

ISLIP RESOURCE RECOVERY AGENCY

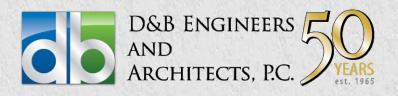
Sonia Road Landfill Brentwood, New York

Post Closure Groundwater Monitoring Program

2015 Monitoring Report Baseline Sampling Event

June 2015

Prepared by:





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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.

Thomas P. Fox, R.C.

Vice President

TPF/KSR/nc Enclosure •3371\TPF15Ltr -01

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

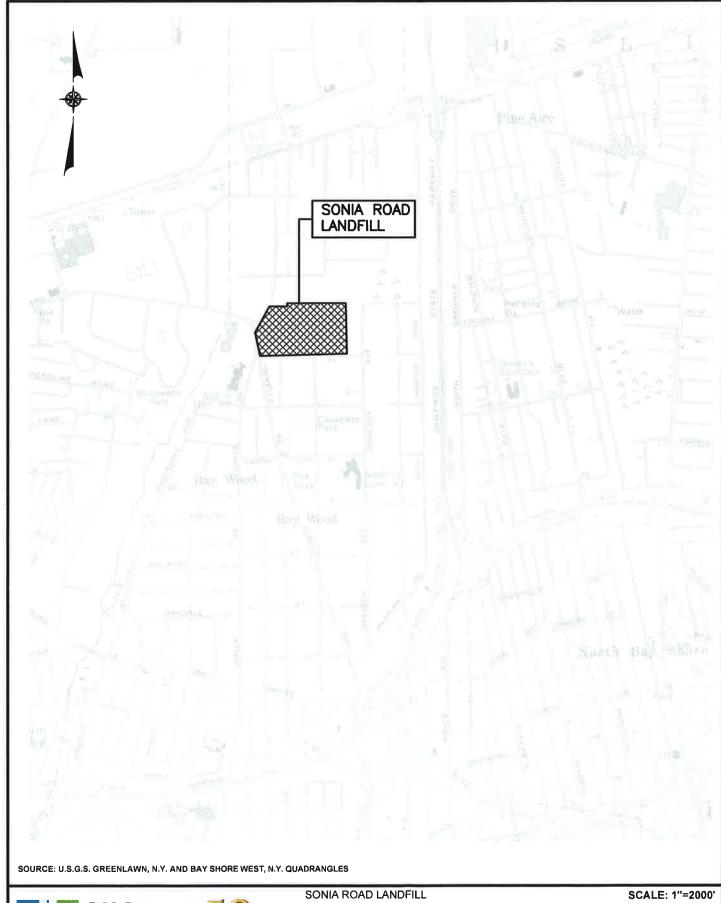
The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater quality and flow direction subsequent to the capping and closure of the Sonia Road Landfill.

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.**

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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

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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.

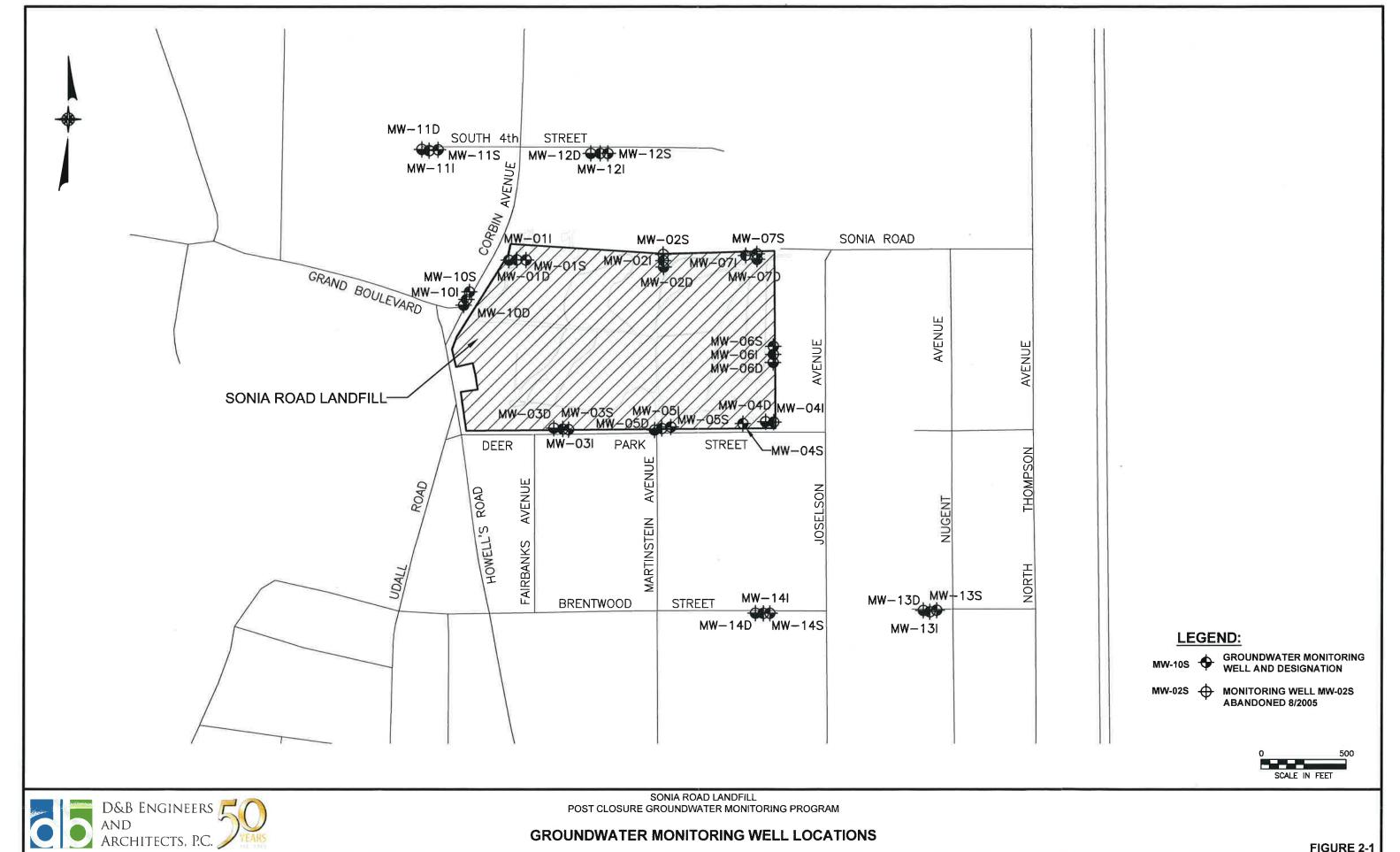


Table 2-1

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

					Screen Setting	tting	
Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Depth (feet below measuring point)	Elevation (feet above mean sea	Measuring Point Elevation (feet above
MW-01D ^(I)	10/14/97	4	8	106	96-106	(-32) - (-42)	64 53
$MW-01I^{(1)}$	10/6/97	. 4	SS	78	82 - 89	(-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	4ugust 2005		
$MW-03D^{(I)}$	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
$MW-04D^{(I)}$	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)	96.07
MW-05I ⁽¹⁾	10/2/97	4	SS	70	02 - 09	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	92	92 - 99	9 - (-1)	74.52
$MW-06S^{(5)}$	9/24/97	4	SS	37	22 - 37	53 - 38	74.45
$MW-07D^{(I)}$	10/8/97	4	SS	122	112 - 122	(-37) - (-47)	75.04
$ \text{MW-07I}^{(4)}$	6/56/97	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

					Screen Setting	tting	
Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Depth (feet below measuring point)	Elevation (feet above mean sea level)	Measuring Point Elevation (feet above mean sea level)
$MW-10D^{(2)}$	10/15/97	4	SS	96	96-98	(-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
$MW-12D^{(I)}$	10/15/97	4	SS	86	86 - 88	(-29) - (-39)	58.61
$MW-12I^{(1)}$	10/10/97	4	SS	70	02 - 09	(-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	

2-5

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

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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.**

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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**.

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Table 4-1 SONIA ROAD LANDFILL POST CLOSURE GROUNDWATER MONITORING PROGRAM SUMMARY OF FINAL FIELD PARAMETER RESULTS **MARCH 2015 SAMPLING EVENT**

Monitoring Well	pН	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

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

	T		_	T		_			_	T-	_											
TKN	Q	D	D	Ω	Q	Q	Ω	D	D	Q	S	O	Q	D	О	Ω	Q	D	Q	Q	Ι	Q
TDS	C	D	Ι	၁	П	၁	၁	Q	O	Q	D	၁	D	П	၁	I	D	C	C	I	C	D
TOC	၁	ပ	ပ	ပ	ပ	၁	П	ပ	ပ	O	Q	D	Q	ပ	ပ	ပ	ပ	C	Н	S	Н	C
Sulfate	C	Q	П	I	I	D	၁	C	О	D	D	I	I	I	ပ	Ι	D	П	Ι	-	Н	Q
Total Phenols	၁	1	C	ပ	v	1	1	ပ	-	ပ	O	1	· -1- ·	1	I	C	П	ပ	၁	I	C	1
Nitrate	П	Q	Ι	Г	ပ	I	I	Ī	I	П	П	C	П	О	O	၁	н	ပ	Н	ш	П	ပ
Hardness		D	I	C	I	C	C	I	D	O	Q	I	D	C	S	C	D	I	Ι	I	Π	C
Chloride	O	Q	I	I	I	D	C	Q	C	O	D	Ι	O	ĭ	C	I	C	Ω	C	I	D	D
COD	D	Ö	C	D	C	D	D	C	I	I	C	Ü	I	C	C	С	C	C	С	C	C	C
Bromide	C	C	C	C	C	С	C	Ü	C	C	C	C	C	D	C	C	С	O	C	C	ပ	C
BOD	ပ	ر ت	Ö	၁	C	D	၁	၁	Ι	D	C	C	D	၁	C	C	С	C	С	C	ပ	С
Ammonia	D	Q	C	D	С	D	D		C	D	C	С	D	O	С	D	I	C	С	ပ	T.	C
Alkalinity	Ü	D	C	၁	I	D	C	I	D	C	Ö	I	D	I	D	C	D	O	I	၁	Д	D
Location	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Downgradient	Side gradient	Side gradient	Side gradient	Upgradient												
Well	MW-01S	MW-01I	MW-01D	MW-02I	MW-02D	MW-03S	MW-04S	MW-04I	MW-04D	MW-05S	MW-05I	MW-05D	S90-MW	I90-MM	MW-06D	MW-07I	MW-11S	MW-111	MW-11D	MW-12S	MW-12I	MW-12D

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 1

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.

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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 <u>Inorganic Parameters</u>

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]).

<u>Iron</u>

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.

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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.

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

Hexavalent Chromium	O	ď	C	C	C	C	C	O	C	O	C	C	O	ပ	С	C	၁	၁	C	C	C	C
Calcium	ı	D	I	၁	П	C	C	I	D	၁	D	I	D	C	C	2	D	I	I	I	I	C
Cadmium	S	C	С	C	၁	C	С	C	С	C	C	С	D	S	С	C	C	Q	С	Э	C	C
Boron	D	Q	D	D	C	D	၁	D	С	D	D	I	D	O	D	D	D	D	D	D	C	D
Beryllium	O O	C	I	C	C	C	၁	၁	C	2	၁	C	C	၁	C	٥	2	C	C	C	C	C
Barium	ı	D	С	I	Ι	၁	C	၁	C	C	О	I	D	I	С	I	C	_	Ι	I	1	O
Arsenic	0	O	C	0	C	2	D	O	Q	၁	C	С	C	C	C	C	2	С	C	C	C	C
Antimony	D	O	С	D	С	၁	D	I	D.	C	Ω	၁	Э	S	၁	2	Ω	C	C	S	C	C
Aluminum	Q	ပ	I	D	I	D	C	C	C	C	C	O	D	D	C	I	I	Ι	I	1	O	I
Location	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Downgradient	Side gradient	Side gradient	Side gradient	Upgradient												
Well	MW-01S	MW-01I	MW-01D	MW-02I	MW-02D	MW-03S	MW-04S	MW-04I	MW-04D	MW-05S	MW-05I	MW-05D	S90-MM	190-MM	MW-06D	MW-07I	MW-11S	MW-111	MW-11D	MW-12S	MW-12I	MW-12D

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)

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

																	_			_		
Nickel	S	O	I	O	C	ပ	D	C	D	O	C	S	Н	C	Q	Ç	O	ပ	П	I	C	O
Mercury	O	O	C	C	O	ر د	C	S	C	S	O	ပ	Q	C	S	C	C	O	O	C	C	O
Manganese	1	D	1	I	S	Ö	C	D	O	O	D	D	C	1	D	I	D	I	O	I	D	I
Magnesium	I	Q	O	O	I	υ	O	I	Q	S	Q	Ι	D	Ü	O	I	S	I	Ι	I	I	Ö
Lead	C	C	C	Ü	U	L	C	O	D	C	C	S	D	O	Ü	O O	O	C	Ι	C	C	ပ
Iron	T	Ö	О	D	S	I	2	D	C	C	D	C	D	O	D	C	C	O	1	I	C	C
Copper	၁	O	O	S	O	C	Э	Ü	C	သ	O	C	Э	O	С	C	C	D	I	I	C	O
Cobalt	D	Ü	C	သ	C	S	C	C	C	C	C	C	၁	ပ	С	C	C	C	ى ت	C	C	ပ
Total Chromium	O	O	C	C	C	٦	C	O	С	Э	O	С	D	C	С	С	S	C	I	I	S	C
Location	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Downgradient	Side gradient	Side gradient	Side gradient	Upgradient												
Well	MW-01S	MW-01I	MW-01D	MW-02I	MW-02D	MW-03S	MW-04S	MW-04I	MW-04D	MW-05S	MW-05I	MW-05D	S90-MM	I90-MW	MW-06D	MW-07I	MW-11S	MW-111	MW-11D	MW-12S	MW-12I	MW-12D

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)

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

Iron plus Manganese	I	D	I	_	D	C	O	D	C	ပ	D	D	D	1	D	1	1	Ç			D	C
Cyanide 1	2	C	D	C	C	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Zinc	Н	C	C	C	D	I	D	၁	C	I	၁	C	C	C	C	C	O	I	I	I	C	С
Vanadium	O O	C	D	C	С	С	С	C	C	O	C	С	C	C	C	C	C	O	С	C	C	С
Thallium	O O	C	С	၁	C	C	C	C	С	C	O	С	C	O	C	၁	C	C	С	C	O	C
Sodium	I	O	ı	1	I	С	C	Q	D	C	D	I	1	1	1	I	S	U	I	Ţ	H	С
Silver	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	С	C	C	C
Selenium	O	C	C	C	C	S	C	O	C	C	C	၁	S	O	C	C	C	C	C	C	C	C
Potassium	C	D	I	C	I	S	C	I	C	C	D	I	I	I	C	I	C	I	Ι	74	-	O
Location	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Downgradient	Sidegradient	Sidegradient	Sidegradient	Upgradient												
Well	MW-01S	MW-01I	MW-01D	MW-02I	MW-02D	MW-03S	MW-04S	MW-04I	MW-04D	MW-05S	MW-05I	MW-05D	MW-06S	MW-06I	MW-06D	MW-07I	MW-11S	MW-111	MW-11D	MW-12S	MW-12I	MW-12D

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.

<u>Arsenic</u>

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.

<u>Beryllium</u>

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.

<u>Manganese</u>

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.

<u>Selenium</u>

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 <u>Volatile Organic Compounds</u>

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.

