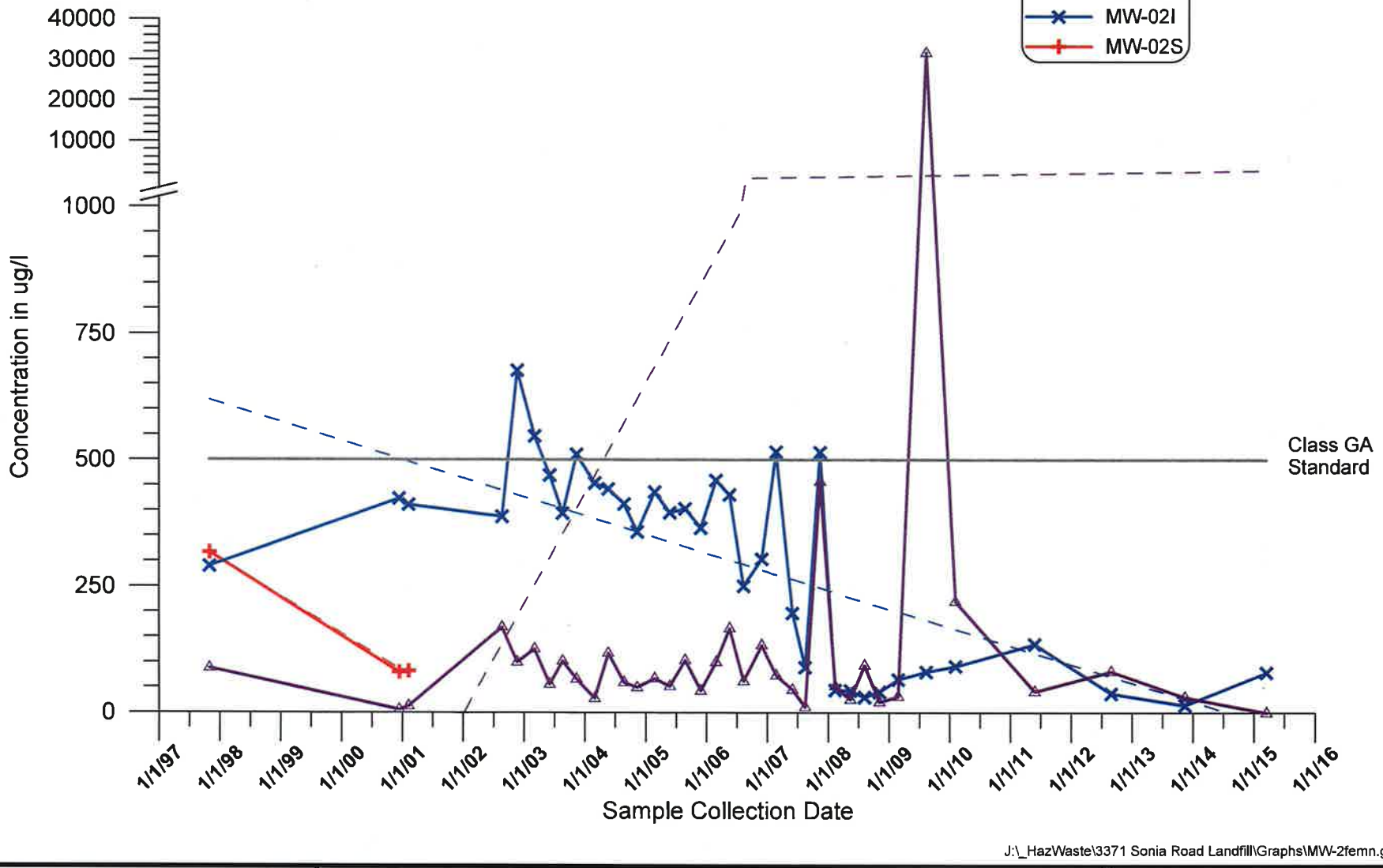
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 1

Appendix B



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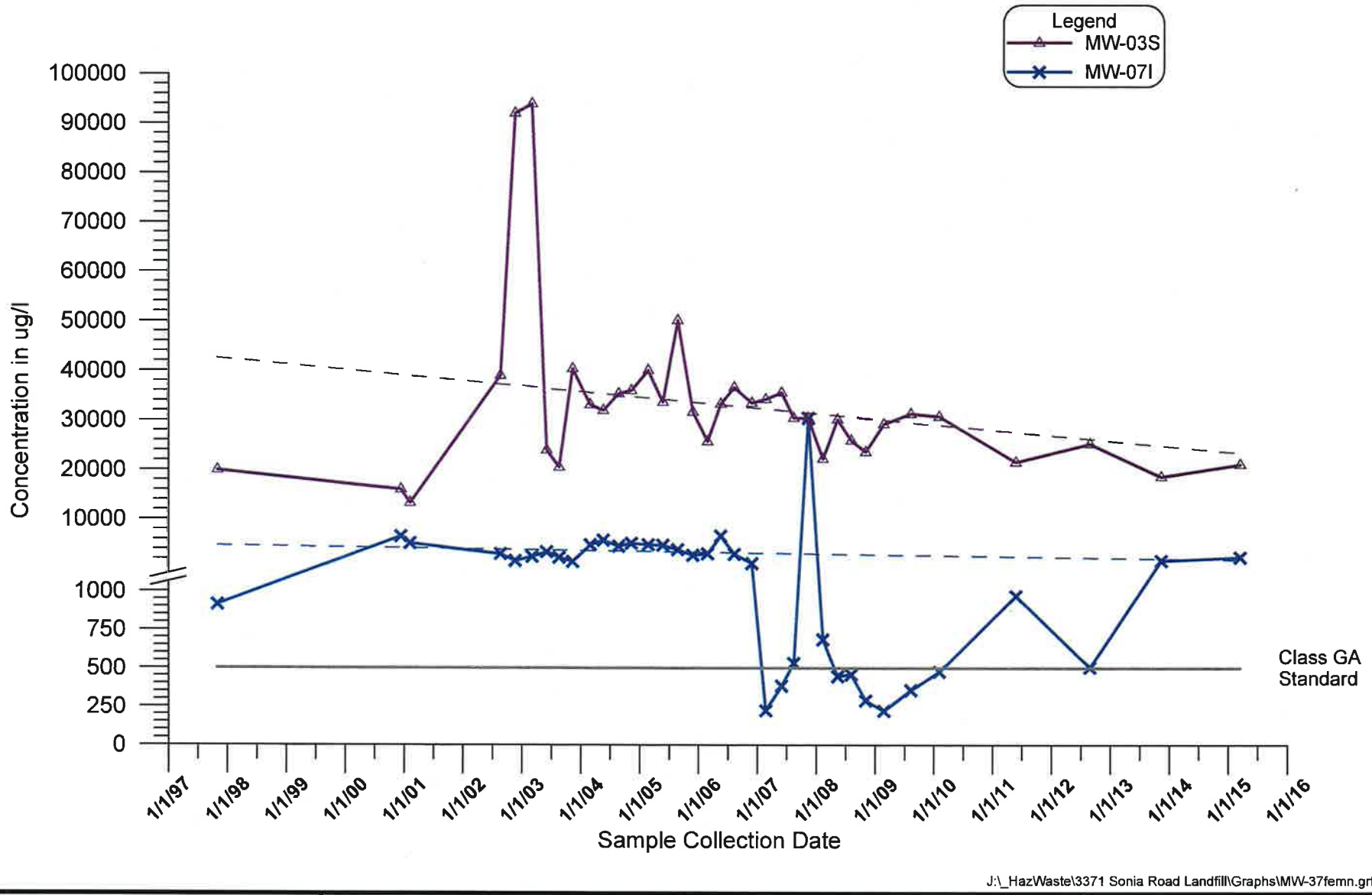
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for
Monitoring Well Cluster 2

Appendix
B



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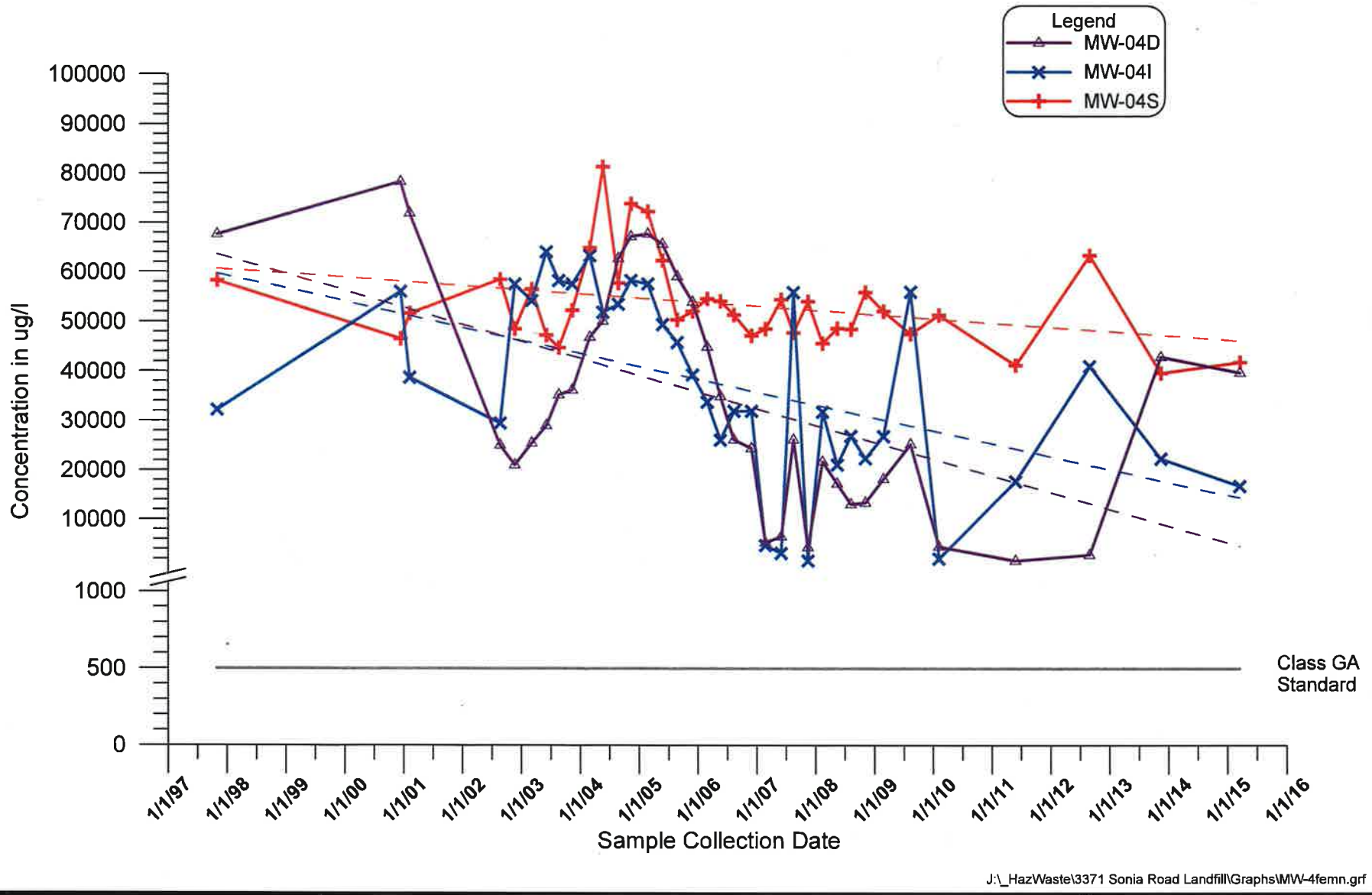
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Iron and Manganese Data for
Monitoring Wells 3S and 7I

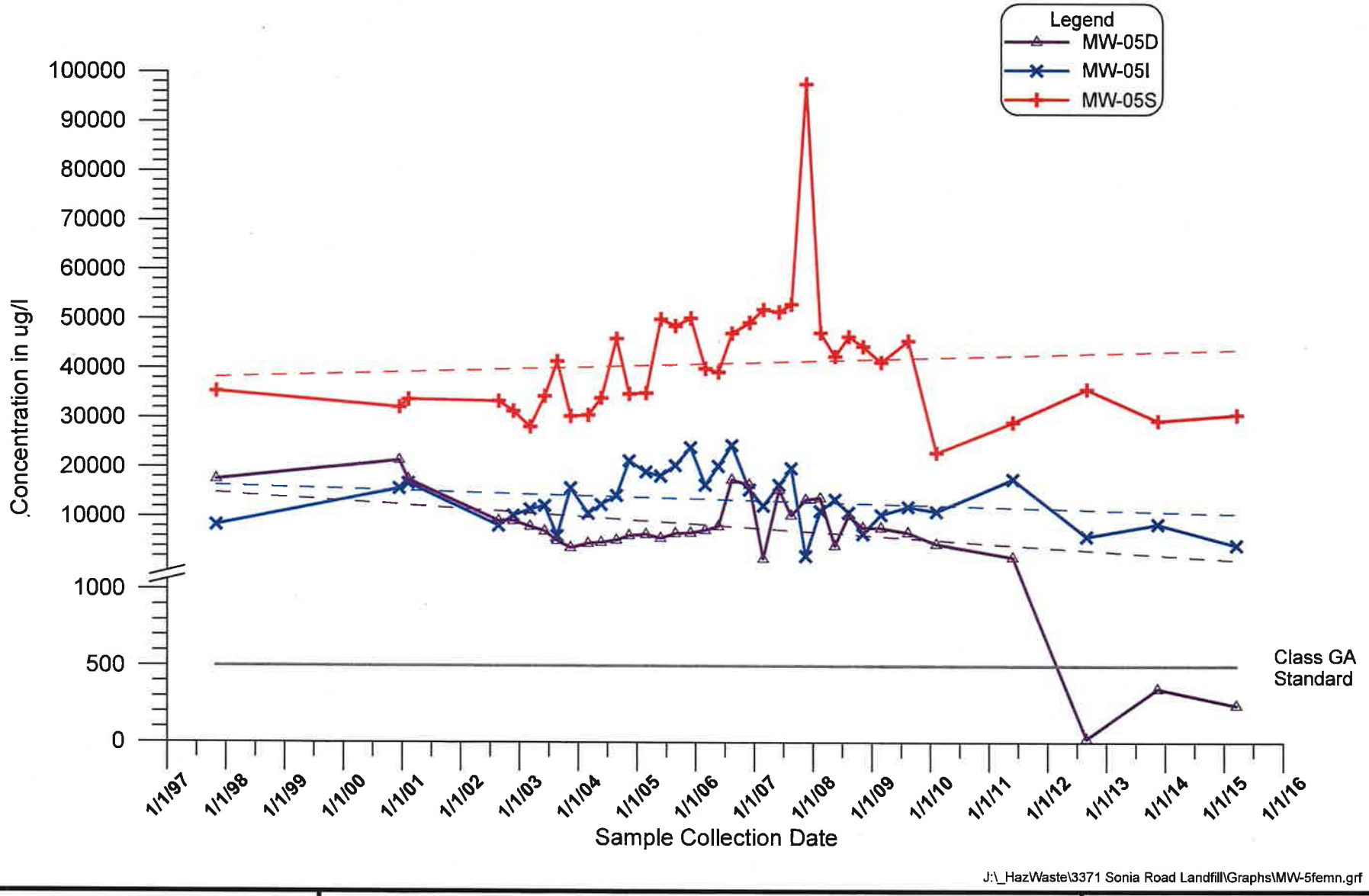
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 4

Appendix B



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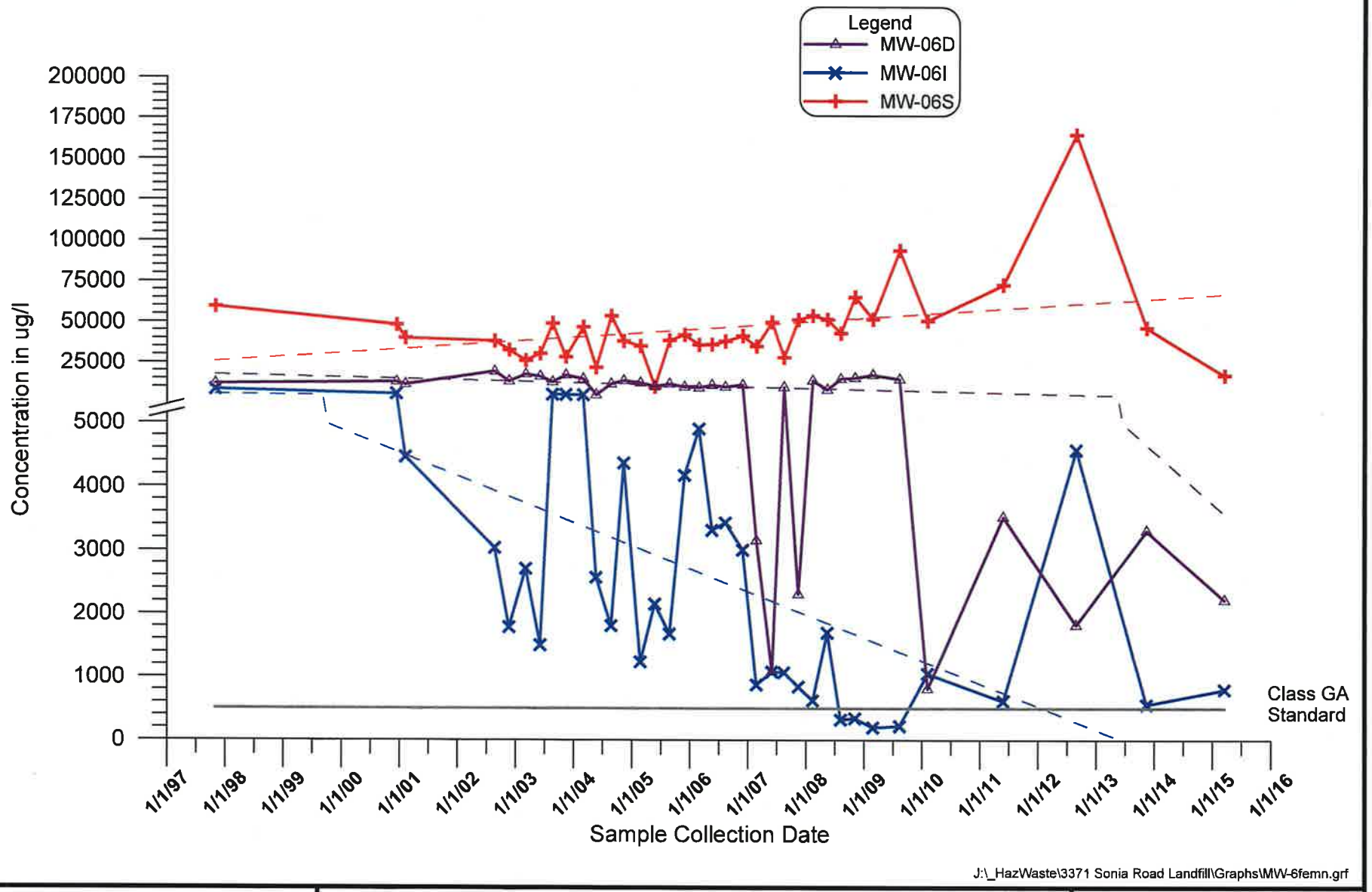
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 5