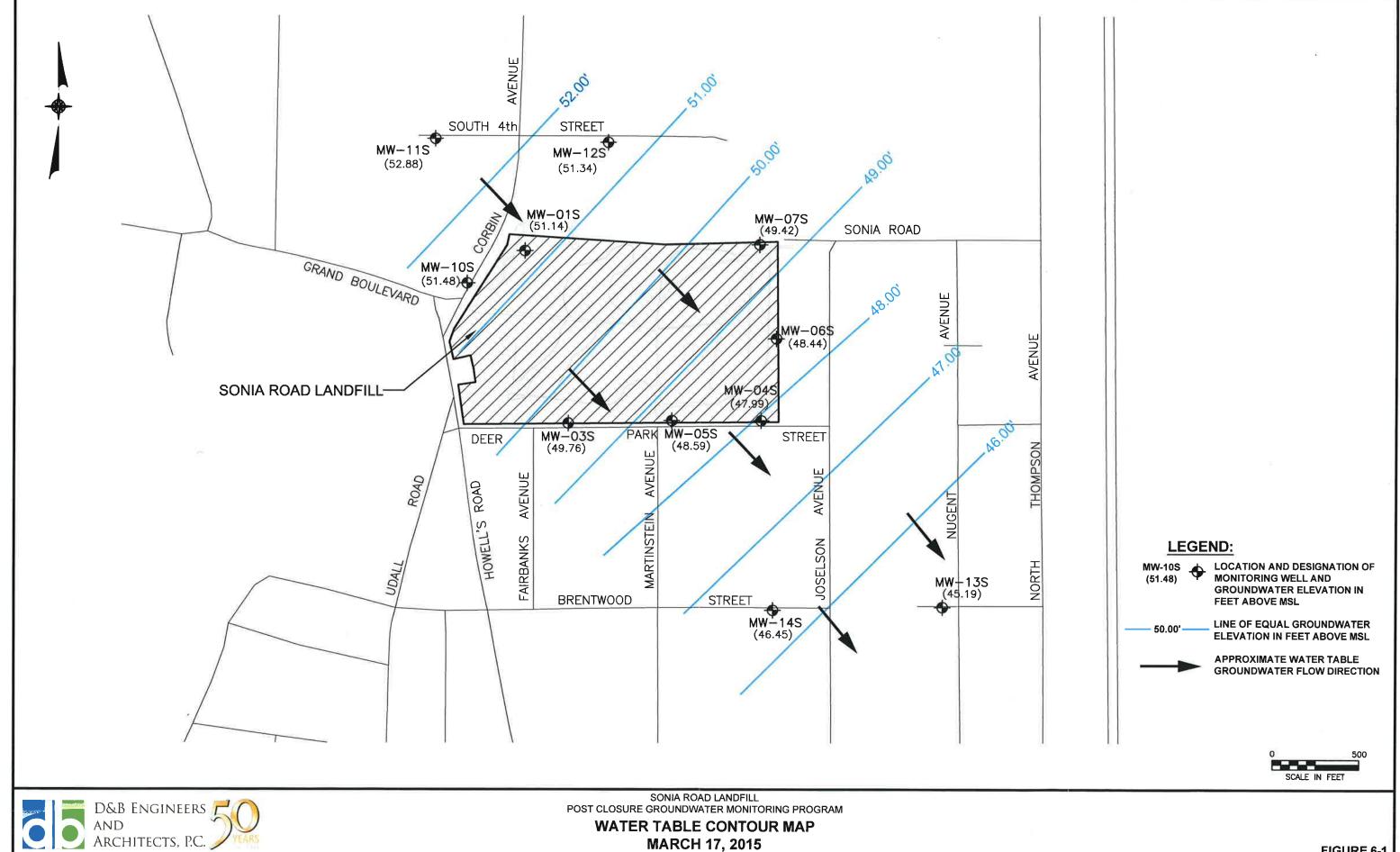
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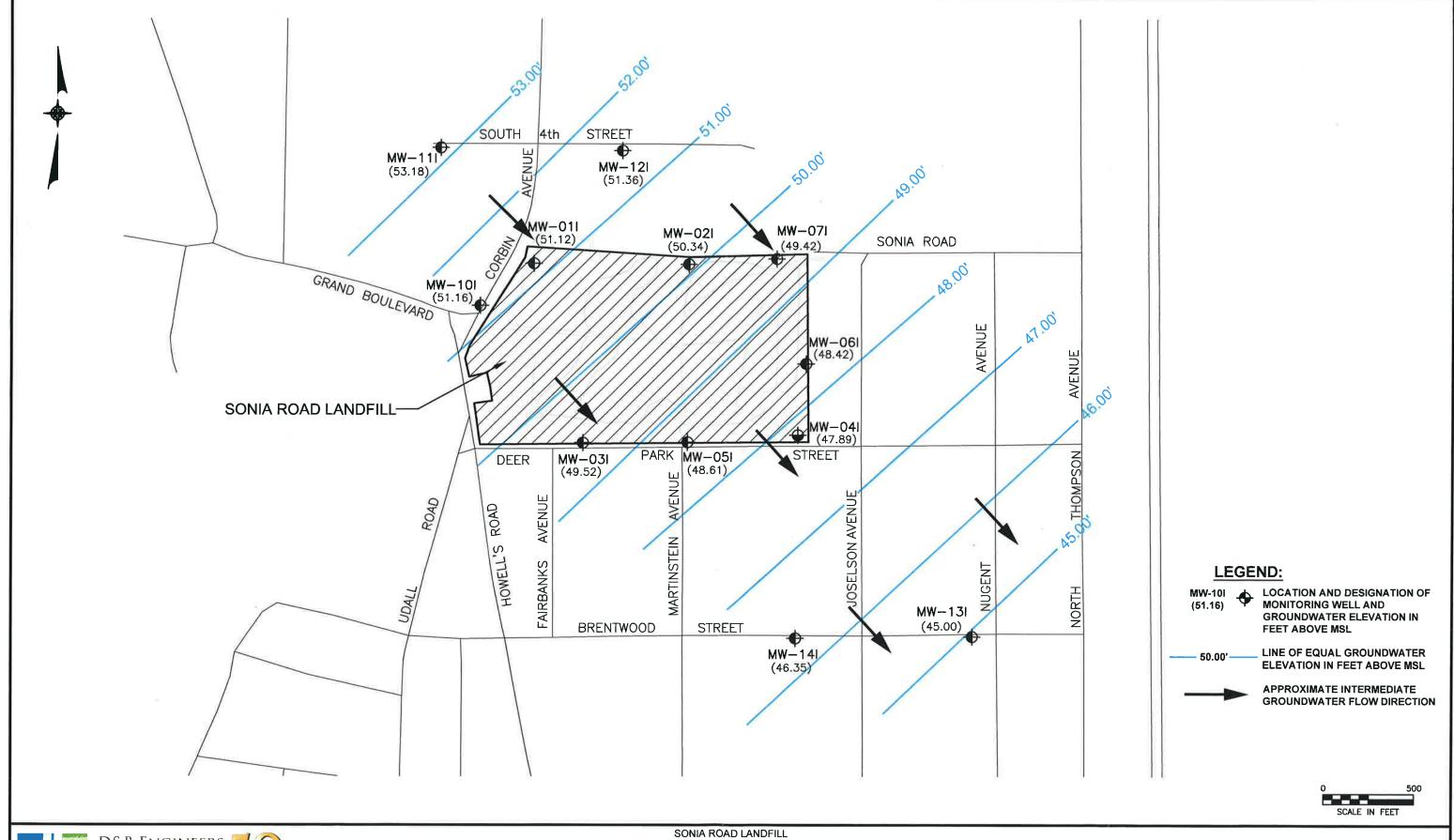
Table 6-1

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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MW-11D (53.04)

MW-10D

GRAND BOULEVARD

SOUTH

MW-01D (51.14)

STREET

MW-02D (50.12)

MW-07D

(49.36)

MW-06D (48.42)

SONIA ROAD

MW-12D (51.35)



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

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

	NYSDEC Class GA		SITE:	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D
	Groundwater Standards	CAS#	DATE:	11/28/06	2/21/07	5/25/07	8/17/07	11/9/07	02/11/08	2/12/08	8/2/08	11/3/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	,		(nuits)	5	20	ΑΝ	ΑΝ	AN	NA	AN	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)	89.0	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	a		(mg/l)	2 U	10	2 U	2 U	9	2 U	2 U	2.0	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 ∪	0.5 U	0.5 ∪	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	•10		(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	- 602	366	195	182	144
Hardness (as CaCO3)	æ		(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	(l/gm)	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	٠	(mg/l)	0.005 U	0.005 U	0.005 U	U 200.0	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	0.27	5.0 U	42.8	20.9	14.8	7.32	10.6
Total Organic Carbon	٠	*	(l/gm)	2.5	11.5	2.5	1.4	12.7	1.0	1 U	10	10	10
Total Dissolved Solids	40	(12)	(l/gm)	2,840	1,240	2,730	2,350	212	1190	729	446	399	388
Total Kjeldahl Nitrogen (as N)	;:•	7727-37-9	(l/gm)	1.49	3.65	1.66	1.01	3.65	0.68	0.30	0.1 U	0.1 U	0.1 U

	NYSDEC Class GA		SITE:	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D
	Groundwater Standards	CAS#	DATE	8/12/09	2/4/10	5/26/11	2/28/12	11/12/2013	03/17/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	(e)		(units)	5	30	40	15	1	5 U
Alkalinity (as CaCO3)		471-34-1	(l/gm)	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	ηľ	0.0500 U	0.0500 U
Biochemical Oxygen Demand	17	ú	(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	∩ 09 [.]	.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)	(34)	U#S	(l/gm)	15.0	56.0	38	20	9.34	25.4
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	11.4	4.43	1.03 D	3.37 D	3.36 J	5.42 D
Phenols, total	0.001 ST	•	(l/gm)	0.005 U	12.5	0.005 U	0.005 U	0.0120 UB	0.0100 U
Sulfate	250 ST		(l/gm)	16.9	5 U	5 U	12.4	12.6	33.3
Total Organic Carbon	80		(I/gm)	,	2.7	2.8	10	10	10
Total Dissolved Solids	A	3	(l/gm)	279	136	20	1820	173	454 D
Total Kjeldahl Nitrogen (as N)	2.6	7727-37-9	(l/gm)	0.1	0.65 U	1.97	98.0	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.



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

	NYSDEC Class GA		SITE:	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011
	Groundwater Standards	CAS#	DATE:	11/28/06	2/21/07	5/25/07	8/15/07	11/9/07	2/11/08	5/15/08	8/2/08	11/3/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)	×	*	(nuits)	5.0	2	NA	ΑΝ	NA	ΝA	ΑΝ	AN	5	ΝΑ
Alkalinity (as CaCO3)		471-34-1	(l/gm)	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	(l/gm)	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	×		(l/gm)	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 ∪	0.5 U							
Chemical Oxygen Demand	33452	•	(l/gm)	10 U	10 U	13	10 U						
Chloride	250 ST	16887-00-6	(l/gm)	16.7	20.7	19.7	14.6	12.1	30.9	35.6	5.90	5.12	4.86
Hardness (as CaCO3)		•	(l/gm)	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	(I/gm)	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	(0)	(I/Bm)	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 ∪
Sulfate	250 ST	14808-79-8	(l/gm)	14.3	16.2	14.6	15.0	17.4	11.9	11.9	19.4	14.7	18.4
Total Organic Carbon	álí		(mg/l)	10	2.4	1.5	10	1.4	10	10	1.1	10	10
Total Dissolved Solids	2000	(*)	(l/gm)	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
													E .

	NYSDEC Class GA		SITE:	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011
	Groundwater Standards	CAS#	DATE:	8/12/09	2/4/10	5/26/11	2/28/12	11/12/2013	03/17/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(I/gm)	(mg/l)
Color (APHA Units)	(10)	(6)	(units)	5	10	5 U	15	10	5 U
Alkalinity (as CaCO3)	2.0	471-34-1	(mg/l)	10.0	8.90	6.40	10.20	90.9	5.00
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	0.1	0.10	10 U	1.47	0.280	0.0500 U
Biochemical Oxygen Demand	8	:20	(l/gm)	2	2.0	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	7.	300	(l/gm)	10	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	6.97	8.25	11.7	19.2	120	46.0
Hardness (as CaCO3)	(I#A)		(l/gm)	24.0	25.0	22 D	22	95.3	30.3
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.94	1.27	08'0	0.83	0.910 J	0.256
Phenols, total	0.001 ST	(*)	(l/gm)	24.0	2 n	0.005 U	0.005 U	0.0100 U	0.0580
Sulfate	250 ST		(l/gm)	21.9	13.2	68.6	98.9	3.34	9.79 UB
Total Organic Carbon		(3)	(l/gm)	1	10	1 U	Λl	1	1 U
Total Dissolved Solids	19.		(l/gm)	58	63	84	72	265	107 D
Total Kjeldahl Nitrogen (as N)	*	7727-37-9	(I/6m)	0.13	0.55 U	0.10 U	1.46	1.46	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 valldation criteria. J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.



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

	NYSDEC Class GA		SITE:	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S
	Groundwater Standards	CAS#	DATE:	11/28/06	2/21/07	5/25/07	8/15/07	11/9/07	2/11/08	2/15/08	8/2/08	11/3/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)
Color (APHA Units)	•		(nuits)	70	30	Ν	AN	NA	NA	NA	ΝΑ	0.09	NA
Alkalinity (as CaCO3)	in.	471-34-1	(l/gm)	198	242	181	200	173	192	152	170	170	146
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	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	*	×	(l/gm)	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								
Chemical Oxygen Demand	16		(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	8.06	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	(0)	(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	99	46.9	65.7	48.0	111	62.7	61.7
Total Organic Carbon		*	(l/gm)	10.1	12.0	9.6	9.4	6.8	8.4	6.1	9.7	7.8	6.0
Total Dissolved Solids	•10	E.	(J/BW)	604	562	498	459	395	379	386	477	365	329
Total Kjeldahl Nitrogen (as N)	11.	7727-37-9	(l/gm)	0.84	1.38	1.35	1.26	0.75	0.54	0.50	0.68	0.48	0.41

	NYSDEC Class GA		SITE:	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S
	Groundwater Standards	CAS#	DATE:	8/12/09	2/4/10	5/26/11	2/28/12	11/12/2013	03/17/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)		•	(units)	20	20	30	55	15	5 U
Alkalinity (as CaCO3)	a	471-34-1	(l/gm)	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 ∪	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	.5 U	2.00 ∪	2.00 U
Chemical Oxygen Demand		(e)	(l/gm)	32.7	19.4	18.6	29.3	11.3	7.35 J
Chloride	250 ST	16887-00-6	(l/gm)	106	46.4	175 D	6.09	45.0	47.0
Hardness (as CaCO3)	G.	C162	(I/gm)	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	76	(l/gm)	0.005 U	១១	0.005 U	0.005 U	0.00560 UB	0.0100 U
Sulfate	250 ST		(l/gm)	86.0	1.74	57.8 D	39.8	36.9	43.7
Total Organic Carbon		S.	(l/gm)	9.8	8.9	6.4	5.9	4.6	4.5
Total Dissolved Solids	14	*	(l/gm)	421	322	499	336	262	300 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	0.81	0.74 U	0.63 ∪*	99.0	2.05	0.231 J

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.



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

	NYSDEC Class GA		SITE:	MW-02D	MW-02D	MW-02D	020-WM	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D
	Groundwater Standards	CAS#	DATE:	11/30/06	2/22/07	5/25/07	8/14/07	11/13/07	2/12/08	5/19/08	8/4/08	11/3/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	34		(nuits)	5.0	5	NA	NA	NA	NA	NA	NA	2	ΑN
Alkalinity (as CaCO3)		471-34-1	(l/gm)	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	(l/gm)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U				
Biochemical Oxygen Demand	2		(l/gm)	2 U	2 U	2 U	102	2 U	2 U	2 U	2 U	2 ∪	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	*	1	(l/gm)	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	(l/gm)	6.3	6.7	5.8	5.6	6.2	5.7	4.86	4.66	4.98	4.64
Hardness (as CaCO3)	3	(*	(mg/l)	28	40.0	25	26	22	28	22.0	21.0	22.0	120
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	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	(***)	(l/gm)	0.005 U	0.005 U	0.005 U	N 500'0	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(l/gm)	17.9	19.3	19.3	19.1	13.4	17.0	16.1	15.3	14.7	11.7
Total Organic Carbon	Х	3.65	(l/gm)	10	1.0 U	1.0 U	1.0 U	1.0 U	10	10	2.3	10	10
Total Dissolved Solids	κ .	360	(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

	NYSDEC Class GA		SITE:	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D
	Groundwater Standards	CAS#	DATE	8/14/09	2/8/10	5/31/11	2/28/12	11/12/2013	1/12/2013 03/17/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)		340	(nuits)	5	5	5 U	5.0	10	5 U
Alkalinity (as CaCO3)	0,000	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	(l/gm)	0.1	0.1 U	0.10 U	1.81	0.0500 U	0.0500 U
Biochemical Oxygen Demand	*	- 1	(mg/l)	2	2.0	2 U	10 U	4 U	က
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 ∪	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	46	4	(l/gm)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	11.3	5.38	5.92	38.4	25.0	32.0
Hardness (as CaCO3)	10	40	(mg/l)	23.0	19.0	23	100	36.2	69.5
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.45	0.46	2.05 D	0.1 U	1.41 J	1.22 D
Phenols, total	0.001 ST	**	(l/gm)	0.005 U	90	0.005 U	0.005 U	0.0190 UB	0.0120
Sulfate	250 ST		(l/gm)	17.5	11.3	13.4	20.8	11.7	18.2
Total Organic Carbon	=	e.	(l/gm)	1	10	1.0 U	1.5	10	10
Total Dissolved Solids			(l/ßm)	62	56	61	183	95.0	119 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	0.10	0.23	0.10 U	1.88	0.817	0.400 U

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

	NYSDEC Class GA		SITE:	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-021	MW-02I	MW-02i
	Groundwater Standards	CAS#	DATE:	11/30/06	2/22/07	5/25/07	8/14/07	11/13/07	2/12/08	5/19/08	8/4/08	11/3/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(Mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•	×	(units)	5 U	5	ΝΑ	NA	AN	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	r	471-34-1	(l/gm)	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)	8.0	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	10 U	10 U	10 U	1035	10 UJ	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(l/gm)	36.8	37.9	35.4	40.3	28.3	16.2	19.1	15.2	14.8	16.5
Hardness (as CaCO3)	30	(%)	(l/gm)	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	20	(l/gm)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 ∪	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	*		(l/gm)	1.2	1.3	1.8	1.4	2.3	10	10	1.1	10	10
Total Dissolved Solids	*	300	(l/gm)	129	159	146	194	139	95	101	98	73	86
Total Kjeldahl Nitrogen (as N)	S\$ # 03	7727-37-9	(l/gm)	0.82	0.71	69.0	0.68	1.92	0.13	0.14	0:20	0.51	0.25

	NYSDEC Class GA		SITE:	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I
	Groundwater Standards	CAS#	DATE:	8/14/09	2/8/10	5/31/11	2/28/12	11/12/2013	03/17/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•		(units)	5	5	5	5 U	1	5.0
Alkalinity (as CaCO3)	•	471-34-1	(l/gm)	28.1	29.6	44.9	11.7	52.5	50.0
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	0.1 U	0.1 U	2.95	0.1 U	4.08	0.886
Biochemical Oxygen Demand	*	•	(l/gm)	2	2 U	2 U	2 U	U 4	2 U
Bromide	2 GV	24959-67-9	(l/gm)	U 5.0	U 5.0	U 3.0	U 3.	2.00 ∪	2.00 U
Chemical Oxygen Demand	a.	•	(mg/l)	10	10 U	10 U	10 U	3.44 J	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	26.7	20.0	16.9	14.9	34.0	42.5
Hardness (as CaCO3)	*0	65	(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	r 006'0	1.92 D
Phenols, total	0.001 ST	SF.	(l/gm)	0.005 U	23.4	O.005 U	0.005 U	0.0140 UB	0.0100 U
Sulfate	250 ST		(I/gm)	19.1	9.82	19	91.7	17.8	23.8
Total Organic Carbon		5(46)	(mg/l)	1 U	1 U	1.2	1 U	1.1	1.1
Total Dissolved Solids	×3.5	:•	(l/gm)	103	105	86	22	140	149 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(I/gm)	1.13	1.74	3.22	2.03	6.38	1.12

NOTES:

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

	NYSDEC Class GA		SITE:	MW-02S									
	Groundwater Standards	CAS#	DATE:										
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(I/gm)
Color (APHA Units)		*	(nuits)										
Alkalinity (as CaCO3)		471-34-1	(mg/l)										
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	A	٧	A	٧	Α	A	A	A	A	A
Biochemical Oxygen Demand		((l/gm)	В	8	В	В	В	В	8	В	В	В
Bromide	2 GV	24959-67-9	(l/gm)	Α	A	A	A	Α	Α	A	A	A	A
Chemical Oxygen Demand		8	(l/gm)	z	z	z	z	z	z	z	z	z	z
Chloride	250 ST	16887-00-6	(l/gm)	D	D	D	D	D	D	Q	D	О	О
Hardness (as CaCO3)	13		(l/gm)	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	z	z	z	z	z	z	z	z	z	z
Phenols, total	0.001 ST	(2)	(l/gm)	Е	Е	Е	Е	Е	Е	Э	Е	Е	Е
Sulfate	250 ST	14808-79-8	(l/gm)	D	О	٥	D	D	D	Q	О	D	D
Total Organic Carbon	*		(l/gm)										
Total Dissolved Solids	×		(mg/l)										
Total Kjeldahl Nitrogen (as N)	(201)	7727-37-9	(mg/l)										

	NYSDEC Class GA		SITE:	MW-02S	MW-02S	MW-02S
	Groundwater Standards	CAS#	DATE:			
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	ATE:	•)	(nuits)			
Alkalinity (as CaCO3)	46•01	471-34-1	(mg/l)			
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	٧	٧	٧
Biochemical Oxygen Demand	-	3.00	(l/gm)	8	В	В
Bromide	2 GV	24959-67-9	(l/gm)	٧	٧	٧
Chemical Oxygen Demand	5		(l/gm)	z	z	Z
Chloride	250 ST	16887-00-6	(l/gm)	a	a	۵
Hardness (as CaCO3)	r	***	(l/gm)	0	0	0
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	z	z	z
Phenols, total	0.001 ST	380	(l/gm)	E	Э	ш
Sulfate	250 ST		(l/gm)	a	q	О
Total Organic Carbon	(40)	-	(l/gm)			
Total Dissolved Solids		•	(l/gm)			
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)			

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

	NYSDEC Class GA		SITE:	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S
	Groundwater Standards	CAS#	DATE:	11/29/06	2/22/07	6/1/07	8/14/07	11/14/07	2/11/08	5/15/08	8/2/08	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	9	•	(nuits)	70	100	¥	Α̈́	¥	NA	ΑN	AN	50	NA
Alkalinity (as CaCO3)	D)	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	\$ 4	į.	(l/gm)	6	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 ∪	0.5 ∪	0.5 U	0.5 U	U 3.0	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	10	*	(l/gm)	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)	Na.	×	(l/gm)	300	320	340	270	234	240	260	220	220	450
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	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	520	(l/gm)	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	(l/gm)	11.9	5.0 ∪	5.0 U	5.0 ∪	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U
Total Organic Carbon	*	•	(l/gm)	8.3	8.8	9.8	7.9	7.4	6.7	7.1	7.2	6.8	5.7
Total Dissolved Solids	*0	9)	(mg/l)	404	364	410	360	347	293	337	330	278	329
Total Kjeldahl Nitrogen (as N)	*	7727-37-9	(I/gm)	3.60	4.52	4.09	4.57	3.67	2.77	2.70	3.41	2.83	1.90

	NYSDEC Class GA		SITE:	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S
	Groundwater Standards	CAS#	DATE:	8/14/09	2/4/10	6/1/11	8/28/12	11/13/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	((*)	(4)	(nuits)	200	200	150 D	125 D	25	250
Alkalinity (as CaCO3)	10	471-34-1	(l/gm)	304	259	210 D	186 D	222	201
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	29.0	1.27	2.27	1.75 D	1.70	0.88 J
Biochemical Oxygen Demand	c	340	(mg/l)	6	16	6	14	22	13 J
Bromide	2 GV	24959-67-9	(I/Bm)	U 5.0	0.5 U	0.5 U	U 3.	2.00 ∪	2.00 U
Chemical Oxygen Demand			(mg/l)	8.08	21.8	25.9	29.9	4.07 J	14.6
Chloride	250 ST	16887-00-6	(l/gm)	48.8	53.8	09	49.4	56.0	42.0
Hardness (as CaCO3)		200	(l/gm)	300	240	220 D	270 D	183	175
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.1 U	0.24	0.10 U	10	0.100 U	1.89 DJ
Phenols, total	0.001 ST		(mg/l)	0.005 U	20	∩ 900'0	U 300.0	0.00663 UB	L 68600.0
Sulfate	250 ST		(l/gm)	9.30	5 U	2 0	9.0	4.48	3.49 UB
Total Organic Carbon	(4)	tau:	(l/gm)	8.9	6.4	7.5	6.2	6.3	9
Total Dissolved Solids		ï	(l/gm)	419	338	304	324	333	305 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/Bw)	2.40	3.55	2.69	2.15	4.82	1.22

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

	NYSDEC Class GA		SITE:	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D
	Groundwater Standards	CAS#	DATE	11/30/06	2/23/07	5/24/07	8/10/07	11/13/07	2/11/08	5/15/08	8/4/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)			(nuits)	70	30	ΑΝ	ΨN	¥	A V	ΑΝ	¥	80.0	NA
Alkalinity (as CaCO3)	ı	471-34-1	(l/gm)	49.8	40.0	35.6	*1	39.8	40.7	33.6	25.9	23.2	20.0
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	06.0	0.10 U	0.10 U	0.89	0.10 U	0.56	0.73	0.52	0.3	0.36
Biochemical Oxygen Demand	14		(mg/l)	2 U	2.0	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(l/gm)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 ∪	0.5 U	0.5 U	0.5 U	0.5 U	0.5 ∪
Chemical Oxygen Demand	ю	9)	(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	(l/gm)	10.4	10.4	9.7	* <u></u>	6.6	10.7	8:38	6.23	8.47	20.2
Hardness (as CaCO3)	84	3	(mg/l)	64	55.0	09	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				
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	=	5 *	(l/gm)	1.6	1.0 U	3.3	1.4	1.1	10	10	1 U	10	10
Total Dissolved Solids	at.	٠	(mg/l)	106	106	96	*	101	96	66	70	64	90
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	1.60	0.74	69'0	1.9	0.24	0.89	62.0	0.62	0.73	0.64
	AO CHOOMA		L	4	0.0	900	2007010	0.00	0.00				

	NYSDEC Class GA		SITE:	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	
	Groundwater Standards	CAS#	DATE	8/12/09	2/4/10	5/26/11	8/27/12	11/13/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•		(units)	140	20	30	10	10	350
Alkalinity (as CaCO3)	5000	471-34-1	(mg/l)	28.5	18.4	18.8	19.7	110	17.0
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	0.39	0.1 U	0.10 U	0.22	0.180	0.167 J
Biochemical Oxygen Demand	K2	(4)	(l/gm)	2 U	7 N	2 U	2 U	8 0	5 J
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	U 5.0	0.5 U	U 3.	2.00 ∪	2.00 U
Chemical Oxygen Demand	6.		(l/gm)	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)	k	360	(mg/l)	54.0	40.0	47	48 D	68.8	50.3
Nitrate (as N)	10 ST	14797-55-8	(J/gm)	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		(l/gm)	16.8	11.0	15.3	12.6	37.0	26.5
Total Organic Carbon	10	*	(l/gm)	1 U	10	10	1 U	1.8	1.5
Total Dissolved Solids	6		(I/6m)	117	72	97	92	209	181 D
Total Kjeldahl Nitrogen (as N)	3.	7727-37-9	(I/6m)	1.50	0.21 U	0.10 U	0.1 U	1.67	0.400 U

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 LEACHATE INDICATORS

	NYSDEC Class GA		SITE:	MW-041	MW-04I	MW-04I	MW-04I	MW-041	MW-04I	MW-04I	MW-04I	MW-041	MW-04
	Groundwater Standards	CAS#	DATE	11/30/06	2/23/07	5/24/07	8/10/07	11/13/07	2/11/08	5/15/08	8/2/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)		*	(nuits)	70	20	NA	NA	NA	NA	NA	NA	100	ΑA
Alkalinity (as CaCO3)	0	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	Ÿ	٠	(l/gm)	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 บ	0.5 U	0.5 U
Chemical Oxygen Demand	3	Э.	(l/gm)	10 U	13.0	10 U	*n	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(l/gm)	19.8	20.8	21.3	42.1	26.5	48.7	32.0	47.1	39.6	55.1
Hardness (as CaCO3)		NZ	(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				
Phenols, total	0.001 ST		(l/gm)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 ∪	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	8		(l/gm)	2.4	1.4	2.5	9.9	2.2	3.2	10	2.2	1.5	1.3
Total Dissolved Solids	(*)	(10)	(l/gm)	151	134	158	338	181	217	147	192	144	219
Total Kjeldahl Nitrogen (as N)	78.	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

	NYSDEC Class GA		SITE:	MW-041	MW-041	MW-041	MW-041	MW-041	MW-041
	Groundwater Standards	CAS#	DATE	8/12/09	2/4/10	5/26/11	8/27/12	11/13/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)
Color (APHA Units)		•	(units)	200	10	0/	75 D	15	150
Alkalinity (as CaCO3)	í.	471-34-1	(l/gm)	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)(2)	(T)	(mg/l)	17 J*	2 U	2 U	9	08	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	300	*	(l/gm)	27.9	10 U	10 U	14.7	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	9.62	48.8	19.1	83.9 D	93.0	58.5
Hardness (as CaCO3)	(0)	13.1	(mg/l)	180	92.0	58 D	180 D	76.3	66.3
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	•	(l/gm)	0.005 U	2 U	0.005 U	0.005 U	0.00780 UB 0.00795	U.00795J
Sulfate	250 ST		(mg/l)	11.3 U	19.9	14.8	7.08	22.6	22.4
Total Organic Carbon	(A)		(l/gm)	3.6	1.2	1.1	2.3	2.8	1.9
Total Dissolved Solids			(l/bm)	337	200	111	326	287	223 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	06'0	0.64 ∪	0.15 U*	0.23	3.80	2.50

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

	NYSDEC Class GA		SITE:	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S
	Groundwater Standards	CAS#	DATE:	11/30/06	3/2/07	5/24/07	8/10/07	11/13/07	2/11/08	5/15/08	8/4/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	*		(units)	80	90	AN	ΑN	A	AN	NA	NA	100	Y Y
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	,		(l/gm)	13	20	12	18	6	12	11	20	15.9	22.0
Bromide	2 GV	24959-67-9	(l/gm)	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	100	i.	(l/gm)	13.5	58.6	25.7	*	43.4	21.8	26.8	26.8	66.5	10 U
Chloride	250 ST	16887-00-6	(mg/l)	72.9	7.07	71.7	61.2	68.1	57.4	60.2	55.0	49.9	48.6
Hardness (as CaCO3)	; ·	iie	(l/gm)	360	1,100	310	320	290	280	260	268	300	510
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U				
Phenols, total	0.001 ST	(6)	(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	(l/gm)	0.5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2 U	5 U	5 U
Total Organic Carbon	0.		(l/gm)	8.0	8.2	8.9	8.5	7.9	7.4	7.0	8.1	8.6	4.8
Total Dissolved Solids	**	•05	(l/gm)	424	416	435	460	440	417	422	416	385	396
Total Kjeldahl Nitrogen (as N)	(2)	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

	NYSDEC Class GA		SITE:	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S
	Groundwater Standards	CAS#	DATE:	8/12/09	2/4/10	5/31/11	8/27/12	11/13/2013	11/13/2013 03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)	•	L	(units)	120	09	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	(l/gm)	2.61	2.66	6.73 D	3.64	3.97	1.82 J
Biochemical Oxygen Demand	6	•22	(l/gm)	19 J*	14	17 J*	17	32	27 J
Bromide	2 GV	24959-67-9	(l/gm)	0.5 ∪	0.5 U	0.50 U	.5 U	2.00 U	ס.00 ה
Chemical Oxygen Demand	()		(I/gm)	23.0	36.0	28.6	56	26.2	20.2
Chloride	250 ST	16887-00-6	(J/gm)	48.4	49.9	52.4 D	52.7 D	45.0	44.0
Hardness (as CaCO3)	322	8	(mg/l)	290	275	300 D	310 D	245	277
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.1 U	0.11	0.10 U*J*	U 1.	U 0.0773 J	2.64 DJ
Phenols, total	0.001 ST		(l/gm)	0.005 U	0 9	0.005 U	0.005 U	0.0107 UB	0.0160
Sulfate	250 ST		(l/gm)	10.2	5 U	5.00 U	5 U	2.00 ∪	2.00 U
Total Organic Carbon		JAN:	(l/gm)	6.3	5.4	9.9	5.8	6.7	8.2
Total Dissolved Solids	3.5	•	(l/gm)	398	378	432	448	394	459 D
Total Kjeldahl Nitrogen (as N)	*	7727-37-9	(l/gm)	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

	NYSDEC Class GA		SITE:	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	G\$0-MW	MW-05D	MW-05D	MW-05D
	Groundwater Standards	CAS#	DATE:	11/30/06	2/21/07	5/25/07	8/14/07	11/13/07	2/11/08	5/15/08	8/2/08	11/5/08	2/26/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(l/gm)	(l/gm)
Color (APHA Units)		18	(nuits)	5 U	5	NA	¥	ΑN	WA	AN	AN	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)	06.0	0.10 U	0.10 U	0.46	0.10 U	0.1 U				
Biochemical Oxygen Demand	24		(mg/l)	2.0	2 U	2 0	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	U 5.0	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	·	*6	(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	62.9	46.7	37.4	35.8
Hardness (as CaCO3)	94	•	(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	12	(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	,	*	(l/gm)	2.9	2.9	3.6	3.3	2.9	2.4	3.2	2.0	1.4	1 U
Total Dissolved Solids	r	(a)	(l/gm)	344	303	348	369	275	351	296	292	262	237
Total Kjeldahl Nitrogen (as N)	((•)) •)	7727-37-9	(l/gm)	1.46	1.00	1.33	1.3	0.58	96.0	0.94	0.52	0.27	0.1 U
	6												

	NYSDEC Class GA		SITE:	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D
	Groundwater Standards	CAS#	DATE	8/17/09	2/8/10	6/1/11	8/28/12	11/13/2013	03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(l/gm)
Color (APHA Units)	e		(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	60'6	12.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.10	0.1 U	0.13	0 L	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	×	į	(mg/l)	2 U	2 U	2 U	2 U	10 4	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	∩ 9'0	U 3.	2.00 U	2.00 U
Chemical Oxygen Demand	89	G.	(mg/l)	10 U	10 U	12	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	67.5	46.4	34.5	9.32	13.0	22.5
Hardness (as CaCO3)	10	- 2	(mg/l)	110	82.0	02	19	25.5	45.2
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	4.45	5.28	2.3 D	1.6	1.07	0.948 D
Phenols, total	0.001 ST	•	(mg/l)	0.005 U	0 S	0.005 U	0.005 U	0.0216 UB	0.0240
Sulfate	250 ST		(l/gm)	84.0	29.3	49.9 D	20.1	29.4	38.3
Total Organic Carbon	•	-	(l/gm)	1.0	1.2	1.2	1 U	1.2	10
Total Dissolved Solids			(l/gm)	300	179	163	98	110	122 D
Total Kjeldahl Nitrogen (as N)	î.	7727-37-9	(mg/l)	0.41	1.37	0.19	0.62	1.07	0.645

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

	NYSDEC Class GA		SITE:	MW-05I	MW-051	MW-05I	MW-05I	MW-051	MW-051	MW-05I	MW-05I	MW-051	MW-05I
	Groundwater Standards	CAS#	DATE:	11/30/06	2/21/07	5/25/07	8/14/07	11/13/07	2/11/08	5/15/08	8/2/08	11/5/08	2/26/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)
Color (APHA Units)	•	•	(nuits)	70	20	NA	NA	NA	NA	NA	NA	40.0	NA
Alkalinity (as CaCO3)	9)	471-34-1	(mg/l)	79.5	72.5	63.3	70.5	25	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	*		(l/gm)	3	2 U		2 U	2 U	2 U	2 U	2 U	2.0	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	U 5.0	0.5 U	0.5 ∪	0.5 U				
Chemical Oxygen Demand		n®i	(l/gm)	10 U	25.7	10 N	10.5	18.1	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)	*	38	(l/gm)	136	120	130	180	124	110	96.0	96.0	14.0	190
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	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	(E)	(l/gm)	0.005 U	0.005 U	N 200'0	0.005 U	U 200.0	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(l/gm)	76.0	59.3	26.8	52.8	50.0	36.1	36.8	67.3	32.3	38.0
Total Organic Carbon	-	(%)	(l/gm)	3.3	3.1	3.9	3.4	3.4	3	2.9	3.1	1.4	1.0
Total Dissolved Solids	: = 1	000	(l/gm)	231	207	267	286 J	297	212	223	203	126	151
Total Kjeldahl Nitrogen (as N)	· ·	9-12-1277	(l/gm)	1.26	1.05	2.45	2.32	0.41	1.28	0.74	0.48	0.18	0.16 J*

	NYSDEC Class GA		SITE:	MW-051	MW-05I	MW-051	MW-051	MW-051	MW-05I
	Groundwater Standards	CAS#	DATE	8/11/09	2/8/10	5/31/11	8/28/12	11/13/2013	03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(l/gm)
Color (APHA Units)	0. 4 51	101	(units)	10	9	250 D	100 D	25	150
Alkalinity (as CaCO3)	24	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	99.0	0.570	0.684 J
Biochemical Oxygen Demand	**	*//	(mg/l)	2 U	2	2 U	2 U	8 0	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	U 3.	2.00 ∪	2.00 U
Chemical Oxygen Demand	ïr	*	(mg/l)	10 U	26.5	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	9.76	28.0	27.0	12.5	0.07	25.0
Hardness (as CaCO3)	31075	•	(mg/l)	88.0	64.0	06 D	69	96.5	57.5
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	0.1 U	0.63	0.10 U	U 1.	0.100 U	0.236
Phenols, total	0.001 ST		(mg/l)	O.005 U	16.7	0.005 U	U 300.0	0.0110 UB	0.0100 U
Sulfate	250 ST		(I/Bm)	32.7	22.5	28.7	12.9	70.6	29.6
Total Organic Carbon	12001	7.	(l/gm)	1.3	2.6	2.3	10	3.2	1.9
Total Dissolved Solids	3	S # 3	(l/gm)	196	126	164	100	300	152 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(J/BW)	0.23	1.67	0.20	0.68	1.70	1.41

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. Concentration exceeds Standard/Guidance Value U* or UB: Analyte considered undetected based on data validation criteria. U*: Value is an approximate concentration of the analyte in the sample as determined by data validation.