Appendix B



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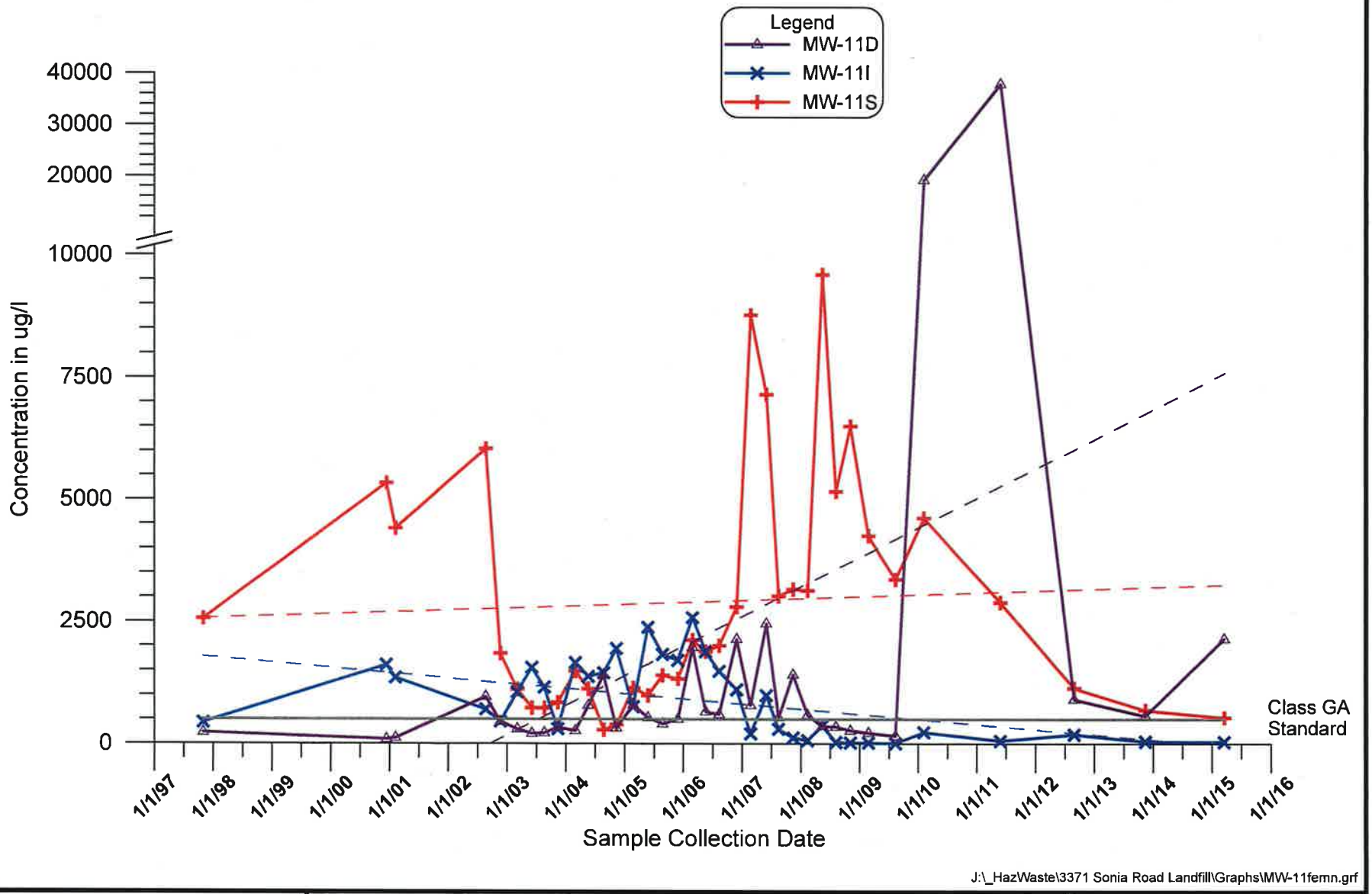
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 6

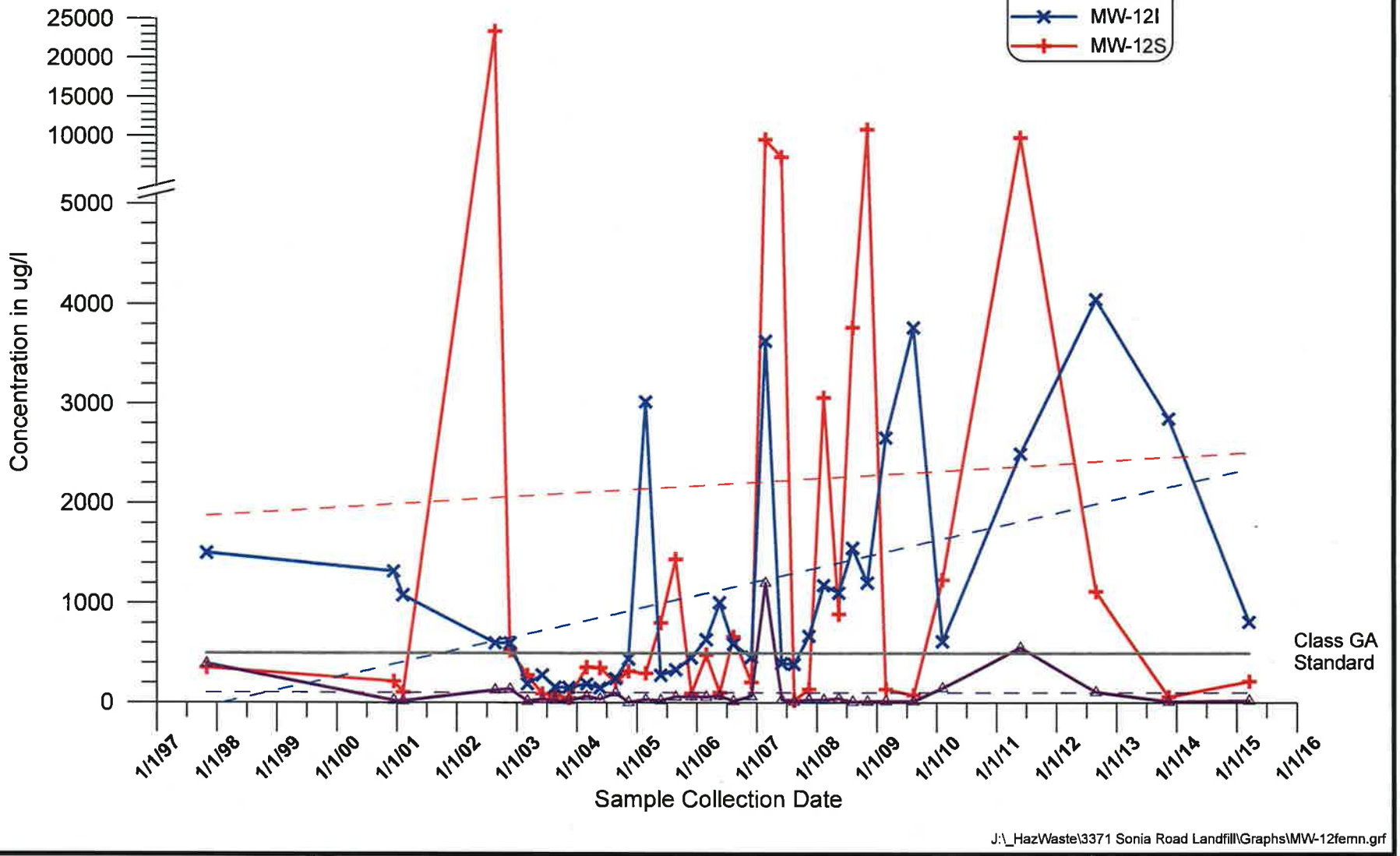
Appendix B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 11