-: No standard or guildance value

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

	NYSDEC Class GA		SITE:	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S
	Groundwater Standards	CAS#	DATE:	11/30/06	2/21/07	6/1/07	8/14/07	11/13/07	2/11/08	5/15/08	8/2/08	11/5/08	5/26/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)		,	(units)	20	20	NA	NA	NA	AN	NA	NA	60.0	Ϋ́
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	20'9	68.8	7.86	6.46	4.01	5.20	5.75	4.0	3.40
Biochemical Oxygen Demand		•	(l/gm)	18	12	12	23	16	10	6	2.0	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	×	R	(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)	9.09	58.4	48.8	46.2	49	45.6	36.3	38.5	38.3	34.2
Hardness (as CaCO3)	11.0	(•	(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				
Phenols, total	0.001 ST	·	(mg/l)	0.005 U	0.005 U	0.005 U	O.005 U	O: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 ∪	0.5 0.0	5.0 U	5.0 U	5.20	5 U	5 U	5 U
Total Organic Carbon	31	*	(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	,	ě	(mg/l)	460	451	454	202	456	395	363	403	371	372
Total Kjeldahl Nitrogen (as N)	(a)	7727-37-9	(l/gm)	9.46	8.54	9.15	6.63	8.4	6.90	6.71	7.46	5.77	5.01

	NYSDEC Class GA		SITE:	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S
	Groundwater Standards	CAS#	DATE:	8/11/09	2/8/10	5/31/11	8/29/12	11/13/2013	1/13/2013 03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•:	*	(units)	40	50	200 D	150 D	25	250
Alkalinity (as CaCO3)	{(4)}	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	6.26 D	6.18 D	4.28	1.85 J
Biochemical Oxygen Demand		ň	(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	U 3.0	2.00 ∪	2.00 ∪
Chemical Oxygen Demand	((4))		(mg/l)	32.7	21.8	29.2	26	7.55 J	24.0
Chforide	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 ₪	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	•	(l/gm)	0.005 ∪	5.4	0.005 U	0.005 U	0.00571 UB	0.0100 U
Sulfate	250 ST		(l/gm)	11.6	22.8	ា ទ	5 U	2.56	2.00 U
Total Organic Carbon	9 (ė:	(mg/l)	8.7	4.8	7.4	1.6	7	8.9
Total Dissolved Solids		154	(l/gm)	496	313	357	383	926	355 D
Total Kjeldahl Nitrogen (as N)	3	7727-37-9	(l/gm)	7.62	5.79	□ 99'9	5.42 D	99'2	4.27

NA: Not analyzed

U* or UB: Analyzed for but not detected, value shown is instrument detection limit J: Estimated value UJ* or UJ: Value was not detected above quantitation limit but was an appoximate concentration as determined by data validation.

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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

	NYSDEC Class GA		SITE:	MW-06D	MW-06D	Q90-MM	MW-06D	MW-06D	MW-06D	Q90-MM	Q90-MM	MW-06D	MW-06D
	Groundwater Standards	CAS#	DATE:	12/1/06	2/22/07	5/24/07	8/10/07	11/9/07	2/11/08	5/15/08	8/4/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)	•	,	(units)	50	5	NA	NA	NA	NA	NA	NA	5.00	ΑΝ
Alkalinity (as CaCO3)	10	471-34-1	(l/gm)	19.9	10.1	6.0	* *	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	3		(mg/l)	2 U	2 U	2 U	2 U	2.0	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	3.1	0.5 ∪	0.5 U							
Chemical Oxygen Demand	198	((•))	(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	*D	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	*n	0.7	0.1 U	0.37	09.0	0.53	1.38
Phenols, total	0.001 ST	(a)	(l/gm)	0.005 U	5 U								
Sulfate	250 ST	14808-79-8	(l/gm)	13.7	17.9	16.7	16.6	17.7	17.3	16.9	19.8	19.4	14.0
Total Organic Carbon	(6)	æ	(l/gm)	1 0	1.0	1.2	1.0 U	1.7	1.0	10	1.4	10	1 U
Total Dissolved Solids	₩.	J.	(l/gm)	82	74	72	, 1	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	0.10	0.10	0.10

	NYSDEC Class GA		SITE:	MW-06D	MW-06D	G90-WM	Q90-WM	MW-06D	MW-06D
	Groundwater Standards	CAS#	DATE	8/11/09	2/4/10	5/26/11	8/27/12	11/12/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•	is * ri	(nuits)	5	5	50	15	10	350
Alkalinity (as CaCO3)	73	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	(l/gm)	0.1 U	0.1 U	0.1 U	0.23	0.868	0.817 J
Biochemical Oxygen Demand		Ē.	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 UJ
Bromide	2 GV	24959-67-9	(l/gm)	0.5 U	0.5 U	0.5 U	.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	(**)	300	(mg/l)	10.9	10 U	10 U	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	25.0	28.0	24.0	24.8	19.0	17.5
Hardness (as CaCO3)	(3)	(1)	(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	89.0	1.55 J	1.54 DJ
Phenols, total	0.001 ST		(l/gm)	0.005 ∪	0.5	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	2	(D)	(mg/l)	10	10	10	10	10	10
Total Dissolved Solids	*	*	(l/gm)	130	101	66	107	87.0	93.0 D
Total Kieldahl Nitrogen (as N)	63	7727-37-9	(l/gm)	0.1 U	0.1 U	0.1 U	.5 U	2.40	0.870

NOTES:

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

	NYSDEC Class GA		SITE	MW-06	190-WW	190-WW	MW-061	MW-061	90-MM	190-MW	190-MM	190-MW	MW-061
	Groundwater Standards	CAS#	DATE:	12/1/06	2/22/07	5/24/07	8/10/07	11/9/07	2/11/08	2/12/08	8/4/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)			(units)	5 U	5	ΑΝ	ΑN	ΑN	AN	NA	NA	5.00	NA
Alkalinity (as CaCO3)	i:	471-34-1	(l/gm)	65.2	27.5	24.7	* <u></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				
Biochemical Oxygen Demand	4		(l/gm)	2 U	9	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	•1	022	(I/gm)	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	(I/gm)	31.5	31.8	32.3	29.9	36.4	26.3	16.8	25.5	16.7	17.9
Hardness (as CaCO3)	18	(#C	(l/gm)	89	70.0	72	192	92	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	(*))	(l/gm)	N 500'0	U 200.0	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	(l/gm)	21.0	22.1	19.9	24.1	21.2	14.1	11.6	9.42	9.38	9.31
Total Organic Carbon	*	3.63	(l/gm)	1.1	1.3	1.0	1.3	1.2	10	1.0	1 U	1.0	1.1
Total Dissolved Solids	10		(l/gm)	144	147	161	166	184	108	111	137	105	92
Total Kjeldahl Nitrogen (as N)	•	7727-37-9	(l/gm)	6.21	1.93	1.28	5.36	0.81 J	2.34	1.53	1.48	1.27	1.66

	NYSDEC Class GA		SITE:	MW-06!	MW-061	MVV-061	MW-061	MW-061	MW-061
	Groundwater Standards	CAS#	DATE:	8/11/09	2/4/10	5/26/11	8/27/12	11/12/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)		10	(nuits)	10	10	5 U	5	10	350
Alkalinity (as CaCO3)	ᅋ	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	0.050.0	0.0500 UJ
Biochemical Oxygen Demand		8	(mg/l)	2 U	2 U	2 U	7 N	4 U	2 UJ
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	∩ 9:0	U 3.	1.33 J	2.00 U
Chemical Oxygen Demand		*	(l/gm)	10 U	10 U	U 01	10 U	10.0 U	10.0 U
Chloride	250 ST	16887-00-6	(l/gm)	2.08	23.2	6.66	27.2	23.0	46.5
Hardness (as CaCO3)		1(4)	(mg/l)	45.0	45.0	Q 08	52 D	39.8	46.6
Nitrate (as N)	10 ST	14797-55-8	(I/gm)	0.1 U	1.11 J*	0.86 D	2.08 U	2.32 J	0.166 J
Phenols, total	0.001 ST	*	(l/gm)	0.005 U	១១	0.005 U	0.005 U	0.0100 U	0.0110
Sulfate	250 ST		(l/gm)	11.1	9.46	56.2 D	15	8.66	26.6
Total Organic Carbon		M•04	(l/gm)	1.0	1 U	10	1 U	10	1.3
Total Dissolved Solids		3.	(l/gm)	124	86	188	129	99.0	188 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	0.41	0.25 U	0.35 U*	0.28 U	0.961	0.400 U

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

	NYSDEC Class GA		SITE:	MW-06S	WW-06S	MW-06S	S90-MW	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S
	Groundwater Standards	CAS#	DATE	12/1/06	2/22/07	5/24/07	8/10/07	11/9/07	2/11/08	5/15/08	8/4/08	11/3/08	2/23/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(l/gm)	(mg/l)	(mg/l)						
Color (APHA Units)	38	٠	(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	(l/gm)	6.08	4.42	4.65	3.04	5.15	3.42	4.43	4.23	3.7	2.60
Biochemical Oxygen Demand	4	ā	(mg/l)	14	6	10	4	140	8	3	2 U	8.6	10.3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	U 5.0	∩ 9:0	0.5 U					
Chemical Oxygen Demand	ű.	ř	(mg/l)	10 U	35.8	25.7	*N	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)		,	(l/gm)	312	240	260	160	200	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 ∪	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(l/gm)	5.0 U	∩ 0′9	0.03	5.1	5.0 U	5.0 U	8.50	2 ∪	5 U	5 U
Total Organic Carbon	3	3.42	(l/gm)	9.1	9.8	9.6	5.0	8.0	7.1	6.3	4.9	8.5	4.5
Total Dissolved Solids			(l/gm)	364	248	331	233	348	368	327	268	344	324
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	9.50	6.48	7.96	*n	6.56	5.98	5.80	4.87	5.22	3.72

	NYSDEC Class GA		SITE:	S90-MW	S90-MW	WW-06S	MW-06S	MW-06S	MW-06S
	Groundwater Standards	CAS#	DATE:	8/11/09	2/4/10	5/26/11	8/27/12	11/13/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)		•	(units)	100	70	100 D	75	20	250
Alkalinity (as CaCO3)	300	471-34-1	(l/gm)	220	7.77	259 D	223 D	293	96.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.41 J*	1.46	6.90 D	3.89	2.60	0.222 J
Biochemical Oxygen Demand		٠	(mg/l)	%	8	10 J*	13	16	5 J
Bromide	2 GV	24959-67-9	(mg/l)	U 5.0	U 2.0	0.5 U	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	191	(3)	(l/gm)	25.4	21.8	20.0	25.3	10.0 U	3.26 J
Chloride	250 ST	16887-00-6	(l/gm)	21.9	23.0	27.9	49.5	27.0	31.0
Hardness (as CaCO3)		388	(l/gm)	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	•	(l/gm)	0.005 U	5 U	0.005 U	0.005 U	0.0100 U	0.0110
Sulfate	250 ST		(l/gm)	7.40	5.0	5 U	2 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	3	(重)	(l/gm)	277	228	329	378	276	218 D
Total Kjeldahl Nitrogen (as N)	at.	7727-37-9	(J/BW)	4.08	3.37	7.07 D	0.5 U	5.08	0:303 J

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

	NYSDEC Class GA		SITE:	MW-07!	MW-071	MW-07I	MW-071	MW-071	MW-07I	MW-071	MW-071	MW-071	MW-071
	Groundwater Standards	CAS#	DATE:	11/28/06	2/22/07	5/24/07	8/10/07	11/14/07	2/11/08	5/19/08	8/2/08	11/5/08	2/24/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)
Color (APHA Units)	*	ŝ	(nuits)	5.0	5	ΝΑ	NA	NA	NA	NA	AA	5.00	NA
Alkalinity (as CaCO3)	(B)	471-34-1	(l/gm)	20.4	14.7	27.9	*5	33.8	26.4	35.6	40.2	49.6	40.7
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	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			(l/gm)	2 U	4	3	2 ∪	2.0	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(l/gm)	1.4	0.5 U	0.5 ∪	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	<u>8</u> /		(I/Bm)	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	(l/gm)	57.5	49.7	43.7	35.0	37.7	46.0	44.3	44.6	49.0	36.5
Hardness (as CaCO3)		:•:	(l/gm)	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	(l/gm)	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	970	(l/gm)	0.005 U	0.005 U	0.005 ∪	0.005 U	0.005 U	0.005 ∪	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(l/gm)	10	11.5	28.9	24.1	21.9	14.7	10.1	6.75	6.98	11.4
Total Organic Carbon	*	243	(l/gm)	1 U	1.2	1.7	3	1.4	10	1.1	8.9	10	10
Total Dissolved Solids	3300		(mg/l)	190	148	147	162	326	126	149	163	157	123
Total Kjeldahl Nitrogen (as N)	3.€	7727-37-9	(l/gm)	0.52	0.87	1.47	*	1.98	2.04	1.18	0.88	0.24	0.58

	NYSDEC Class GA		SITE:	MW-07!	MW-07I	120-WM	IZ0-WM	MW-071	MW-071
	Groundwater Standards	CAS#	DATE	8/14/09	2/8/10	5/26/11	8/27/12	11/12/2013	03/18/2015
CONSTITUENT	and Guidance Values		UNITS	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(l/gm)
Color (APHA Units)	33#35		(units)	5 U	2	20	5 U	n I	150
Alkalinity (as CaCO3)	3	471-34-1	(l/gm)	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	45	W	(mg/l)	2 U	7	2 U	2 U	4 U	2 UJ
Bromide	2 GV	24959-67-9	(l/gm)	0.5 ∪	0.5 U	0.5 U	LU 3.	2.00 U	2.00 U
Chemical Oxygen Demand	٠		(l/gm)	10 U	10 U	10 U	10 U	10.0 U	10.0 U
Chtoride	250 ST	16887-00-6	(mg/l)	74.0	43.3	€7.8 D	44.3 D	33.0	50.0
Hardness (as CaCO3)	8901	((•))	(l/gm)	0.89	41.0	120 D	Q 85	38.4	43.0
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	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	2∪	0.005 U	N 9	0.0100 U	0.0100 U
Sulfate	250 ST		(l/gm)	20.6	12.9	28.1	2.7	9.37	15.0
Total Organic Carbon	-5		(l/gm)	10	1 U	1.1	10	10	10
Total Dissolved Solids	*)#:	(l/gm)	243	136	298	167	117	151 D
Total Kjeldahl Nitrogen (as N)	*	7727-37-9	(mg/l)	1.70	1.78	∗U 66:0	1.36	1.93	0.363 J

NOTES:

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: Concentration exceeds Standard/Guidance Value
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J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.
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POST CLOSURE GROUNDWATER MONITORING PROGRAM HISTORIC AND CURRENT SAMPLE RESULTS LEACHATE INDICATORS SONIA ROAD LANDFILL

	NYSDEC Class GA		SITE:	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D
	Groundwater Standards	CAS#	DATE:	11/29/06	2/28/07	6/1/07	8/17/07	11/14/07	2/12/08	5/14/08	80/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(I/gm)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)	72	0.5	(nuits)	10	5	NA	NA	NA	NA	NA	AN	2	NA
Alkalinity (as CaCO3)	1	471-34-1	(l/gm)	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	(l/gm)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U				
Biochemical Oxygen Demand		(*)	(I/Bm)	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	(l/gm)	0.7	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U				
Chemical Oxygen Demand		3.60	(mg/l)	10 U	10 U	30.7	10 U	10.5	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)	3	0.75	(l/gm)	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	98.3	5.38	6.05	6.57	5.48	5.90	5.87	28.6	4.16
Phenols, total	0.001 ST	*	(l/gm)	0.005 U	U 300.0	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	(l/gm)	20.9	21.7	27.8	21.8	18.7	18.6	16.7	15.8	16.4	19.3
Total Organic Carbon		()	(l/gm)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	10	1 U	10	10	10
Total Dissolved Solids		3.00	(l/gm)	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

	NYSDEC Class GA		SITE:	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D
	Groundwater Standards	CAS#	DATE:	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013	11/14/2013 03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(I/gm)	(mg/l)
Color (APHA Units)	963	•	(nuits)	2 ∪	250	5.0	15	10	100
Alkalinity (as CaCO3)	e	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	(l/gm)	0.1 U	0.1 U	0.14	0.1 U	0.0500 U	0.0500 UJ
Biochemical Oxygen Demand	SR:	*	(l/gm)	2 U	2 U	16	7.0	4 U	2 U
Bromide	2 GV	24959-67-9	(l/gm)	0.5 ∪	U 3.0	0.5 ∪	U 5.0	2.00 ∪	2.00 ∪
Chemical Oxygen Demand	(00)	•	(I/b͡ш)	10 U	U 01	136	U 01	5.34 J	4.52 J
Chloride	250 ST	16887-00-6	(l/gm)	19.9	39.0	10.3	G 09	21.0	25.0
Hardness (as CaCO3)		*	(l/gm)	27.0	105	270 D	460 DJ	43.6	62.8
Nitrate (as N)	10 ST	14797-55-8	(l/gm)	2.77	2.22	0.10 U	0.42	4.25	4.86 D
Phenols, total	0.001 ST	3.1	(l/gm)	0.005 U	2 N	0.0254	O:005 U	0.0100 U	0.0100 U
Sulfate	250 ST		(l/gm)	24.4	15.9	16.3	38.1	28.7	46.9
Total Organic Carbon	٧	9)	(l/gm)	10	2.5	3.3	1.6	10	1.4
Total Dissolved Solids	0000		(mg/l)	104	197	138 D	252	161	166 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/gm)	0.1 U	7.58	72.0	U 5.0	2.02	1.48

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Concentration exceeds Standard/Guidance Value

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

	NYSDEC Class GA		SITE:	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111
	Groundwater Standards	CAS#	DATE:	11/29/06	2/28/07	6/1/07	8/16/07	11/14/07	2/12/08	5/14/08	8/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(l/gm)
Color (APHA Units)	30 (3 0 5)		(units)	2 U	5 U	ΝA	NA	NA	NA	NA	NA	2.00	NA
Alkalinity (as CaCO3)	ar .	471-34-1	(l/gm)	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	(l/gm)	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	(16))•)	(I/gm)	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	(l/gm)	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			(l/gm)	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)	56•30		(l/gm)	16.0	12.0	19.0	18.0	24.0	18.0	36.0	15.0	0.09	90.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.78	0.70	1.12	0.53	0.62	09'0	2.38	0.65	0:30	0.20
Phenols, total	0.001 ST	*	(J/gm)	O:005 U	U 200.0	0.005 U	0.005 U	0.005 U	0.005 U	∩ 9 00′0	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(l/gm)	11.0	13.1	14.5	16.9	18.9	15.1	8.93	11.5	12.7	11.1
Total Organic Carbon	74	050	(l/gm)	10	1.0 U	1.0 U	1.0 U	1.0 U	1 U	10	1 U	10	10
Total Dissolved Solids	74	585	(l/gm)	58	47	53	71	78	09	104	63	53	82
Total Kjeldahl Nitrogen (as N)	•	7727-37-9	(l/gm)	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

	NYSDEC Class GA		SITE:	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111
	Groundwater Standards	CAS#	DATE:	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013	03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(I/Bm)	(mg/l)	(mg/l)
Color (APHA Units)		(40)	(nuits)	5 U	5 U	150 D	5 U	10	9.0
Alkalinity (as CaCO3)	100	471-34-1	(l/gm)	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	XII	-	(mg/l)	2 U	2 U	20	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	U 5.0	0.5 U	0.5 U	∩ 5′0	2.00 ∪	2.00 U
Chemical Oxygen Demand	II:	7/00	(l/gm)	U 01	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	20.9 D	8.00	7.00 UB
Hardness (as CaCO3)	25 🕏		(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	190	(mg/l)	0.005 ∪	2 ∪	0.005 U	0.005 U	0.0100 U	0.00929 J
Sulfate	250 ST		(l/gm)	16.7	10.6	9.22	12.2	9.51	14.7
Fotal Organic Carbon	4.1		(l/gm)	1 0	10	1.0 U	10	10	1 U
Total Dissolved Solids	III # ₹f	2540	(l/gm)	64	47	33	138	49.0	41.0 D
Total Kjeldahl Nitrogen (as N)	м	7727-37-9	(l/gm)	0.1 U	0.1 U	0.1 U	0.5 U	1.31	0.275 J
									1

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

	NYSDEC Class GA	*	SITE:	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S
	Groundwater Standards	CAS#	DATE	11/29/06	2/23/07	6/1/07	8/16/07	11/14/07	2/12/08	5/14/08	8/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(I/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	•	*	(nuits)	5 U	30	ΝΑ	AA	ΑN	NA	NA	NA	20.0	NA
Alkalinity (as CaCO3)	r	471-34-1	(l/gm)	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	N		(l/gm)	2 U	4	4	2 U	2 U	2 U	9	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	10	i i	(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)	5.	*	(l/gm)	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	•	(l/gm)	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	٠	332	(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	¥	(3)	(l/gm)	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

	NYSDEC Class GA		SITE:	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S
	Groundwater Standards	CAS#	DATE	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013 03/19/2015	03/19/2015
CONSTITUENT	and Guidance Values		UNITS	(I/6m)	(l/gm)	(mg/l)	(mg/l)	(l/gm)	(mg/l)
Color (APHA Units)	48	(6)	(units)	50	5	10	5 U	1 U	5 U
Alkalinity (as CaCO3)	60	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		•11	(mg/l)	2 U	2 U	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(l/gm)	0.5 U	U 5.0	U 3.0	0.5 U	2.00 U	2.00 U
Chemical Oxygen Demand	139		(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	04.4 D	82.3 D	53.5	49.5
Hardness (as CaCO3)	20	e	(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	3	(l/gm)	0.005 U	20	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	- 6	(46)	(mg/l)	3.8	5.0	3.2	3.6	4.5	3.3
Total Dissolved Solids	A.	34	(l/gm)	286	380	276	321	323	227 D
Total Kjeldahl Nitrogen (as N)		7727-37-9	(l/Bw)	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

	NYSDEC Class GA		SITE:	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D
	Groundwater Standards	CAS#	DATE:	11/29/06	2/23/07	6/1/07	8/16/07	11/14/07	2/12/08	5/14/08	8/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(I/gm)	(l/gm)	(mg/l)	(l/gm)	(l/bm)
Color (APHA Units)	*	*	(nuits)	5.0	5	ΝΑ	ΑN	NA	NA	ΑΝ	NA	5.00	NA
Alkalinity (as CaCO3)	ю	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	(l/gm)	0.10	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U				
Biochemical Oxygen Demand	4	٠	(l/gm)	2 U	9	2 U	2 U	2 U	2 U	2 U	2.0	2 U	2.0
Bromide	2 GV	24959-67-9	(l/gm)	1.6	0.5 U	0.5 U	0.5 ∪	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	42	•))	(l/gm)	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	(l/gm)	5.5	6.9	7.7	10.6	20.5	21.7	27.6	31.0	29.3	33.6
Hardness (as CaCO3)			(l/gm)	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	(l/gm)	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	•00	(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	O: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	*		(l/gm)	1 U	1.0 U	1.0 U	1.0 U	1.3	10	10	1 U	109	1 U
Total Dissolved Solids	ж	***	(I/gm)	71	20	69	85	128	112	128	140	10	127
Total Kjeldahl Nitrogen (as N)	30000	7727-37-9	(l/gm)	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

Coundwater Standards CAS# Colon (APHA Units) and Guidance Values Color (APHA Units) - Idealinity (as CaCO3) 2 ST Information (as N) 2 ST Information (as N) 2 GV Information (as N) 2 GV Information (as N) 2 GV Information (as N) - Information (as N) - Infrate (as N) - Infrate (as N) - Infrate (as N) 0.001 ST Inflate 250 ST Inflate 250 ST Inflate 250 ST Inflate - In	NYSDEC Class GA	SITE:	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D
2 ST 2 GV 2 GV 2 50 ST 10 ST 0.001 ST		DATE:	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013	03/20/2015
APHA Units) - y (as CaCO3) - ia (as N) 2 ST mical Oxygen Demand - al Oxygen Demand - ss (as CaCO3) - (as N) 10 ST s, total 250 ST rganic Carbon - issolved Solids -		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
y (as CaCO3) - ia (as N) 2 ST mical Oxygen Demand - al Oxygen Demand - ss (as CaCO3) - (as N) 10 ST s, total 250 ST rganic Carbon - rganic Carbon - issolved Solids -	6	(units)	5.0	5 U	5 U	20	10	5.0
itia (as N) inical Oxygen Demand al Oxygen Demand ss (as CaCO3) (as N) (a	471-34-1	(l/gm)	9.15	12.8	16	9.4	60.6	5.00
al Oxygen Demand 2 GV 2 al Oxygen Demand 2 GV 2 ss (as CaCO3)		(l/gm) /	0.1 U	0.1 U	0.10 U	0.1 U	0.0500 U	0.0500 UJ
al Oxygen Demand	£.	(l/gm)	2 U	2 U	2 U	2 U	4 U	2 U
al Oxygen Demand 250 ST		(l/gm) 6	0.5 U	0.5 U	0.5 U	0.5 U	2.00 ∪	2.00 U
ss (as CaCO3)	:4	(l/gm)	10 U	10 U	12	10 U	10.0 U	10.0 U
ss (as CaCO3) 10 ST 1 (as N) 10 ST 1 s, total 0.001 ST 250 ST rganic Carbon ssolved Solids -		(l/gm) 9	40.1	26.4	8.80	90'6	8.00	10.0 UB
(as N) 10 ST 1 s, total 0.001 ST 250 ST rganic Carbon - - issolved Solids - -	15	(l/gm)	53.0	42.0	30	22	22.8	22.2
s, total rganic Carbon issolved Solids	1	(l/gm) 8	1.79	1.79	2.70 D	2.94 D	1.46	1.70 D
rganic Carbon ssolved Solids	0.001 ST	(l/gm)	0.005 U	2 N	O:005 U	0.005 U	0.0100 U	0.0200
otal Organic Carbon	250 ST	(l/gm)	30.8	20.8	15.7	10.2	17.0	9.15 UB
otal Dissolved Solids		(l/gm)	1 U	1 U	1.0 U	0.10	10	1 U
	B.	(l/gm)	119	110	23	20	76.0	26.0 D
Fotal Kjeldahl Nitrogen (as N)	- 1727-37	(l/gm) 6	0.1 U	0.1 U	0.44	0.5 U	1.77	0.363 J

NOTES:

NA: Not analyzed

 U^{\star} 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.



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

	NYSDEC Class GA		SITE:	MW-12I	MW-12I	MW-121	MW-12I	MW-12I	MW-12I	MW-12I	MW-12	MW-12I	MW-12I
	Groundwater Standards	CAS#	DATE:	11/29/06	2/23/07	6/1/07	8/16/07	11/14/07	2/12/08	5/14/08	80/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)	240		(units)	5.0	5	ΑΝ	AN	AN	NA	NA	NA	5.00	ΑN
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			(l/gm)	2	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(l/bm)	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 Oxvoen Demand	*		(l/gm)	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	(l/gm)	12.9	21.7	12.6	14.8	18.1	14.2	17.9	12.2	10.7	23.1
Hardness (as CaCO3)		g•.	(l/gm)	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		(l/gm)	0.005 U	0.005 U	0.005 U	0.005 ∪	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	10	1	10	1 C
Total Dissolved Solids		ķ	(mg/l)	46	124	74	62	54	72	84	79	58	105
Total Kjeldahl Nitrogen (as N)		7727-37-9	(mg/l)	79.7	3.99	3.95	3.11	3.32	3.84	4.45	5.58	3.31	3.81

	NYSDEC Class GA		SITE:	MW-121	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I
	Groundwater Standards	CAS#	DATE:	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013	03/20/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)		*	(nuits)	5 U	20	10	20	1	5 U
Alkalinity (as CaCO3)		471-34-1	(l/gm)	17.0	10	2.80	23.6 D	27.3	11.0
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	1.64	0.1 U	0.74	1.75	2.80	5.80 DJ
Biochemical Oxygen Demand	4	٠	(mg/l)	2 U	2 U	10	7 N	4 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	ก ร:0	2.00 U	2.00 U
Chemical Oxygen Demand	87411	570	(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)		•	(l/gm)	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	62'0	0.455	0.578
Phenols, total	0.001 ST	•	(l/gm)	0.005 ∪	5 U	0.005 U	0.005 U	0.0100 U	0.0100 U
Sulfate	250 ST		(l/gm)	23.2	11.0	7.03	31	39.9	58.9
Total Organic Carbon	19	-	(l/gm)	1 U	1.0	2.1	1.3	1.3	2.1
Total Dissolved Solids		•	(l/gm)	155	22	74	110	177	179 D
Total Kjeldahl Nitrogen (as N)	٠	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.



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

	NYSDEC Class GA		SITE:	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S
	Groundwater Standards	CAS#	DATE	11/29/06	2/23/07	6/1/07	8/16/07	11/14/07	2/12/08	5/14/08	80/9/8	11/5/08	2/25/09
CONSTITUENT	and Guidance Values	,	UNITS	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(l/gm)	(Mg/l)
Color (APHA Units)		020	(units)	5 U	20	NA	NA	NA	Ą	AN	NA	30.0	AN
Alkalinity (as CaCO3)	5	471-34-1	(I/gm)	73.0	71.2	9.09	8.09	67.2	89	67.2	76.2	86.8	68.4
Ammonia (as N)	2 ST	7664-41-7	(l/gm)	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	*	S#3	(l/gm)	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	3ª	•	(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	(l/gm)	25.2	25.5	27.7	17.8	23.9	32.9	28.5	32.4	44.1	38.0
Hardness (as CaCO3)	-	720	(l/gm)	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	(J/BW)	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		(l/gm)	U 200.0	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	(l/gm)	22.8	25.0	21.6	33.2	29.9	33.2	32.0	34.6	36.2	28.3
Total Organic Carbon	2	(•)	(l/gm)	1.5	1.4	2.0	1.5	1.1	1.4	1.5	1.9	212	1 U
Total Dissolved Solids	*		(I/gm)	189	183	159	167	193	196	185	199	2.0	195
Total Kjeldahl Nitrogen (as N)	•	7727-37-9	(l/gm)	0.16	0.75	0.69	0.1 U	0.10 U	0.14	0.10	0.85	0.22	0.13

	NYSDEC Class GA		SITE:	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S
	Groundwater Standards	CAS#	DATE:	8/13/09	2/5/10	5/27/11	8/29/12	11/14/2013	03/20/2015
CONSTITUENT	and Guidance Values		UNITS	(mg/l)	(mg/l)	(l/gm)	(mg/l)	(mg/l)	(mg/l)
Color (APHA Units)		*	(units)	9.0	20	20	15	10	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	0.050.0	0.0500 UJ
Biochemical Oxygen Demand	a		(l/gm)	2 U	2.0	2 U	2 U	4 U	2 U
Bromide	2 GV	24959-67-9	(I/gm)	0.5 U	0.5 U	0.5 U	U 5.0	2.00 U	2.00 ∪
Chemical Oxygen Demand		240	(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	(l/gm)	0.81	1.34	1.22	0.37	0.347	1.06 D
Phenols, total	0.001 ST	ě.	(mg/l)	0.005 U	5.0	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		9 5.	(mg/l)	1.4	1.2	3.3	5.1	1.8	2.1
Total Dissolved Solids	**		(l/gm)	200	192	233	227	258	532 D
Total Kjeldahl Nitrogen (as N)	\$(0)	7727-37-9	(l/gm)	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

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.



APPENDIX A-2

Monitoring Well Sample Results - Inorganic Parameters

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

	NYSDEC Class GA		SITE	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D
	Groundwater Standards/	CAS#	DATE:	11/9/2007	2/11/2008	5/15/2008	8/5/2008	11/3/2008	2/24/2009	8/12/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(ng/l)	(I/6n)	(l/gn)	(ng/l)	(ng/l)	(ng/l)
Aluminum	ő.	7429-90-5	J/Bn	AN	NA	NA	NA	75,1 B	NA	1,130	268
Antimony	3 GV	7440-36-0	l/bn	ΑN	ΝΑ	NA	NA	2.3 U	ΝΑ	2.5 U	6.2 B
Arsenic	25 ST	7440-38-2	l/Bn	AN	NA	NA	NA	1.8 U	ΑN	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/gu	ΑN	ΑN	ΝΑ	NA	59.8 B	N.	35.8 B	30.2 B
Beryllium	3 GV	7440-41-7	l/gu	NA	ΑN	NA	NA	0.10 B	ΑN	0.13 U	0.91 B
Boron	1,000 ST	7440-42-8	l/gu	ΑN	ΑN	NA	Ā	54.5 BN	Ą	52.0 B	32.0 B
Cadmium	5ST	7440-43-9	l/gu	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	9	7440-70-2	l/6n	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	l/ßn	AN	ΝΑ	NA	N.	1.18	Ą	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	ΑN	NA	NA	N A	0.02 U	ΑN	2.6 B	2.1 B
Cobalt		7440-48-4	l/gn	NA	NA	NA	ΝΑ	1.9 B	AN	1,5 B	1.4 B
Copper	200 ST	7440-50-8	l/gn	A V	NA A	Ą	Ą	3,1 B	N A	3.3 B	10.6 B
Iron	300 ST	7439-89-6	l/bn	1,280	97.2 B	180	276	78.6 B	8 9'69	1,040	315 J*
ead	25 ST	7439-92-1	l/gu	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	l/Bn	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	l/bn	106	066	352	184	126	137	123	72.7
Mercury	0,7 ST	7439-97-6	l/Bn	AN	NA	NA	NA	0,13 U	NA	0.10 U	0,10 U
Nickel	100 ST	7440-02-0	l/bn	AN	NA	NA	NA	1.7 B	NA	2.0 B	2.9 B
Potassium		7440-09-7	l/6n	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	l/gu	AN	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 B
Silver	50 ST	7440-22-4	/bn	ΑN	NA	NA	NA	0.54 U	ΑN	0,33 ∪	0.83 U
Sodium	20,000 ST	7440-23-5	l/bn	23,700	482,000	250,000	159,000	150,000	130,000	78,100	15,100
Thallium	0.5 GV	7440-28-0	l/bn	NA	AN	N.	NA	4.0 B	NA	3.9 U	3,2 U
Vanadjum	(3)	7440-62-2	l/bn	NA	NA	NA	AN	0.74 U	NA	2.18	1.9 B
Zinc	2,000 ST	7440-66-6	l/bn	NA	NA	NA	NA	8.3 B	NA	30.8	49.7
Cyanide	200 ST	0057-12-5	l/bn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	\$00 ST*	(*	l/bn	1,386	1,087.2	532	460	204.6	206.6	1,163	387.7

J. Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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