Appendix B



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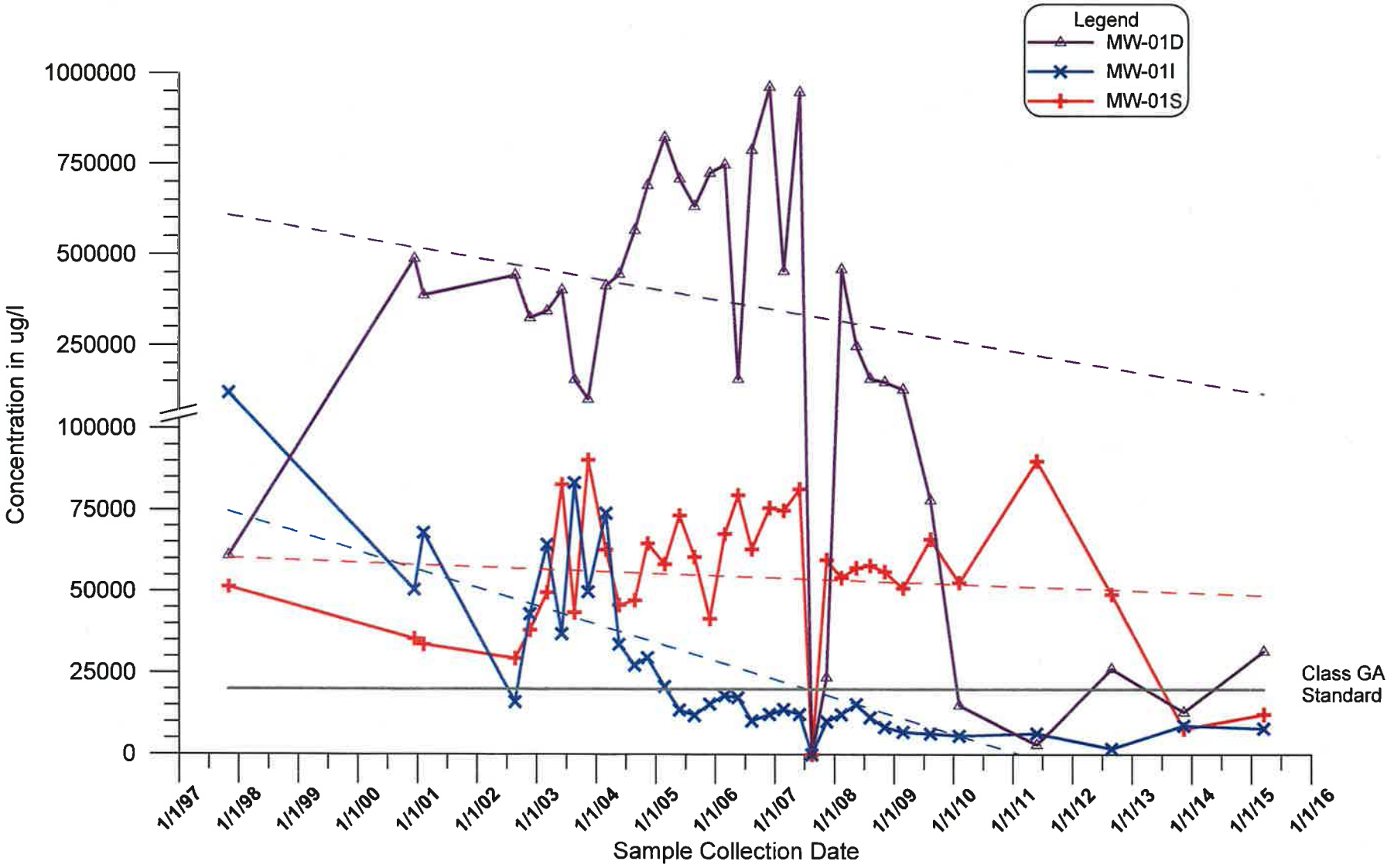
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sum of Iron and Manganses Data for Monitoring Well Cluster 12

Appendix B



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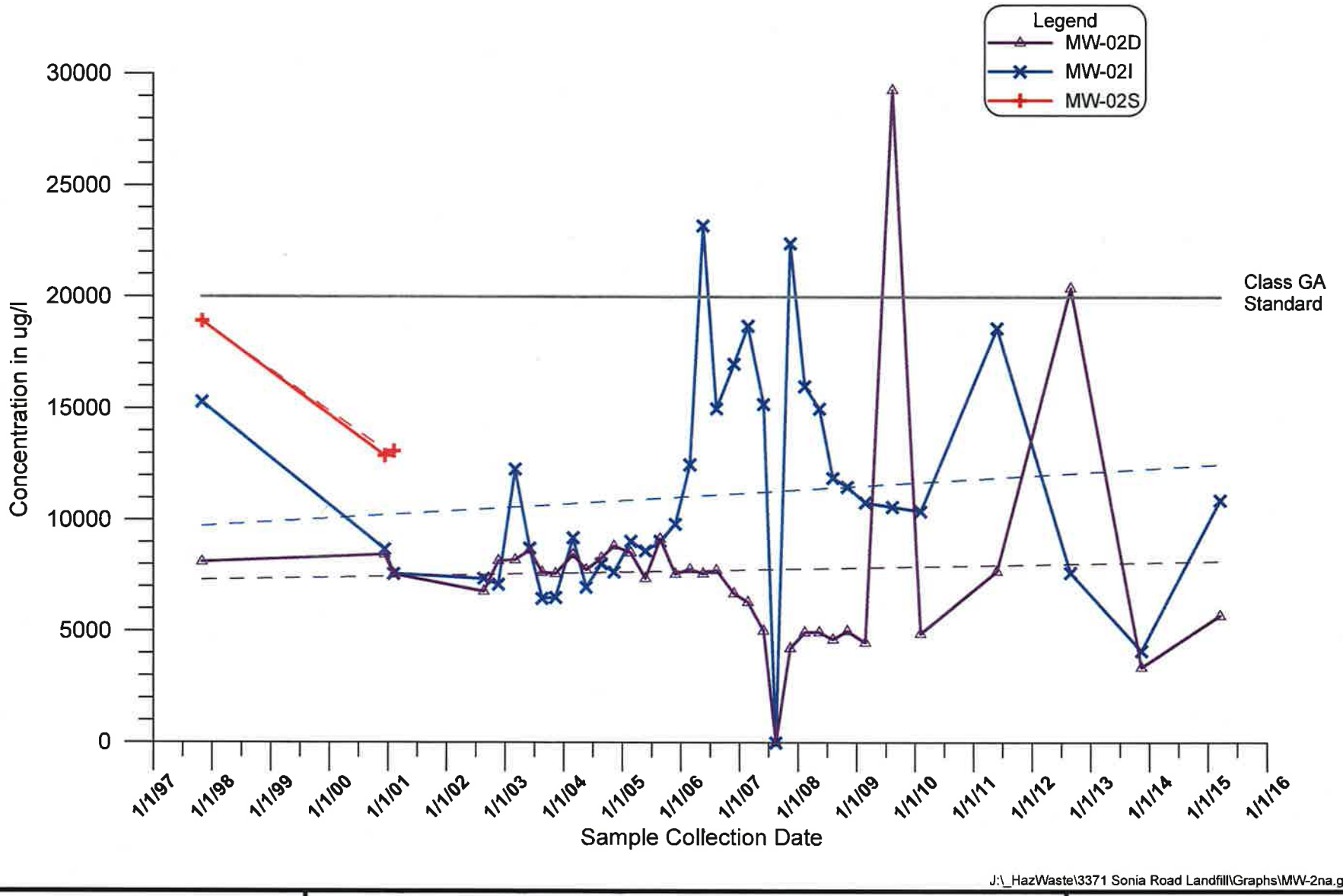
D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 1