Groundwater Standards/ CAS # 1 Guidance Values 7429-90-5 1 3 GV 7440-36-0 1 25 ST 7440-38-2 1 1,000 ST 7440-42-8 1 5 ST 7440-43-9 1 300 ST 7439-89-6 1 300 ST 7439-89-6 1 100 ST 7440-09-7 1 100 ST 7440-09-7 7440-09-7 100 ST 7440-23-6 1 100 ST 7440-23-6 1 100 ST 7440-23-6 1 100 ST 7440-28-6 1		NYSDEC Class GA		SITE:	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D
Maintenance		Groundwater Standards/	CAS#	DATE:	5/26/2011	8/28/2012	11/12/2013	03/17/2015				
Influence TA29-90-5 ug/l 3,070 133 B 392 Influence 25 ST 7440-36-0 ug/l 2.1 U 1.1 U 20 U Influence 1,000 ST 7440-38-2 ug/l 2.24 B 16.3 B 44 Influence 1,000 ST 7440-41-7 ug/l 0.13 U 4.4 U 20 U Influence 5 ST 7440-41-7 ug/l 0.13 U 1.1 U 20 U Influence 5 ST 7440-41-7 ug/l 0.13 U 1.1 U 2.0 U Influence 5 ST 7440-41-3 ug/l 0.13 U 8.9 B 10 U Influence 5 ST 7440-41-3 ug/l 2.0 U 8.9 B 10 U Influence 5 ST 7440-42-3 ug/l 2.0 U 8.9 B 10 U Influence 5 SST 7440-43-9 ug/l 2.0 U 8.9 B 10 U Influence 5 SST 7440-42-8 ug/l 2.4 UB 8.0 B 1.0 UB	CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/6n)	(l/6n)	(ng/l)	(I/6n)	(I/Bn)	(I/Bn)
ny 3 GV 740-36-0 ug/l 2.1 U 1.1 U 20 U t 25 ST 740-38-2 ug/l 1.9 U 4.4 U 25 U m 1,000 ST 740-38-3 ug/l 2.24 B 16.3 B 4.3 U m 3 GV 740-42-8 ug/l 5.5 B 66.3 B 4.4 U m 6 ST 7440-42-8 ug/l 5.5 B 66.3 B 4.4 U m 5 ST 7440-42-8 ug/l 5.5 B 66.3 B 4.4 U m 5 ST 7440-42-8 ug/l 5.5 B 66.3 B 4.4 U m 5 ST 7440-43-9 ug/l 5.5 B 66.8 B 10.0 um/l Hexavalent 50 ST 7440-43-9 ug/l 1.8 B 8.0 B 10.0 um/l Hexavalent 50 ST 7440-44-3 ug/l 1.8 B 5.0 U 10.0 um/l Hexavalent 50 ST 7440-48-4 ug/l 1.8 B 8.0 B 1.0 U sium	Aluminum	¥ii	7429-90-5	l/gu	3,070	133 B	39,2	48.6				
1.00 1.00	Antimony	36V	7440-36-0	l/gu	2.1 U	1.1 U	20 U	20 U				
mm 1,000 ST 7440-39-3 ug/l 22.4 B 16.3 B 43.8 mm 3 GV 7440-42-8 ug/l 6.13 B .12 U 20 U mm 5 ST 7440-42-8 ug/l 5.5 B 66.3 B 44 nm 5 ST 7440-43-9 ug/l 5.5 B 66.8 B 10 U nm 50 ST 7440-43-9 ug/l 5.5 B 6.6 B 10 U nm 50 ST 7440-47-3 ug/l 5.0 U 8.9 B 10 U nm 200 ST 7440-47-3 ug/l 6.9 B 8.0 B 20 U sium 200 ST 7440-47-3 ug/l 1.2 B .5 U 20 U sium 200 ST 7440-47-3 ug/l 1.2 B .5 U 20 U sium 200 ST 7440-48-4 ug/l 1.2 B .5 U 20 U sium 35.000 GV 7439-92-4 ug/l 2.4 B .5 U y 0.7 ST 7439-92-4	Arsenic	25 ST	7440-38-2	l/gu	1.9 U	4,4 U	25 U	25 U				
mm 3 GV 7440-41-7 ug/l 5.5 B 66.3 B 44 mm 5 ST 7440-42-8 ug/l 5.5 B 66.3 B 44 mm 5 ST 7440-42-9 ug/l 5.5 B 66.3 B 44 mm - 7440-70-2 ug/l 9,050 7,140 2,670 mm 50 ST 1840-22-9 ug/l 20,10 8.9 B 10,0 mm 200 ST 7440-47-3 ug/l 1,8 B 52 U 20,0 mm 200 ST 7440-48-4 ug/l 1,8 B 52 U 20,0 color ST 7440-48-8 ug/l 1,8 B 52 U 20,0 color ST 7440-48-4 ug/l 1,10 B 1,0 20,1 color ST 7439-92-1 ug/l 2,410 B 1,0 20,1 color ST 7439-92-4 ug/l 2,410 B 1,0 2,0 color ST 7440-22-0 ug/l 2,410 B 1,0 2,0	Barium	1,000 ST	7440-39-3	l/Bn	22,4 B	16.3 B	43.8	172				
Imm 5 ST 740-42-8 ug/l 5.5 B 66.3 B 44 Imm 5 ST 740-43-9 ug/l 3.3 B 0.6 B 10 U Imm 5 ST 740-43-9 ug/l 3.3 B 0.6 B 10 U Imm 50 ST 740-77-2 ug/l 5.9 B 8.9 B 10 U Imm 50 ST 740-47-3 ug/l 1.8 B 5.2 U 20 U Imm 200 ST 740-47-3 ug/l 1.8 B 5.2 U 20 U Imm 200 ST 740-47-3 ug/l 1.8 B 5.2 U 20 U Imm 25 ST 740-56-8 ug/l 12.0 B 7.0 20 U Imm 35,000 GV 7439-86-6 ug/l 2.4 D B 15 D 20 U y 0.7 ST 7439-86-6 ug/l 2.4 D B 17 B 20 U y 0.7 ST 7440-66-8 ug/l 1.7 B 2.0 U 2.0 U y 0.7 ST 7440-6	Beryllium	3 GV	7440-41-7	l/6n	0.13 U	.12 U	20 U	20 U				
nm 5 ST 7440-43-9 ug/l 3.3 B 0.6 B 10 U nn nn 5 ST 7440-70-2 ug/l 9,050 7,140 2,670 um Hexavalent 50 ST 7440-73-3 ug/l 50 ST 7440-84-3 ug/l 50 ST 20 U r 200 ST 7440-48-4 ug/l 12.0 B 7.0 20 U sium 300 ST 7440-48-4 ug/l 12.0 B 7.0 20 U sium 300 ST 7439-89-6 ug/l 2,41B 52 U 20 U sium 35,000 GV 7439-89-5 ug/l 2,41B 65 U 15 U y 100 ST 7439-89-5 ug/l 2,41B 65 U 15 U y 100 ST 7439-89-5 ug/l 1,10 1,10 1,10 y 100 ST 7439-89-5 ug/l 1,10 1,10 2,41 y 100 ST 7440-89-5 ug/l 2,410 1,10 2,10	Boron	1,000 ST	7440-42-8	l/gu	5.5 B	66.3 B	44	20 U				
num Hexavalent 50 ST 7440-70-2 ug/l 9,050 7,140 2,670 um Hexavalent 50 ST 18540-29-9 ug/l 20 U 8.9 B 10 U um Total 50 ST 7440-47-3 ug/l 6.9 B 8.0 B 10 U rese 200 ST 7440-48-4 ug/l 1.8 B 52 U 20 U sium 300 ST 7440-50-8 ug/l 1.8 B 52 U 20 U sium 35,000 GV 7439-89-6 ug/l 2,410 B 50 U 15 U sium 300 ST 7439-98-5 ug/l 2,410 B 50 U 15 U y 0.7 ST 7439-98-5 ug/l 2,410 B 17 B 20 U y 0.7 ST 7440-02-0 ug/l 2,00 B 1.1 B 20 U im 0.5 ST 7440-02-0 ug/l 5,00 G 6,760 2,01 im 0.5 ST 1,00 G 2,00 B 2,00 B 2,00 B 2,00 im<	Cadmium	5ST	7440-43-9	l/gn	3.3 B	0.6 B	10 U	10 U				
um Hexavalent 50 ST 18540-29-9 ug/l 20 U 8:9 B 10 U um Total 50 ST 7440-47-3 ug/l 6:9 B 8:0 B 20 U rum Total 50 ST 7440-48-4 ug/l 1.8 B 52 U 20 U rese 300 ST 7440-50-8 ug/l 12.0 B 7.0 C 20 U sium 35,000 GV 7439-92-1 ug/l 2,410 B 650 U 24.1 B see 300 ST 7439-95-5 ug/l 1,04 C 23 24.1 B rese 300 ST 7439-96-5 ug/l 1,04 C 23 24.1 B rese 0.7 ST 7440-02-0 ug/l 1,1 B 25.0 U 27.1 B rim 100 ST 7440-02-0 ug/l 5,000 6,760 3470 rim 10 ST 7440-02-0 ug/l 2,000 2,00 13,00 rim 10 ST 7440-02-0 ug/l 2,90 2,90 13,00 rim	Calcium	,	7440-70-2	l/gn	9,050	7,140	2,670	7750				
um Total 50 ST 7440-47-3 ug/l 6.9 B 8.0 B 20 U	Chromium Hexavalent	50 ST	18540-29-9	l/gn	20 U	8.9 B	10 U	10.0 U				
Formula 7440-48-4 ug/l 1.8 B .52 U 20 U Formula 200 ST 7440-50-8 ug/l 12.0 B .7 U 20 U Sium 25 ST 7439-89-6 ug/l 20.4 B 15.0 B 20.1 UB nese 35,000 GV 7439-92-1 ug/l 2.410 B 1510 B 650 y 0.7 ST 7439-95-5 ug/l 2.410 B 1510 B 650 y 0.7 ST 7439-96-5 ug/l 1.14 23 24.1 y 0.7 ST 7439-96-5 ug/l 0.10 Ub ⁻ J ⁻ 1.1 D 0.25 U im 100 ST 7440-02-0 ug/l 0.10 Ub ⁻ J ⁻ 1.1 D 2.2 U im 10 ST 7440-02-0 ug/l 2.6 Ub ⁻ J ⁻ 2.8 U 2.0 U im 0.5 GY 7440-22-4 ug/l 2.5 Ub ⁻ J ⁻ 2.8 U 2.0 U im 0.5 GY 7440-22-5 ug/l 2.3 U 1.5 U im 0.5 GY	Chromium Total	50 ST	7440-47-3	l/gn	6.9 B	8.0 B	20 U	20 U				
F. 200 ST 7440-50-8 ug/l 12.0 B .7 U 20.0 E .20 ST 7439-89-6 ug/l 3,780 104 20.1 UB .20 E .25 ST 7439-92-1 ug/l 20.4 18.5 15.U E .20 E .25 ST 7439-92-1 ug/l 20.4 18.5 15.U E .20 E .25 ST 7439-92-1 ug/l 20.4 18.5 15.U E .20	Cobalt	•	7440-48-4	l/6n	1.8 B	.52 U	20 U	20 U				
sium 300 ST 7439-89-6 ug/l 3,780 104 20.1 UB sium 25 ST 7439-92-1 ug/l 20.4 18.5 15 U rese 35,000 GV 7439-95-4 ug/l 2,410 B 1510 B 650 rese 300 ST 7439-96-5 ug/l 104 23 24.1 rese 0.7 ST 7439-97-6 ug/l 104 23 24.1 rium 100 ST 7440-02-0 ug/l 5,000 6,760 3470 rium 50 ST 7782-49-2 ug/l 5,000 6,760 32 U rium 50 ST 7440-22-4 ug/l 2,32 U 25 U rium 0.5 GV 7440-22-4 ug/l 2,32 U 15 U rium 0.5 GV 7440-22-5 ug/l 2,32 U 15 U rium 0.5 GV 7440-22-5 ug/l 2,32 U 15 U rium 2,000 ST 7440-22-5 ug/l 7,40 <td< td=""><td>Copper</td><td>200 ST</td><td>7440-50-8</td><td>l/Bn</td><td>12.0 B</td><td>U 7.</td><td>20 U</td><td>20 U</td><td></td><td></td><td></td><td></td></td<>	Copper	200 ST	7440-50-8	l/Bn	12.0 B	U 7.	20 U	20 U				
sium 25 ST 7439-92-1 ug/l 20,4 18.5 15 U sium 35,000 GV 7439-95-5 ug/l 2,410 B 1510 B 650 y 0.7 ST 7439-96-5 ug/l 104 23 24.1 y 0.7 ST 7439-97-6 ug/l 104 U/U-Y 1.1 0.25 U imm 100 ST 7440-02-0 ug/l 5,000 6,780 3470 n 20,000 ST 7440-24-2 ug/l 2,80 U 28 U 15 U m 0.5 GV 7440-23-5 ug/l 2,90 B 26,00 15 U m 0.5 GV 7440-23-5 ug/l 2,7 U 32 U 15 U m 0.5 GV 7440-23-5 ug/l 7.7 U 32 U 15 U m 0.5 GV 7440-23-5 ug/l 7.0 U 32 U 15 U m 2,000 ST 7440-62-2 ug/l 7.0 U 10.0 U 11 U m 2,000 ST	Iron	300 ST	7439-89-6	l/gu	3,780	104	20.1 UB	14.2 UB				
sium 35,000 GV 7439-95-4 ug/l 2,410 B 1510 B 650 nese 300 ST 7439-96-5 ug/l 104 23 24.1 y 0.7 ST 7439-96-5 ug/l 104 23 24.1 ium 100 ST 7440-02-0 ug/l 3.9 B 1.7 B 20 U imm 10 ST 7782-49-2 ug/l 5.000 6,760 3470 n 20,000 ST 7440-22-4 ug/l 2.9 UU-J* 2.8 U 15.0 m 0.5 GV 7440-23-5 ug/l 2.90 B 26,00 m 0.5 GV 7440-23-5 ug/l 7.7 U 3.2 U 15.U m 0.5 GV 7440-23-5 ug/l 7.7 U 3.2 U 15.U m 0.5 GV 7440-23-5 ug/l 7.7 U 2.8 U 15.U m 0.5 GV 7440-23-5 ug/l 7.7 U 2.8 U 11.UB m 2.000 ST 7440-66-5	Lead	25 ST	7439-92-1	l/gu	20,4	18.5	15 U	15 U				
nese 300 ST 7439-96-5 ug/l 104 23 24.1 y 0.7 ST 7439-97-6 ug/l 0.10 UU-1* .1 U 0.26 U ium 100 ST 7440-02-0 ug/l 5,000 6,760 3470 im 20,000 ST 7782-49-2 ug/l 2,8 UU-1* 28 U 20 U m 20,000 ST 7440-22-4 ug/l 2,900 B 4,500 13,000 m 0.5 GV 7440-23-5 ug/l 2,7 U 3,2 U 15 U m 0.5 GV 7440-23-5 ug/l 2,7 U 3,2 U 15 U m 2,000 ST 7440-23-5 ug/l 7,7 U 3,2 U 15 U m 2,000 ST 7440-28-0 ug/l 7,6 4 29.8 11 UB e 2,000 ST 0.057-12-5 ug/l 76.4 29.8 11 UB m 2,000 ST 0.057-12-5 ug/l 10.0 U 47.0 U m 2,000 ST	Magnesium	35,000 GV	7439-95-4	l/gn	2,410 B	1510 B	650	1470				
y 0.7 ST 7439.97-6 ug/l 0.10 UU-J-f .1 U 0.25 U ium 100 ST 7440-02-0 ug/l 3.9 B 1.7 B 20 U im 10 ST 7440-02-7 ug/l 5,000 6,760 3470 n 50 ST 7440-22-4 ug/l 2,6 UN-J* 2.8 U 25 U n 20,000 ST 7440-23-5 ug/l 2,90 B 26,200 13,000 m 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U lum 2,000 ST 7440-28-0 ug/l 75.4 2.8 B 20 U e 2,000 ST 7440-28-0 ug/l 75.4 2.9 B 11 UB e 2,000 ST 7440-68-5 ug/l 76.4 2.9 B 11 UB m 2,000 ST 0.057-12-5 ug/l 10.0 U 47.6 UB	Manganese	300 ST	7439-96-5	l/gn	104	23	24.1	866				
ium 100 ST 7440-02-0 ug/l 3.9 B 1.7 B 20 U 20	Mercury	TS 7.0	7439-97-6	l/6n	0.10 UU*J*	U 1.	0.25 U	0.25 U				
sium FA40-09-7 ug/l 5,000 6,760 3470 Im 10 ST 7782-49-2 ug/l 2.6 UNU** 2.8 U 2.5 U n 50 ST 7440-22-4 ug/l 0.52 UU** 32 U 20 U m 20,000 ST 7440-23-5 ug/l 2.7 U 3.2 U 15 U im 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U im 2,000 ST 7440-68-0 ug/l 76.B 20 U le 2,000 ST 10,00 U 10,00 U 47.6 UB Mandanese 500 ST* - - - 44.2	Nickel	100 ST	7440-02-0	l/gn	3.9 B	1.7 B	20 U	6.98 J				
Inm 10 ST 7782-49-2 ug/l 2.6 UNU³* 2.8 U 25 U n 50 ST 7440-22-4 ug/l 0.52 UU³* 32 U 20 U n 20,000 ST 7440-23-5 ug/l 2.960 B 26,300 13,000 imm 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U imm - 7440-62-2 ug/l 8.2 B .6 B 20 U imm 2,000 ST 7440-66-6 ug/l 76.4 29.8 11 UB le 200 ST 0657-12-5 ug/l 10,0 U 47,6 UB Mandanese 500 ST ug/l 384 127 44.2	Potassium	28	7440-09-7	l/gn	5,000	6,760	3470	7950				
n 50 ST 7440-22-4 ug/l 0.52 UU-J* .32 U 20 U n 20,000 ST 7440-23-5 ug/l 2,980 B 26,300 13,000 im 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U ium 2,000 ST 7440-62-2 ug/l 76.4 29.8 11 UB le 2,000 ST 7440-66-6 ug/l 10,0 U 47,6 UB Mannanese 500 ST ug/l 3,884 127 44.2	Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.8 ∪	25 U	25 U				
um 20,000 ST 7440-23-5 ug/l 2,980 B 26,300 13,000 idm 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U idlum - 7440-62-2 ug/l 8.2 B .6 B 20 U idle 2,000 ST 7440-66-6 ug/l 76.4 29.8 11 UB idle 200 ST 0657-12-5 ug/l 10.0 U 47.6 UB + Mandanese 500 ST ug/l 3,84 127 44.2	Silver	50 ST	7440-22-4	l/bn	0.52 UU*J*	.32 U	20 U	20 U				
limm 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U sdlum 2,000 ST 7440-62-2 ug/l 8.2 B .6 B 20 U ide 2,000 ST 7440-66-6 ug/l 76.4 29.8 11 UB + Mandanese 500 ST 0057-12-5 ug/l 10.0 U 47,6 UB + Mandanese 500 ST ug/l 3,884 127 44.2	Sodium	20,000 ST	7440-23-5	l/6n	2,980 B	26,300	13,000	31700				
solum 7440-62-2 ug/l 8.2 B .6 B 20 U 2,000 ST 7440-66-6 ug/l 76.4 29.8 11 UB iride 200 ST 0057-12-5 ug/l 10.0 U 47.6 UB + Mandanese 500 ST ug/l 3,884 127 44.2	Thallium	0.5 GV	7440-28-0	l ug/i	2.7 U	3.2 U	15 U	15 U				
2,000 ST 7440-66-6 ug/l 76.4 29.8 11 UB iide 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 47.6 UB + Mandanese 500 ST ug/l 3,884 127 44.2	Vanadium		7440-62-2	l/gn	8.2 B	.6 B	20 U	20 U				
200 ST 0057-12-5 ug/l 10.0 U 10.0 U 47.6 UB 500 ST* ug/l 31884 127 44.2	Zinc	2,000 ST	7440-66-6	ng/	76.4	29.8	11 UB	20 U				
500 ST* . ug// 3,884 127 44,2	Cyanide	200 ST	0057-12-5	l/ßn	10.0 U	10.0 U	47.6 UB	6.38 J				
Control of the contro	Iron + Manganese	500 ST*		l/gn	3,884	127	44.2	866				

NO ES.

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



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

	NYSDEC Class GA		SITE:	MW-011	MW-01!	MW-011	MW-011	MW-011	MW-011	MW-01I	MW-011
	Groundwater Standards/	CAS#	DATE:	11/9/2007	2/11/2008	5/15/2008	8/5/2008	11/3/2008	2/24/2009	8/12/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(J/Bn)	(ngu))	(I/Bn)	(I/Bn)	(ng/l)	(ng/l)	(ng/l)	(l/6n)
Aluminum	*	7429-90-5	l/gn	ΑN	NA	NA	NA	8.7 U	NA	12.5 U	118 B
Antimony	3 GV	7440-36-0	l/gn	NA	Ą	Ą	ΑN	2,3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	Ā	NA	ΝΑ	ΑN	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/gu	ΑN	ΑN	Ą	Ϋ́	6.7 B	ΑN	8.0 B	7.9 B
Beryllium	3.6V	7440-41-7	l/6n	NA	ĄN	ĄN	ΑN	U 960.0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	AN	NA	NA	NA	62.8 BN	NA	52.2 B	47.9 B
Cadmium	5 ST	7440-43-9	l/Bn	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	(6	7440-70-2	l/gu	9,220	12,200	13,600	8,380	6,510	6,160	6,620	6,500
Chromium Hexavalent	50 ST	18540-29-9	l/gu	Ą	N A	ΑN	ΑN	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/bn	AN	ΑN	NA	NA	0.02U	NA	0.60 B	1.2 B
Cobalt		7440-48-4	l/gu	¥	N.	ΑN	Ą	0.88 U	NA	U 9/20	1.2 U
Copper	200 ST	7440-50-8	l/bn	¥	¥	ΑN	Ą.	1.5 B	Α̈́	0.70 B	2.4 B
Iron	300 ST	7439-89-6	l/6n	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	l/gu	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	l/gu	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	l/gu	178	463	343	336	148	64.8	107	112
Mercury	0.7 ST	7439-97-6	l/gu	AN	NA	NA	NA	14.5	NA	0,10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gn	¥	AN	NA	N A	1.7 B	NA	0.82 U	2.4 B
Potassium	35	7440-09-7	l/gu	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	l/gn	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/bn	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	10,200	12,300	15,400	11,400	8,450	6,950	6,450	2,790
Thallium	0.5 GV	7440-28-0	l/gu	NA	NA	NA	NA	4.2 B	NA	3.9 U	3.2 U
Vanadium	300	7440-62-2	l/Bn	NA	NA	NA	NA	0.74 U	NA	U 77.0	1.4 U
Zinc	2,000 ST	7440-66-6	l/gu	NA	NA	NA	NA	9.9 B	NA	10.1 B	46.8
Cyanide	200 ST	0057-12-5	l/bn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	198	l/gu	300	487.2	375	357.4	175.6	78.1	138.8	502
NOTES.											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value,

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

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



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

	NYSDEC Class GA		SITE:	MW-011	MW-01I	MW-011	MW-011	MW-011	MW-011	MW-011	MW-011
	Groundwater Standards/	CAS#	DATE:	5/26/2011	8/28/2012	11/12/2013	03/17/2015				
CONSTITUENT	Guidance Values		UNITS:	(l/6n)	(I/6n)	(l/gn)	(l/Bn)	(l/gn)	(l/6n)	(l/gn)	(l/6n)
Aluminum	3	7429-90-5	l/bn	8.2 U	38.2 B	10.8 J	9.19 J				
Antimony	3 GV	7440-36-0	l/bn	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/gu	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gu	4.9 B	10.1 B	83	52.3				
Beryllium	3 GV	7440-41-7	l/gu	0.13 U	₁12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	24.4 B	33.8 B	83	20 U				
Cadmium	5ST	7440-43-9	l/gu	0.27 U	_18 U	10 U	10 U				
Calcium	355	7440-70-2	l/6n	5,290	6,230	27,400	8930				
Chromium Hexavalent	50 ST	18540-29-9	1/gn	20 U	.2 U	97.3	10.0 U				
Chromium Total	50 ST	7440-47-3	l/6n	1.3 B	8.0 B	20 U	20 U				
Cobalt	380	7440-48-4	l/Bn	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	1.9 B	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	71.0 B	13.8 B	8.88 UB	5.75 UB				
Lead	25 ST	7439-92-1	l/6n	1.5 U	6.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/6n	1,940 B	1340 B	6,560	1940				
Manganese	300 ST	7439-96-5	l/gn	9.6 B	1440	1,720	1180				
Mercury	0.7 ST	7439-97-6	l/gn	0.10 UU*J*	.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	I/Bn	1.2 U	2.1 B	20 U	20 U				
Potassium	(0.)	7440-09-7	l/bn	1620 B	4150 B	6,850	5360				
Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gn	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gn	6,510	1,820	8,930	8060				
Thallium	0.5 GV	7440-28-0	l/bn	2.7 U	3.9 B	15 U	15 U				
Vanadium	(i)	7440-62-2	l/gu	0.56 U	.23 U	20 U	20 U		11:		
Zinc	2,000 ST	7440-66-6	l/bn	9.1 B	23.7	9.84 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10 U	48 UB	10 U				
Iron + Manganese	500 ST*	3	l/gn	80.6	1453.8	1,728.88	1180				
NOTES.											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



	NYSDEC Class GA		SITE:	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S
	Groundwater Standards/	CAS#	DATE:	11/9/2007	2/11/2008	5/15/2008	8/5/2008	11/3/2008	2/24/2009	8/14/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/gu)	(l/6n)	(l/6n)	(J/6n)	(l/gn)	(l/gn)	(ng/l)
Aluminum	*	7429-90-5	l/gu	ΑN	ΑN	ΑN	AN	63.5 B	AN	197 B	44.6 B
Antimony	3 GV	7440-36-0	l/Bn	ΑN	ΑN	ΑN	ΝA	2.3 U	A'A	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	ĄN	Ą	ΑN	Ϋ́	3.5 B	NA	11.2	3.2 B
Barium	1,000 ST	7440-39-3	l/gn	Ą	A'N	ΑN	Ϋ́	45.7 B	ΑN	103 B	48.6 B
Beryllium	3 GV	7440-41-7	l/ān	Ϋ́	ĄN	Ϋ́	A'N	U 960.0	ΑN	0,13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/bn	Ą	NA	Ν	ΝΑ	125 BN	A'A	76.5 B	107
Cadmium	5 ST	7440-43-9	l/gu	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	l/gu	63,100	71,000	008'09	79,700	62,900	58,000	64,100	55,300
Chromium Hexavalent	50 ST	18540-29-9	l/gu	Ą	NA	ĄN	NA	0.49 B	ΑN	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	Ą	Ą	N A	NA	0.02 U	AN	0.80 B	1,0 B
Cobalt	•	7440-48-4	l/Bn	Ą	Ϋ́	ΑΝ	ΑÑ	2.0 B	AN	2.7 B	1,6B
Copper	200 ST	7440-50-8	l/gn	Ą	ΑN	ΝΑ	A'N	3.3 B	AN	2.1 B	2.4 B
Iron	300 ST	7439-89-6	l/gn	5,240	2,370	7,210	8,300	6,500	6,150	24,700	4,040 3*
Lead	25 ST	7439-92-1	l/Bn	1.4 UJ	2.1 B	2,3 U	2,5 B	1.3 U	1.3 U	11,9	2,1B
Magnesium	35,000.GV	7439-95-4	l/gu	9,110	11,000	096'8	11,700	066'6	8,690	8,020	7,650
Manganese	300 ST	7439-96-5	l/gu	735	465	950	1080	799	1,030	1,190	591
Mercury	0.7 ST	7439-97-6	l/Bn	AN	NA	ΑN	ΑN	0.13 U	AN	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	AN	NA	ΑN	NA	1.2 U	AN	0.82 U	1.4 U
Potassium		7440-09-7	l/gu	13,900 J	11,800	12,600	14,700	15,900	12,400	13,100	13,500
Selenium	10 ST	7782-49-2	l/Bn	NA	NA	NA	NA	1,9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	I/Bn	NA	NA	NA	NA A	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	59,800	54,300	57,400	58,100	56,200	51,000	66,100	52,800
Thallium	0.5 GV	7440-28-0	l/bn	ΝΑ	NA	NA	NA	4.1B	NA	3.9 U	3.2 U
Vanadium	100	7440-62-2	l/6n	NA	NA	NA	NA	0.74 U	NA	0.90 B	1.4 U
Zinc	2,000 ST	7440-66-6	l/gu	NA	NA	NA	NA	14.8 B	NA	78.3	30.6
Cyanide	200 ST	0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	×	1/00	5.975	2,835	8,160	9,380	7.299	7.180	25,890	4.631

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value.

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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

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

NOTES:

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	NICOLOGICA GA		- - - - -	MINA-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-UZD	MINA-02D	MAY-UZD
	Groundwater Standards/	CAS#	DATE:	11/13/2007	2/12/2008	5/19/2008	8/4/2008	11/3/2008	2/24/2009	8/14/2009	2/8/2010
CONSTITUENT	Guidance Values		UNITS:	(ngn)	(ng/l)	(l/6n)	(I/Bn)	(I/Bn)	(l/6n)	(l/6n)	(l/6n)
Aluminum		7429-90-5	l/6n	AN	AN	AN	NA	8.7 U	AN	181 B	132 B
Antimony	3.6V	7440-36-0	νβn	NA	NA	ΝΑ	ΝΑ	2.3 U	ΝΑ	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	Ą	AN	ΑN	NA	1.8 U	A'N	3.0 ∪	2.3 U
Barium	1,000 ST	7440-39-3	l/gu	ΑN	NA	NA	AN	3.3 B	NA	225	4.2 B
Beryllium	3 GV	7440-41-7	l/gu	Ą	NA	ΝA	NA	U 960.0	NA	0,20 B	0.30 B
Boron	1,000 ST	7440-42-8	l/6n	Ą	NA	AN	NA	13.5 BN	ΝΑ	196	18.8 B
Cadmium	5ST	7440-43-9	l/gn	0.32 B	0.60 B	0.27 U	0.27 U	0.35 U	0.35 U	1,18	0.34 U
Calcium	,	7440-70-2	l/ĝn	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	/bn	ĄN	NA	ΨN	ΝΑ	1.2 B	NA	0.02 U	0,02 U
Chromium Total	50 ST	7440-47-3	l/gu	Ą	NA	ΑN	NA	0.02 U	NA	1.48	2.2 B
Cobalt	80	7440-48-4	1/gn	Ą	NA	ΑN	ΝΑ	0.88 U	NA	1.0 B	1.2 U
Copper	200 ST	7440-50-8	l/gn	Ą	NA	ΑN	NA	1.8 B	ΝΑ	1.4 B	1.8 B
Iron	300 ST	7439-89-6	l/gn	448	50.4	23.8 B	90.2 B	19.7 B	30.7 B	26,900	215
Lead	25 ST	7439-92-1	l/gn	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	l/bn	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	l/gu	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	l/gn	NA	NA	ΝA	NA	0,13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gn	NA	NA	ΑN	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	n e	7440-09-7	l/bn	997 JB	642 B	637 B	874 B	654 B	622 B	13,200	759 J*
Selenium	10 ST	7782-49-2	I/b̄n	NA	NA	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	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	l/6n	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	300	7440-62-2	l/gn	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4U
Zinc	2,000 ST	7440-66-6	l/bn	NA	NA	NA	NA	10.5 B	NA	27.5	21.9
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	110	l/gn	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

	NYSDEC Class GA		SITE:	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D
	Groundwater Standards/	CAS #	DATE:	5/31/2011	8/28/2012	11/12/2013	03/17/2015				
CONSTITUENT	Guidance Values		UNITS:	(I/Bn)	(l/6n)	(l/gn)	(l/6n)	(l/gn)	(l/gn)	(l/6n)	(I/Bn)
Aluminum	,	7429-90-5	l/gu	36,7 B	45.1 B	20 U	24.1				
Antimony	3.6V	7440-36-0	l/bn	6.0 B	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/bn	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gn	5,3 B	72.8 B	15.2 J	28.1				
Beryllium	3 GV	7440-41-7	l/gu	0.73 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	23.6 B	35.6 B	15 J	20 U				
Cadmium	5 ST	7440-43-9	l/gu	0.27 U	18 U	10 U	10 U				
Calcium		7440-70-2	l/gu	5,380	34,500	7,980	16600			P	
Chromium Hexavalent	50 ST	18540-29-9	l/gn	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/gu	2.2 B	8.0 B	20 U	20 U				
Cobalt	***	7440-48-4	l/gu	0.70 B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	1.4B	U 7.	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	39.0 B	37.7B	29.9 UB	47.6 UB				
Lead	25 ST	7439-92-1	l/gu	2.1B	4	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/gn	2,720 B	3340 B	3,950	6810				
Manganese	300 ST	7439-96-5	l/gu	2.4 B	43.3	20 U	20 U				
Mercury	0.7 ST	7439-97-6	l/gn	0.10 UN	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	2.3 B	1B	20 U	20 U				
Potassium		7440-09-7	l/gn	1290 B	5330	826	1580				
Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gu	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gn	7,690	20,400	3,390	5710				
Thallium	0.5 GV	7440-28-0	l/gn	2.7 U	3.2 U	15 U	15 U				
Vanadium		7440-62-2	l/gn	0.76 B	.3 U	20 U	20 U				
Zinc	2,000 ST	7440-66-8	l/gn	21.6	18.5 B	12.1 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	43 UB	10 U				
Iron + Manganese	500 ST*	*:	l/gu	41.4	81.0	29.9	0				

NOTES:

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N: Matrix spike sampe recovery not within control limits.