Appendix
B

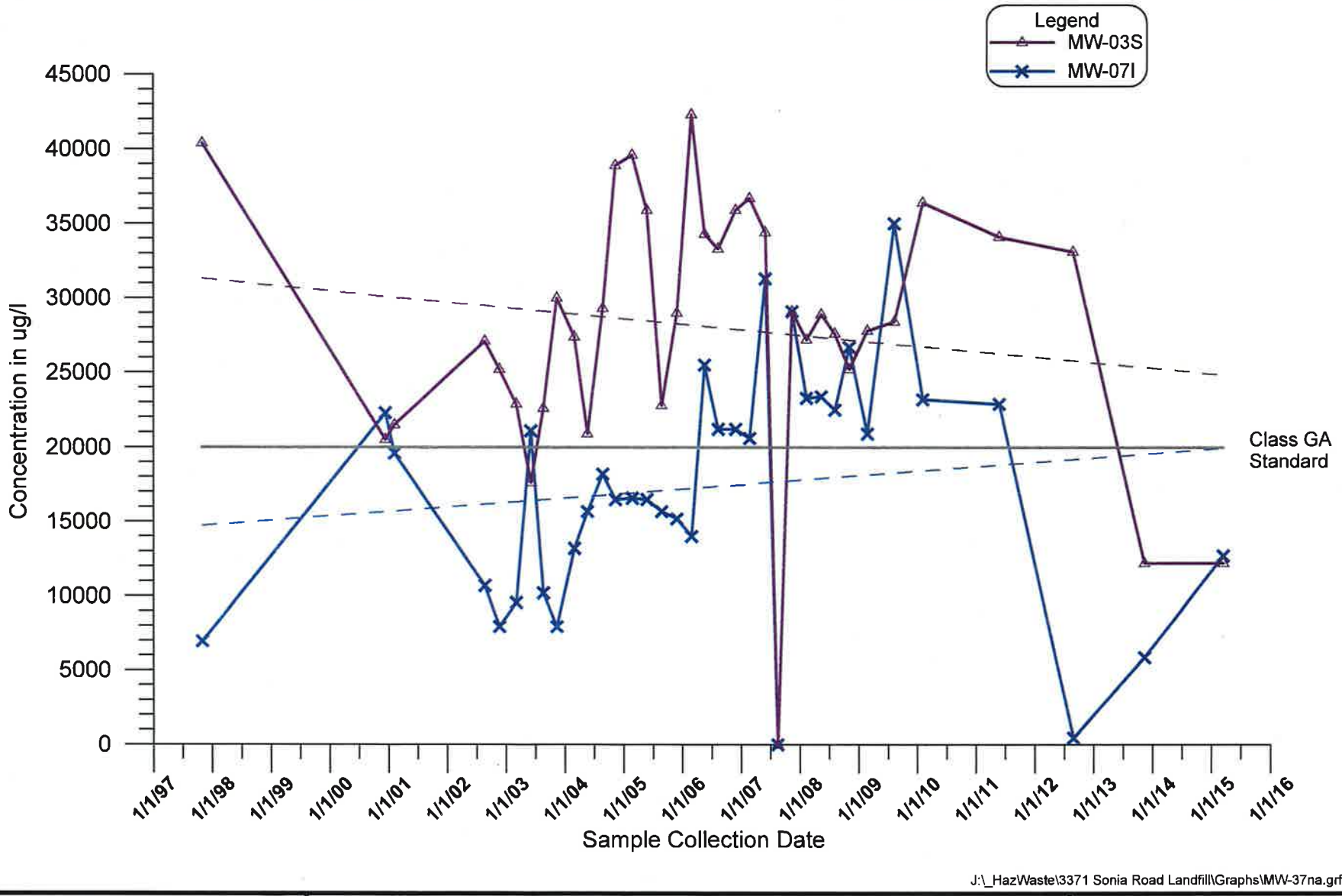


J:_HazWaste\3371 Sonia Road Landfill\Graphs\MW-2na.grf

D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 2

Appendix B

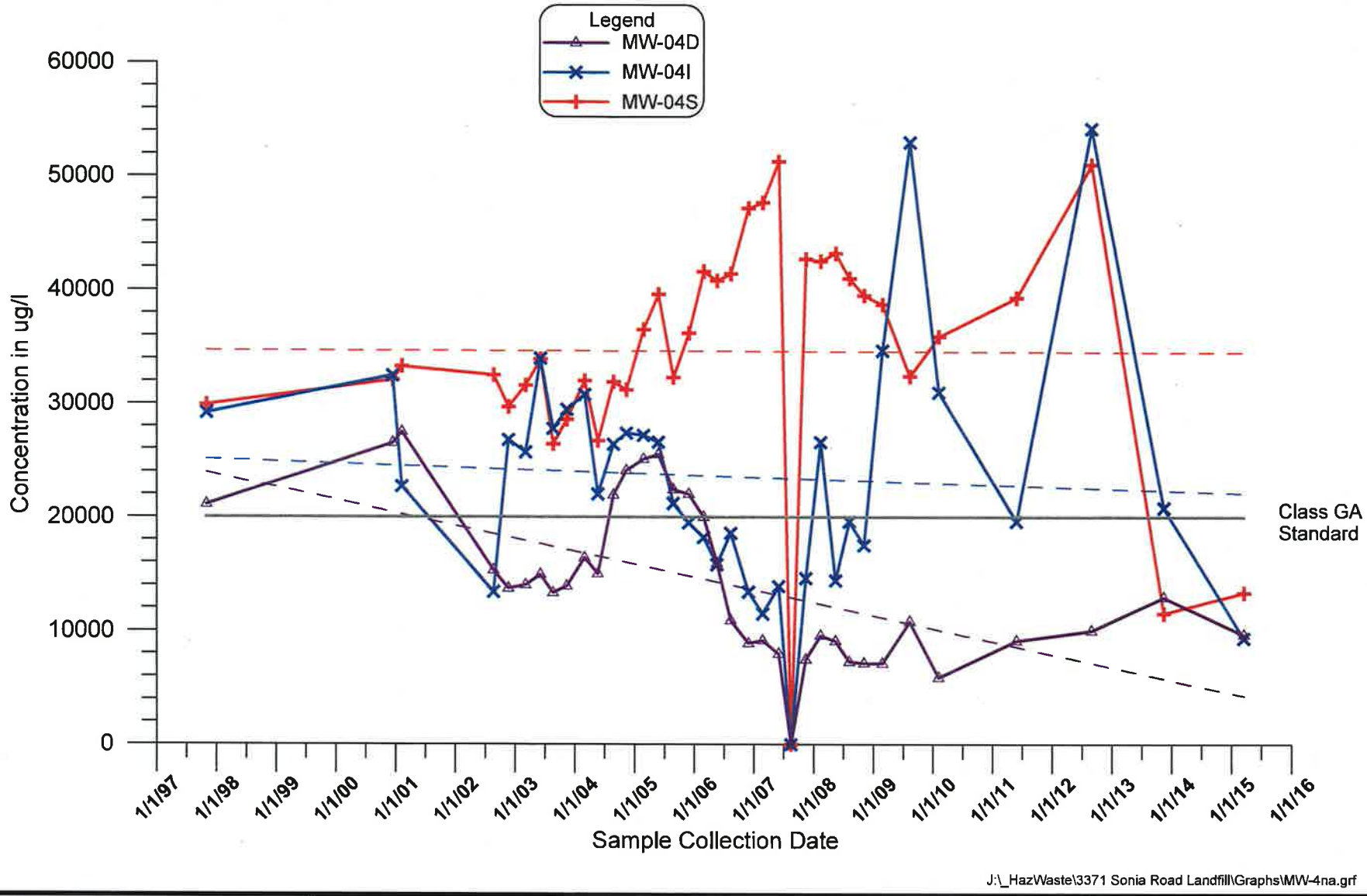


J:_HazWaste\3371 Sonia Road Landfill\Graphs\MW-37na.grf

D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Wells 3S and 7I

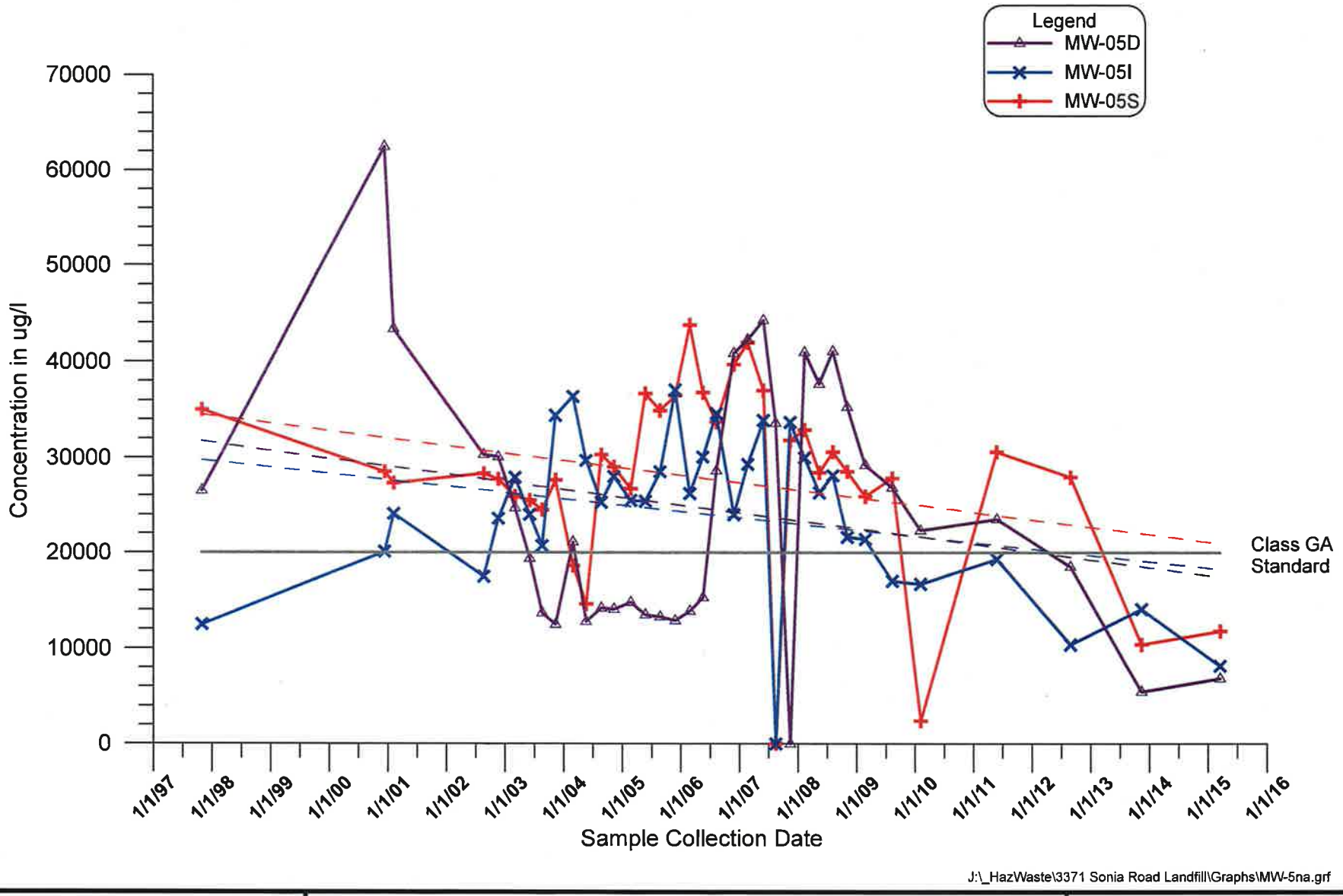
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 4

Appendix
B

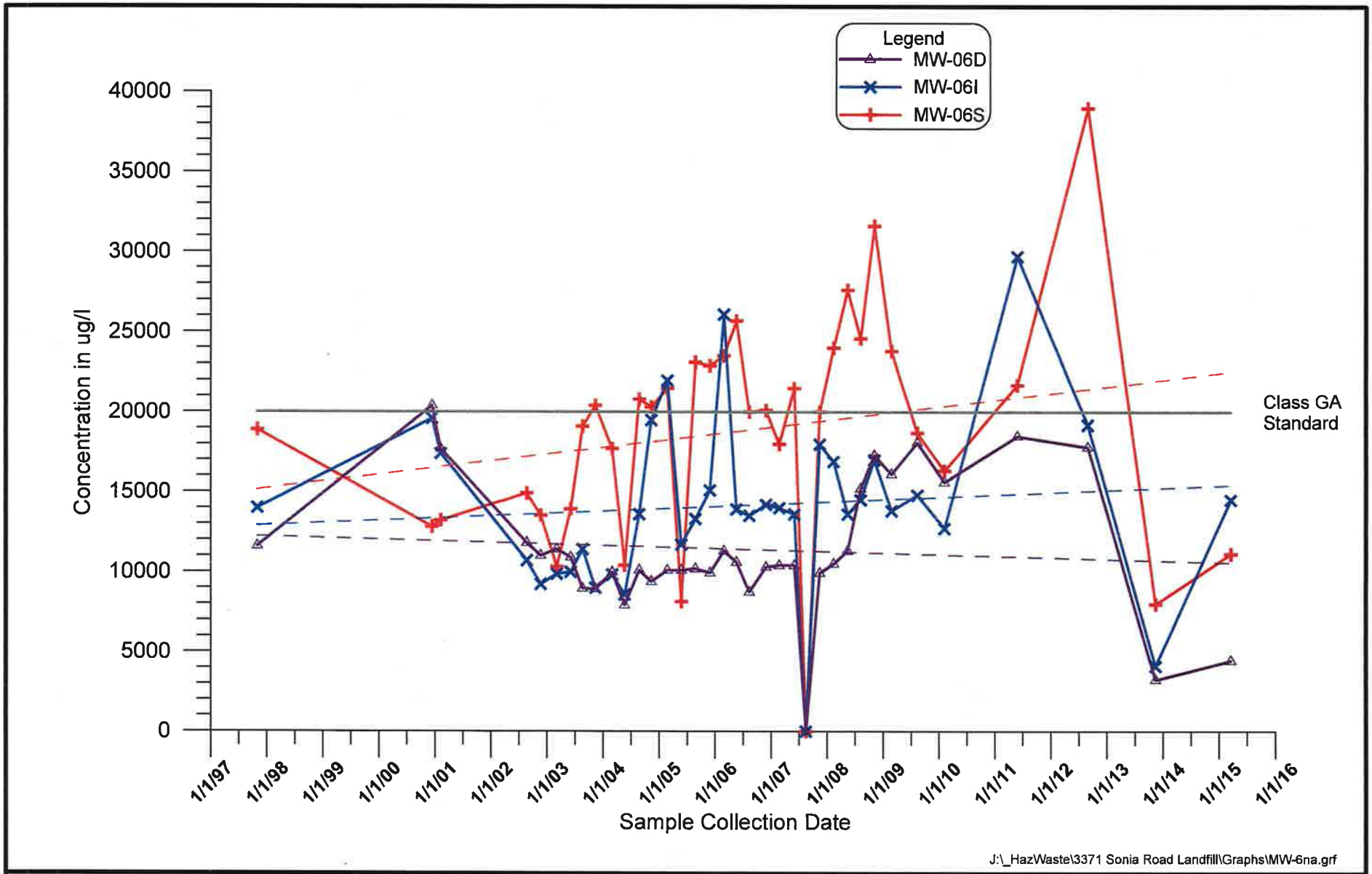


J:_HazWaste\3371 Sonia Road Landfill\Graphs\MW-5na.grf

D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 5

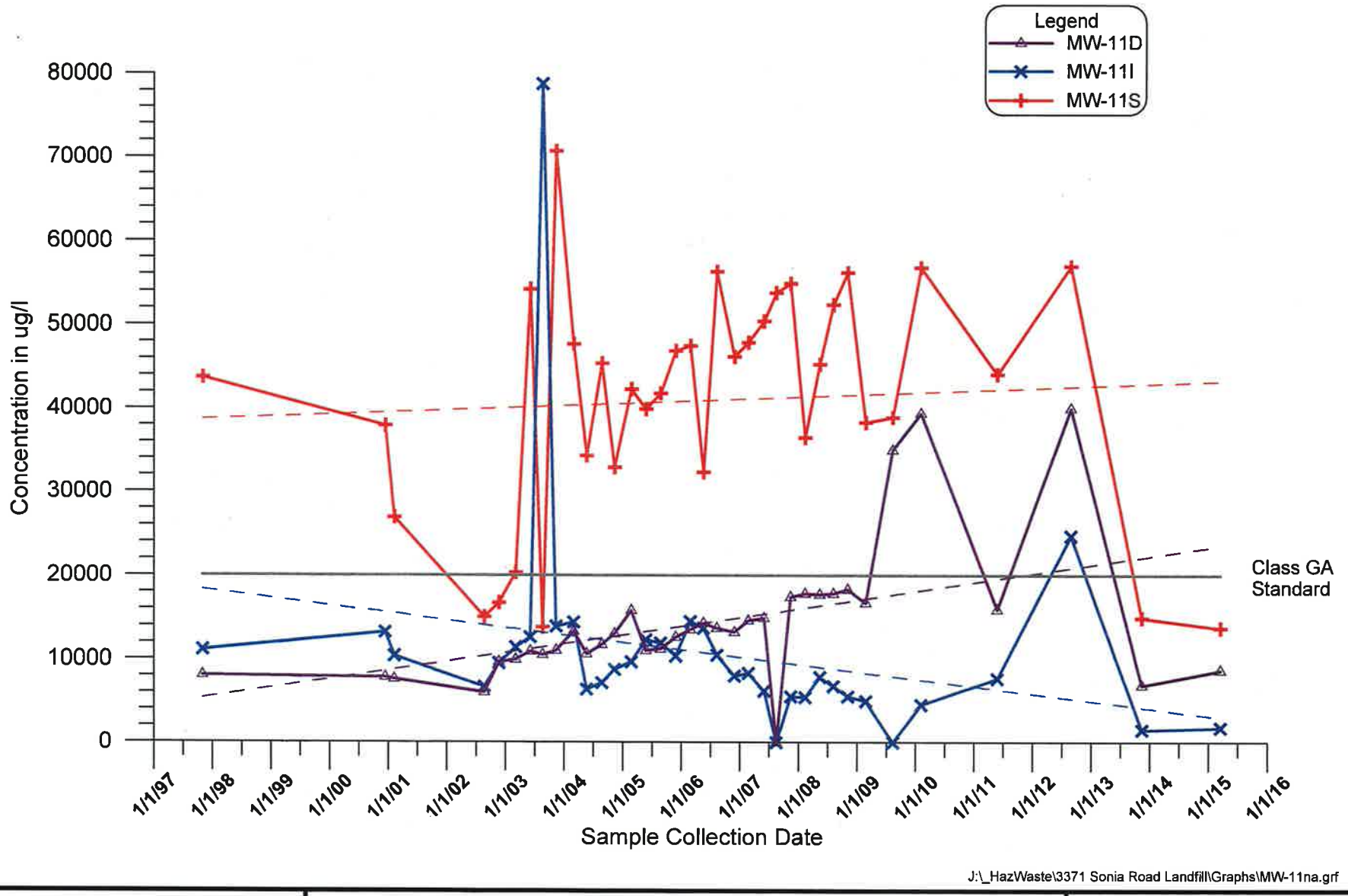
Appendix
B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 6

Appendix
B



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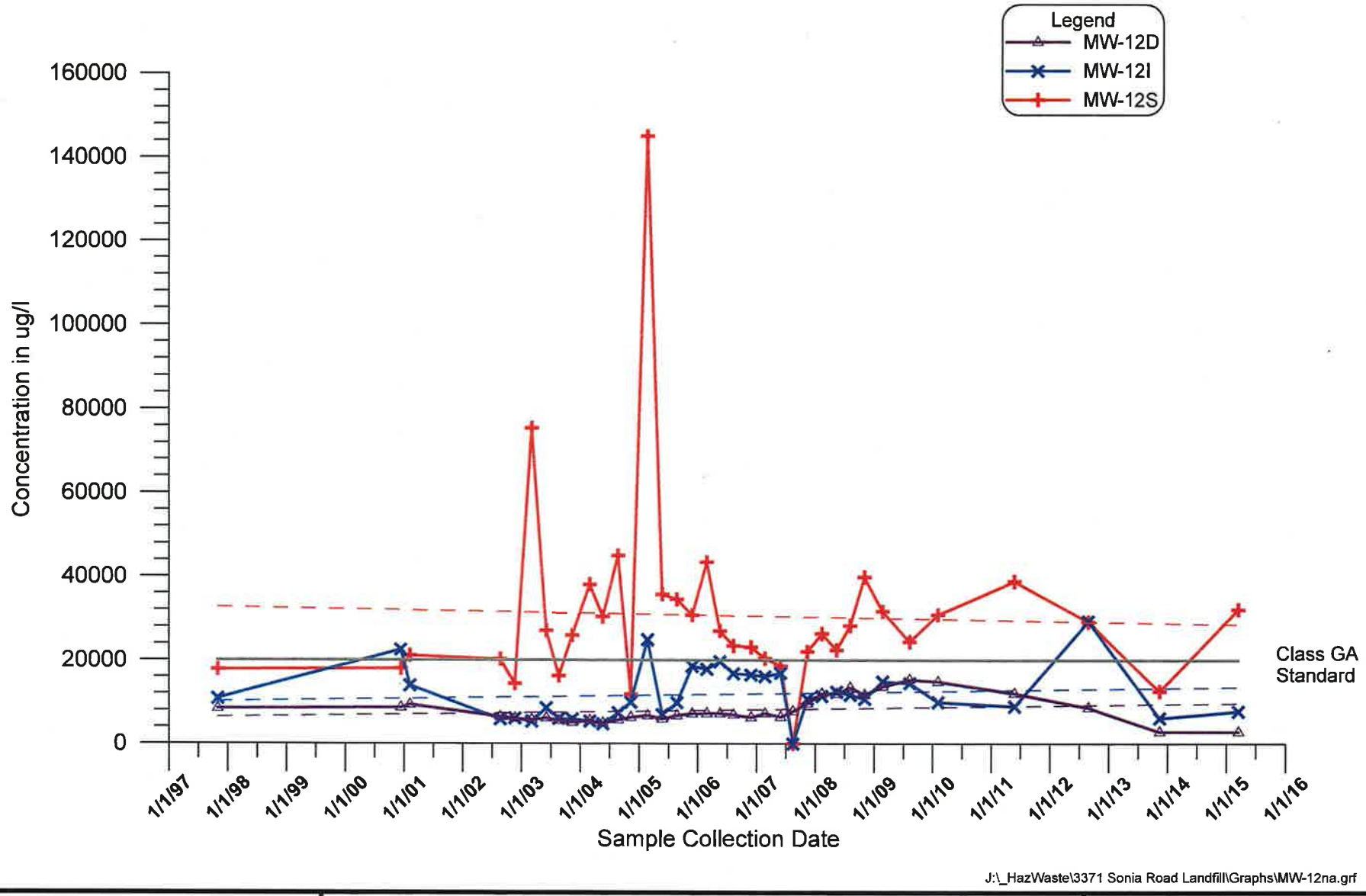
D&B Engineers and Architects, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 11

Appendix B



D&B ENGINEERS AND ARCHITECTS, P.C.

Sonia Road Landfill
Historical Sodium Data for Monitoring Well Cluster 12

Appendix
B

APPENDIX C

Data Validation Forms

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 17, 2015
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 5 Field Duplicates/ 1 Trip Blanks / 1 Field Blanks/ 0
Analyzing Laboratory:	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color and TOC by Pace Analytical, Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: by SW846 Method E200.7, mercury by Method E245.1 and Cyanide by Method E335.4 General Chemistry: Hardness (E200.7), Bromide (MP.S44), Chloride (SM4500), Hexavalent Chromium (7196), Sulfate (SM4500) , Alkalinity (SM2320B), Total Dissolved Solids (SM 2540C), Ammonia (E350.1), Nitrate (E353.2), Total Kjeldahl Nitrogen (E351.2), Phenolics (EPA 420.4), and Chemical Oxygen Demand (COD) (E410.4) analyzed by American Analytical Laboratories; and Biochemical Oxygen Demand (BOD) (SM5210B), Color (SM 2120B) and Total Organic Carbon (SM 5310B) analyzed by Pace Analytical
Laboratory Report No:	1503090 Date:3/27/2015

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. A validation was conducted on the data package and any applicable qualification of the data was determined using the

USEPA National Functional Guidelines of August 2014, or USEPA National Functional Guidelines of Inorganic Data Review, August 2014, method 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.

Custody Numbers:1503090
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
Trip Blank - 3/17/15	1503090-001	03/17/2015		X				
MW-01D-3/17/15	1503090-002	03/17/2015		X			X	X
MW-01I-3/17/15	1503090-003	03/17/2015		X			X	X
MW-01S-3/17/15	1503090-004	03/17/2015		X			X	X
MW-02D-3/17/15	1503090-005	03/17/2015		X			X	X
MW-02I-3/17/15	1503090-006	03/17/2015		X			X	X
Blind Duplicate-3/17/15	1503090-007	03/17/2015	MW-02I	X			X	X

ORGANIC ANALYSE
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard responses		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

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable with the following exception:

2A-C. Methylene chloride and acetone were detected in the method blank, Trip Blanks and Field Blank (in package 1503108). Methylene chloride and acetone were qualified as non-detect (UB) in all samples.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation 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
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
12. Total verse dissolved results					X
13. Field duplicates RPD		X		X	

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exception:

2B. Calcium and iron were detected in the Field Blank (in package 1503108). The following metals were qualified as non-detect (UB) for the following: iron in samples Blind Duplicate, MW-01D, MW-01I, MW-02D and MW-02I.

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 & Continuing calibration verification %R		X		X	
4. Laboratory spike %R		X		X	
5. Laboratory duplicate RPD		X		X	
6. Matrix spike and matrix spike duplicate %R		X		X	
7. Total verse dissolved results					X
8. 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:

2B. Chloride and sulfate were detected in the Field Blank (in package 1503108). Sulfate was qualified as non-detect (UB) in sample MW-01I.

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503090

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	Methylene chloride and acetone	UB	Detected in the method blank, Trip Blanks and Field Blank (in package 1503108)
Metals			
Blind Duplicate, MW-01D, MW-01I, MW-02D and MW-02I	Iron	UB	Detected in the Field Blank(in package 1503108)
General Chemistry			
MW-01I	Sulfate	UB	Detected in the Field Blank(in package 1503108)

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/28/2015
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 18, 2015
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 8 Field Duplicates/ 0 Trip Blanks / 1 Field Blanks/ 0
Analyzing Laboratory:	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color and TOC by Pace Analytical, Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: by SW846 Method E200.7, mercury by Method E245.1 and Cyanide by Method E335.4 General Chemistry: Hardness (E200.7), Bromide (MP.S44), Chloride (SM4500), Hexavalent Chromium (7196), Sulfate (SM4500) , Alkalinity (SM2320B), Total Dissolved Solids (SM 2540C), Ammonia (E350.1), Nitrate (E353.2), Total Kjeldahl Nitrogen (E351.2), Phenolics (EPA 420.4), and Chemical Oxygen Demand (COD) (E410.4) analyzed by American Analytical Laboratories; and Biochemical Oxygen Demand (BOD) (SM5210B), Color (SM 2120B) and Total Organic Carbon (SM 5310B) analyzed by Pace Analytical
Laboratory Report No:	1503098 Date:3/27/2015

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. A validation was conducted on the data package and any applicable qualification of the data was determined using the

USEPA National Functional Guidelines of August 2014, or USEPA National Functional Guidelines of Inorganic Data Review, August 2014, method 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.

Custody Numbers:1503098
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
Trip Blank - 3/18/15	1503098-001	03/18/2015		X				
MW-07I-3/18/15	1503098-002	03/18/2015		X			X	X
MW-06D-3/18/15	1503098-003	03/18/2015		X			X	X
MW-06I-3/18/15	1503098-004	03/18/2015		X			X	X
MW-06S-3/18/15	1503098-005	03/18/2015		X			X	X
MW-04D-3/18/15	1503098-006	03/18/2015		X			X	X
MW-04I-3/18/15	1503098-007	03/18/2015		X			X	X
MW-04S-3/18/15	1503098-008	03/18/2015		X			X	X
MW-03S-3/18/15	1503098-009	03/18/2015		X			X	X

ORGANIC ANALYSE
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard responses		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
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable with the following exception:

2A-C. Methylene chloride and acetone were detected in the method blank, Trip Blanks and Field Blank (in package 1503108). Methylene chloride and acetone were qualified as non-detect (UB) in all samples.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation 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
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. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exceptions:

2B. Calcium and iron were detected in the Field Blank (in package 1503108). The following metals were qualified as non-detect (UB) for the following: iron in samples MW-07I, MW-06D and MW-06I.

8. The %R was above QC limits for potassium in the spike sample. Potassium was qualified as estimated (J) in all samples.

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 & Continuing calibration verification %R		X		X	
4. Laboratory spike %R		X		X	
5. Laboratory duplicate RPD		X	X		
6. Matrix spike and matrix spike duplicate %R		X	X		
7. Total verse dissolved results					X
8. 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 exceptions:

2B. Chloride and sulfate were detected in the Field Blank (in package 1503108). Sulfate was qualified as non-detect (UB) in sample MW-03S.

5. The RPD for BOD was above QC limits in the duplicate. BOD was qualified estimated (J/UJ) in all samples.

6. The %R was below QC limits for ammonia and nitrate in the matrix spike sample. Ammonia and nitrate were qualified estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503098

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	Methylene chloride and acetone	UB	Detected in the method blank, Trip Blanks and Field Blank (in package 1503108)
Metals			
MW-07I, MW-06D and MW-06I	Iron	UB	Detected in the Field Blank (in package 1503108)
All samples	Potassium	J	The %R was above QC limits in the spike sample.
General Chemistry			
MW-03S	Sulfate	UB	Detected in the Field Blank (in package 1503108)
All samples	BOD	J/UJ	The RPD was above QC limits in the duplicate
All samples	Ammonia and nitrate	J/UJ	The %R was below QC limits in the matrix spike sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/30/2015
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 19, 2015
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 6 Field Duplicates/ 0 Trip Blanks / 1 Field Blanks/ 0
Analyzing Laboratory:	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color and TOC by Pace Analytical, Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: by SW846 Method E200.7, mercury by Method E245.1 and Cyanide by Method E335.4 General Chemistry: Hardness (E200.7), Bromide (MP.S44), Chloride (SM4500), Hexavalent Chromium (7196), Sulfate (SM4500) , Alkalinity (SM2320B), Total Dissolved Solids (SM 2540C), Ammonia (E350.1), Nitrate (E353.2), Total Kjeldahl Nitrogen (E351.2), Phenolics (EPA 420.4), and Chemical Oxygen Demand (COD) (E410.4) analyzed by American Analytical Laboratories; and Biochemical Oxygen Demand (BOD) (SM5210B), Color (SM 2120B) and Total Organic Carbon (SM 5310B) analyzed by Pace Analytical
Laboratory Report No:	1503104 Date:3/27/2015

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. A validation was conducted on the data package and any applicable qualification of the data was determined using the

USEPA National Functional Guidelines of August 2014, or USEPA National Functional Guidelines of Inorganic Data Review, August 2014, method 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.

Custody Numbers:1503104
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
Trip Blank - 3/19/15	1503104-001	03/19/2015		X				
MW-11D-3/19/15	1503104-002	03/19/2015		X			X	X
MW-11I-3/19/15	1503104-003	03/19/2015		X			X	X
MW-11S-3/19/15	1503104-004	03/19/2015		X			X	X
MW-05D-3/19/15	1503104-005	03/19/2015		X			X	X
MW-05I-3/19/15	1503104-006	03/19/2015		X			X	X
MW-05S-3/19/15	1503104-007	03/19/2015		X			X	X

ORGANIC ANALYSE
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard responses		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
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable with the following exception:

2A-C. Methylene chloride and acetone were detected in the method blank, Trip Blanks and Field Blank (in package 1503108). Methylene chloride and acetone were qualified as non-detect (UB) in all samples.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation 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
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D					X
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exception:

2B. Calcium and iron were detected in the Field Blank (in package 1503108). The following metals were qualified as non-detect (UB) for the following: iron in samples MW-11I, MW-11S and MW-05D.

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 & Continuing calibration verification %R		X		X	
4. Laboratory spike %R		X		X	
5. Laboratory duplicate RPD		X		X	
6. Matrix spike and matrix spike duplicate %R		X	X		
7. Total verse dissolved results					X
8. 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 exceptions:

2B. Chloride and sulfate were detected in the Field Blank (in package 1503108). Chloride was qualified as non-detect (UB) in sample MW-11I.

6. The %R was below QC limits for ammonia in the matrix spike sample. Ammonia was qualified estimated (J/UJ) in all samples.

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503104

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	Methylene chloride and acetone	UB	Detected in the method blank, Trip Blanks and Field Blank (in package 1503108)
Metals			
MW-11I, MW-11S and MW-05D	Iron	UB	Detected in the Field Blank (in package 1503108)
General Chemistry			
MW-11I	Chloride	UB	Detected in the Field Blank (in package 1503108)
All samples	Ammonia	J/UJ	The %R was below QC limits in the matrix spike sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 5/5/2015
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 20, 2015
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 3 Field Duplicates/ 0 Trip Blanks / 1 Field Blanks/ 1
Analyzing Laboratory:	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color and TOC by Pace Analytical, Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: by SW846 Method E200.7, mercury by Method E245.1 and Cyanide by Method E335.4 General Chemistry: Hardness (E200.7), Bromide (MP.S44), Chloride (SM4500), Hexavalent Chromium (7196), Sulfate (SM4500) , Alkalinity (SM2320B), Total Dissolved Solids (SM 2540C), Ammonia (E350.1), Nitrate (E353.2), Total Kjeldahl Nitrogen (E351.2), Phenolics (EPA 420.4), and Chemical Oxygen Demand (COD) (E410.4) analyzed by American Analytical Laboratories; and Biochemical Oxygen Demand (BOD) (SM5210B), Color (SM 2120B) and Total Organic Carbon (SM 5310B) analyzed by Pace Analytical
Laboratory Report No:	1503108 Date: 4/3/2015

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. A validation was conducted on the data package and any applicable qualification of the data was determined using the

USEPA National Functional Guidelines of August 2014, or USEPA National Functional Guidelines of Inorganic Data Review, August 2014, method 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.

Custody Numbers:1503108
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
Trip Blank - 3/20/15	1503108-001	03/20/2015		X				
Field Blank - 3/20/15	1503108-002	03/20/2015		X			X	X
MW-12I-3/20/15	1503108-003	03/20/2015		X			X	X
MW-12S-3/20/15	1503108-004	03/20/2015		X			X	X
MW-12D-3/20/15	1503108-005	03/20/2015		X			X	X

ORGANIC ANALYSE
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard responses		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
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable with the following exception:

2A-C. Methylene chloride and acetone were detected in the method blank, Trip Blanks and Field Blank. Methylene chloride and acetone were qualified as non-detect (UB) in all samples.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation 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
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D					X
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exception:

2B. Calcium and iron were detected in the Field Blank. The following metals were qualified as non-detect (UB) for the following: iron in samples MW-12I and MW-12D.

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 & Continuing calibration verification %R		X		X	
4. Laboratory spike %R		X		X	
5. Laboratory duplicate RPD		X		X	
6. Matrix spike and matrix spike duplicate %R		X	X		
7. Total verse dissolved results					X
8. 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 exceptions:

2B. Chloride and sulfate were detected in the Field Blank. Chloride and sulfate were qualified as non-detect (UB) in sample MW-12D.

6. The %R was below QC limits for ammonia in the matrix spike sample. Ammonia was qualified estimated (J/UJ) in all samples.

D&B ENGINEERS AND ARCHITECTS, P.C. 50 YEARS

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503108

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	Methylene chloride and acetone	UB	Detected in the method blank, Trip Blanks and Field Blank
Metals			
MW-12I and MW-12D	Iron	UB	Detected in the Field Blank
General Chemistry			
MW-12D	Chloride and sulfate	UB	Detected in the Field Blank
All samples	Ammonia	J/UJ	The %R was below QC limits in the matrix spike sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 5/5/2015
VALIDATION PERFORMED BY SIGNATURE:	