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

	NYSDEC Class GA		SITE:	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-021	MW-02I	MW-02I
	Groundwater Standards/	CAS#	DATE:	11/13/2007	2/12/2008	5/19/2008	8/4/2008	11/3/2008	2/24/2009	8/14/2009	2/8/2010
CONSTITUENT	Guidance Values		UNITS:	(l/6n)	(ng/l)	(ng/l)	(I/Bn)	(l/gn)	(I/6n)	(ng/l)	(l/gn)
Aluminum	3	7429-90-5	l/gu	NA	AN	ΑN	NA	8.7 U	NA	81.1B	39.3 B
Antimony	3 GV	7440-36-0	l/bn	AN	AN	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/bn	NA	NA	NA	NA	1.8 U	NA	0'E	2.3 U
Barium	1,000 ST	7440-39-3	l/Bn	NA	NA	NA	NA	32.3 B	NA	38.2 B	37.8 B
Beryllium	3 GV	7440-41-7	l/Bn	NA	AN	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	NA	NA	NA	NA	106 BN	NA	53.3 B	51.6 B
Cadmium	5 ST	7440-43-9	l/gu	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	l/6n	18,200	18,600	16,300	14,000	13,500	13,800	15,500	14,700
Chromium Hexavalent	50 ST	18540-29-9	l/gu	ΝΑ	AN	AN	AN	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/6n	NA	ΑN	Ą	NA	0.02 U	NA	1.9 B	0.60 B
Cobalt	10.60	7440-48-4	l/gu	NA	NA	AN	NA	0.88 U	NA	U 97.0	1.2 U
Copper	200 ST	7440-50-8	l/bn	NA	AN	NA	NA	2.0 B	NA	1.2 B	2.1 B
Iron	300 ST	7439-89-6	l/Bn	183	24.2 ∪	20.3 B	10.0 B	13.7 B	26.0 B	42.1 B	63.7 B
Lead	25 ST	7439-92-1	l/gu	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	l/gu	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	l/6n	332	20.3	23.3	20.6	26.9	39.6	38.4	28.2
Mercury	0.7 ST	7439-97-6	l/6n	NA	AN	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gn	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium		7440-09-7	l/gn	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	I/Bn	NA	AN	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	ΑN	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gn	22,400	16,000	15,000	11,900	11,500	10,800	10,600	10,400
Thallium	0.5 GV	7440-28-0	l/b̄n	NA	ΝΑ	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	٠	7440-62-2	l/gn	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	ľ/gn	NA	NA	NA	AN	5.6 B	NA	6.8 B	12.6 B
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	ΑN	10,0 U	A A	10.0 U	10.0 U
Iron + Manganese	500 ST*	10	l/gn	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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U* or UB: Result qualified as non-detect based on validation criteria

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

	NYSDEC Class GA		SITE:	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I
	Groundwater Standards/	CAS#	DATE:	5/31/2011	8/28/2012	11/12/2013	03/17/2015				
CONSTITUENT	Guidance Values		UNITS	(l/6n)	(I/6n)	(l/gn)	(l/gn)	(l/bn)	(I/6n)	(l/Bn)	(ng/l)
Aluminum	*	7429-90-5	l/gu	32.3 B	49.5 B	7.35 J	5.15 J				
Antimony	3 GV	7440-36-0	l/gn	2.1 U	1.1 U	6.58.1	20 U				
Arsenic	25 ST	7440-38-2	l/bn	1.9 U	4.4 U	25 U	25 U	24			
Barium	1,000 ST	7440-39-3	l/gu	45.0 B	5.4 B	62.9	83.7				
Beryllium	3 GV	7440-41-7	l/6n	0.26 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gn	36.9 B	20.6 B	63	20 U				
Cadmium	5 ST	7440-43-9	l/bn	0.27 U	.18 U	10 U	10 U				
Calcium	00	7440-70-2	l/gu	13,900	7,540	25,400	26600				
Chromium Hexavalent	50 ST	18540-29-9	l/bn	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3]/ßn	2.1 B	8.0B	20 U	20 U				
Cobalt		7440-48-4	l/gn	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/Bn	1.0 B	U 7::	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	110	35.2 B	20 U	6.53 UB				
Lead	25 ST	7439-92-1	l/gu	2.1 B	8	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/6n	1,620 B	3270 B	2,550	2860				
Manganese	300 ST	7439-96-5	l/gn	25.6	2.4 B	14.8 J	79.2				
Mercury	0.7 ST	7439-97-6	l/gn	0.12 BNU*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	1.8 B	2.3 B	20 U	20 U				
Potassium	3.	7440-09-7	I/6n	3790 B	978 B	5,050	5110				
Sefenium	10 ST	7782-49-2	l/gn	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gn	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gn	18,600	7,630	4,130	10900				
Thallium	0.5 GV	7440-28-0	l/gn	2.7 U	3.2 U	15 U	15 U				
Vanadium		7440-62-2	l/gn	0.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gn	17.8 B	20.8	12.6 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gu	10.0 U	10.0 U	45.4 UB	10 U				
Iron + Manganese	500 ST*	0	l/gu	135.6	37.6	14.8	79.2				

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



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

CONSTITUENT Ground Aluminum Gui Aluminum Artimony Arsenic Barlum Beryllium Boron Cadmium Cadmium Calcium Chromium Total Chromium Total Cobbert Copper Copper Iron Iron	Groundwater Standards/ Guidance Values	4000			C70-AAIAI	EZO-AAIAI	270-AAM		11111	000	NIAN-023
TUENT In In In In In In In In In I	idance Values	CAN#	DATE:								
Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Iron			UNITS:	(µ6n)	(µgn)	(ng/l)	(I/Bn)	(l/6n)	(l/6n)	(ng/l)	(ng/l)
Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Iron	28	7429-90-5	l/6n								
Arsenic Barlum Beryllium Boron Cadomium Chromium Hexavalent Chromium Total Cobalt Cooper	3 GV	7440-36-0	√gn								
Barium Beryllium Boron Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Copper	25 ST	7440-38-2	l/gu								
Beryllium Boron Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Copper	1,000 ST	7440-39-3	l/bn								
Boron Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Copper	3 GV	7440-41-7	l/gu								
Cadmium Calcium Chromium Hexavalent Chromium Total Cobalt Copper	1,000 ST	7440-42-8	l/6n								
Calcium Chromium Hexavalent Chromium Total Cobalt Copper	5 ST	7440-43-9	l/6n								
Chromium Hexavalent Chromium Total Cobalt Copper		7440-70-2	l/gu	8	Μ	Μ	Α	M	M	۸	Μ
Chromium Total Cobalt Copper	50 ST	18540-29-9	/gn	ш	ш	ш	ш	ш	ш	ш	ш
Cobalt Copper Iron	50 ST	7440-47-3	l/gn	٦	١	٦	_	_	٦	٦	٦
Copper		7440-48-4	l/gn	-1	٦	1	7	7	7	٦	٦
tron	200 ST	7440-50-8	l/Bn								
	300 ST	7439-89-6	l/gn	A	A	A	A	٧	A	A	∢
Lead	25 ST	7439-92-1	l/gu	В	В	В	В	В	8	В	В
Magnesium	35,000 GV	7439-95-4	l/6n	Α	٧	A	A	A	A	¥	٧
Manganese	300 ST	7439-96-5	l/gu	z	z	z	z	z	z	z	z
Mercury	0.7 ST	7439-97-6	l/gn	D	О	Q	٥	D	О	О	٥
Nickel	100 ST	7440-02-0	l/gn	0	0	0	0	0	0	0	0
Potassium		7440-09-7	l/bn	z	z	z	z	z	z	z	z
Selenium	10 ST	7782-49-2	l/gu	Е	Е	Е	Е	Е	Е	В	Е
Silver	50 ST	7440-22-4	l/gn	D	Q		٥	D	D	D	O
Sodium	20,000 ST	7440-23-5	l/gu								
Thallium	0.5 GV	7440-28-0	l/gu								
Vanadium	(8)	7440-62-2	l/gn								
Zinc	2,000 ST	7440-66-6	l /gn								
Cyanide	200 ST	0057-12-5	l/gn								
Iron + Manganese	500 ST*	334	I/Bn								

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



CONSTITUENT	NYSDEC Class GA		SITE:	MW-02S							
CONSTITUENT	Groundwater Standards/	CAS#	DATE:								
	Guidance Values		UNITS:	(l/gn)	(l/gn)	(l/gn)	(l/gn)	(I/6n)	(l/gn)	(l/gn)	(I/6n)
Aluminum	*	7429-90-5	l/gu								
Antimony	36V	7440-36-0	l/gn								
Arsenic	25 ST	7440-38-2	l/6n								
Barium	1,000 ST	7440-39-3	l/6n								
Beryllium	3 GV	7440-41-7	l/gn								
Boron	1,000 ST	7440-42-8	l/gu								
Cadmium	5 ST	7440-43-9	l/gu								
Calcium	320	7440-70-2	l/gu	Μ	٨	Μ	W	W	Α	Μ	Μ
Chromium Hexavalent	50 ST	18540-29-9	l/gn	В	Э	3	Е	Е	Е	В	ш
Chromium Total	50 ST	7440-47-3	l/gn	7	7	7	7	7	7		_
Cobalt		7440-48-4	l/bn	7	٦			T	T	7	7
Copper	200 ST	7440-50-8	I/Bn								
Iron	300 ST	7439-89-6	l/bn	A	Α	A	А	A	A	4	∢
Lead	25 ST	7439-92-1	l/gn	В	8	В	В	В	В	В	В
Magnesium	35,000 GV	7439-95-4	/bn	¥	A	A	А	A	A	A	4
Manganese	300 ST	7439-96-5	l/Bn	z	z	z	z	z	z	z	z
Mercury	0.7 ST	7439-97-6	l/gn	۵	a	۵	D	О	О	О	D
Nickel	100 ST	7440-02-0	l/gn	0	0	0	0	0	0	0	0
Potassium	3	7440-09-7	l/6n	z	z	z	z	z	z	z	z
Selenium	10 ST	7782-49-2	l/ōn	Е	Э	В	В	ш	ш	Ш	ш
Silver	50 ST	7440-22-4	l/gn	D	D	Q	О	O	٥	٥	۵
Sodium	20,000 ST	7440-23-5	l/gu								
Thallium	0.5 GV	7440-28-0	l/gn								
Vanadium	(4)	7440-62-2	l/gu								
Zinc	2,000 ST	7440-66-6	l/gn								
Cyanide	200 ST	0057-12-5	l/gn								
Iron + Manganese	500 ST*	٠	l/gn		1						

NOTES:

Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value.

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

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

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

N: Matrix spike sampe recovery not within control limits.



					000	000 1001	000	000 1101	000 1111	000 3404	200
	Orygonates Standards/	# 000	SILE:	11/14/2007	2/11/2008	MW-03S 5/15/2008	8/5/2008	11/5/2008	2/25/2009	MW-035 8/14/2009	2/5/2010
CONSTITUENT	Guidance Values	# 645	UNITS:	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(l/gu)	(l/gu)	(l/gu)	(l/6n)
Aluminúm	**	7429-90-5	l/bn	AN	NA	NA	NA	8.7 U	NA	183 B	277
Antimony	3 GV	7440-36-0	l/bn	ΑN	ΑN	NA	NA	2.3 B	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	ΑN	ΑN	NA	AN	1.8 U	NA	3.0 ∪	2,3 U
Barium	1,000 ST	7440-39-3	l/bn	AN	NA	NA	NA	166 B	NA	221	251
Beryllium	36V	7440-41-7	l/gu	NA	NA	NA	NA	U 960.0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	AN	AN	NA	NA	134 B	NA	183	160
Cadmium	5 ST	7440-43-9	l/gu	0.32 U	1.4 B	0.41B	0,27 U	0,35 U	U 35.0	0.80 B	0.34 U
Calcium	£9.	7440-70-2	l/gn	L 009,E7	67,300	76,100	69,500	66,200	73,600	93,600	75,700
Chromium Hexavalent	50 ST	18540-29-9	l/6n	Ą	ΑN	ΝΑ	ΑN	0.02 U	ΝΑ	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gn	ΑΝ	ΑΝ	NA	ΑN	1.3B	NA	0,80 B	1,58
Cobalt	8.	7440-48-4	/bn	ΨZ	AN	AN	NA	0.88 U	ΝΑ	1.48	1.2 U
Copper	200 ST	7440-50-8	l/gu	ΑΝ	AN	ΨZ	ĄN	2.5 B	AN	2.0 B	0.83 U
Iron	300 ST	7439-89-6	l/gn	24,800	17,200	25,200	21,500	18,500	24,300	26,600	25,400 J*
Lead	25 ST	7439-92-1	l/gu	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	l/6n	11,200 J	10,400	11,900	11,400	10,300	11,100	13,800	11,800
Manganese	300 ST	7439-96-5	l/gu	5,920 J	5,110	5,050	4,530	5,190	5,000	4,780	5,420
Mercury	0.7 ST	7439-97-6	l/gu	Ϋ́N	AN	NA	NA	0.13 U	NA	0.10 U	1.4
Nickel	100 ST	7440-02-0	l/gu	AN	NA	NA	NA	2.18	NA	0.82 U	2.4 B
Potassium	26	7440-09-7	l/gu	12,500	10,700	12,400	13,300	12,400	12,200	12,900	13,900
Selenium	10 ST	7782-49-2	l/bn	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	ΝA	NA	NA	0,85 B	NA	0.33 B	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	29,100 J	27,200	28,900	27,600	25,200	27,800	28,400	36,400
Thallium	0.5 GV	7440-28-0	l/gn	AN	AN	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	٠	7440-62-2	l/bn	NA	ΑN	NA	NA	1.2 B	NA	0.77 U	3,4 B
Zinc	2,000 ST	7440-66-6	l/gn	NA	NA	NA	NA	1.5 U	NA	30.4	39.3
Cyanide	200 ST	0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	3.5	l/gn	30,520	22,310	30,250	26,030	23,690	29,300	31,380	30,820
NOTES											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value.

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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.



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

CONSTITUENT			i	000-44141	CCO-AAIAI	MAY-035	WW-03S	MW-035	MW-U3S	DCO-AAM	CCO-ASIA
CONSTITUENT	Groundwater Standards/	CAS#	DATE:	6/1/2011	8/28/2012	11/13/2013	03/18/2015				
	Guidance Values		UNITS:	(I/6n)	(I/Bn)	(l/gn)	(l/gn)	(l/6n)	(I/Bn)	(l/gn)	(l/6n)
Aluminum	(e)	7429-90-5	l/gu	40.4	66 B	13 J	10.1 J				
Antimony	3 GV	7440-36-0	J/Bn	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/Bn	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/bn	145 B	202	199	196				
Beryllium	3 GV	7440-41-7	l/gn	0.24 B	12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/bn	126	202	97	20 U				
Cadmium	5 ST	7440-43-9	l/gu	0.27 U	. 18 U	10 U	10 U				
Calcium	Ī	7440-70-2	l/bn	27,600	64,500	58,900	57600				
Chromium Hexavalent	50 ST	18540-29-9	l/bn	20 U	.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/bn	1.6 B	8.0 B	20 U	20 U				
Cobalt	3	7440-48-4	l/bn	0.49 U	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/bn	0.55 U	U 2	20 U	20 U				
Iron	300 ST	7439-89-6	l/Bn	17,100	19,900	13,600	16400				
Lead	25 ST	7439-92-1	l/gu	6,3	4.8	15 U	14.5 J				
Magnesium	35,000 GV	7439-95-4	l/6n	9,270	8,370	8640	7590				
Manganese	300 ST	7439-96-5	l/bn	4,530	5,440	5,100	4790				
Mercury	TS.7.0	7439-97-6	l/bn	0.10 UN	0.1	0,25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	2.0 B	1.6 B	20 U	20 U				
Potassium	%•	7440-09-7	l/gn	12,500	11,100	12,400	11400 J				
Selenium	10 ST	7782-49-2	l/gn	2.6 U⁺J⁺	4.5 B	25 U	25 U				
Silver	50 ST	7440-22-4	l/6n	0.54 BN	.48 B	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gn	34,100	33,100	12,200	12200				
Thallium	0.5 GV	7440-28-0	l/gu	2.7 U	8,4 B	15 U	15 U				
Vanadium		7440-62-2	l/gu	1.8 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-68-6	l/gn	18.0 B	13.1 B	12.8 UB	32.9				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	47.1 UBJ	10 U				
Iron + Manganese	500 ST*	ě	l/bn	21,630	25,340	18,700	21190				

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value. U: Analyzed for but not detected, value shown is instrument detection limit.

ST: Standard. GV: Guidance value.

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.



CONSTITUENT Aluminum Antimony Arsenic Barium	7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				MAY-U4D	CI+O-AAIAI	MW-04D	1	O+0-44	140-v4lv1	IMAN-04D
CONSTITUENT Aluminum Antimony Arsenic Barium	Groundwater Standards/	CAS#	DATE:	11/13/2007	02/1108	5/15/2008	8/4/2008	11/3/2008	2/23/2009	8/12/2009	2/4/2010
Aluminum Antimony Arsenic Barium	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/gn)	(l/6n)	(l/gn)	(l/6n)	(l/gn)	(na/l)
Antimony Arsenic Barium		7429-90-5	l/gu	AN	ΑN	AN	AN	8.7 U	AN	12,5 U	35.6 B
Arsenic Barium	3 GV	7440-36-0	l/gu	ΑN	ΑN	ΝΑ	NA	2.3 U	NA	2.6 B	2.1 U
Barium	25 ST	7440-38-2	l/gu	Ϋ́	AN	NA	ĄN	12.9	ΑN	12.5	3.1 B
	1,000 ST	7440-39-3	l/gu	ΑN	AN	ΑΝ	Ą	21.6 B	NA	44.9 B	23.6 B
Beryllium	36V	7440-41-7	l/gn	Ą	NA	Ą	ΑN	U 960.0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/bn	ΑΝ	NA	ΑΝ	AN	40.6 BN	ΑN	28.1 B	39.1 B
Cadmium	5 ST	7440-43-9	l/gu	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	l/bn	16,600	15,700	12,700	9,450	009'6	12,500	18,400	10,600
Chromium Hexavalent	50 ST	18540-29-9	l/gu	NA	NA	NA	NA	0.57 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	ΑN	AN	ΑN	NA	0.02 U	NA	0.49 U	0.51 B
Cobalt	٠	7440-48-4	l/gu	ΝΑ	NA	ΑN	NA	0.88U	NA	1.6 B	1.2 U
Copper	200 ST	7440-50-8	l/gu	NA	NA	NA	NA	2.6 B	NA	0.62 U	3.6 B
Iron	300 ST	7439-89-6	l/gu	4,130	21,100	16,800	12,700	13,000	17,700	24,400	4,240 J*
Lead	25 ST	7439-92-1	l/gu	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	/bn	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	l/gu	251	089	909	403	419	552	915	253
Mercury	0.7 ST	7439-97-6	l/bn	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	AN	AN	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium		7440-09-7	l/gu	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	l/gu	NA	AN	NA	NA	NU 6.1	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/6n	NA	ΝΑ	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/Bn	7,480	9,590	9,100	7,280	7,150	7,130	10,800	5,900
Thallium	0.5 GV	7440-28-0	l/gu	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	*	7440-62-2	l/gu	NA	ΝΑ	NA	NA	0.74 U	AN	0.77 U	1.4 U
Zinc	2,000 ST	7440-68-6	l/gn	NA	NA	NA	NA	6.2 B	NA	11.2 B	24.5
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10,0 U
Iron + Manganese	500 ST*	: * /	l/bn	4,381	21,780	17,306	13,103	13,419	18,252	25,315	4,493

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard, GV: 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

	NYSDEC Class GA		SITE	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D
	Groundwater Standards/	CAS#	DATE:	5/26/2011	8/27/2012	11/13/2013	03/18/2015				
CONSTITUENT	Guidance Values		UNITS:	(Vgn)	(I/Bn)	(l/6n)	(l/gn)	(l/6n)	(l/gn)	(l/gn)	(l/6n)
Aluminum	*	7429-90-5	l/6n	8.2 U	51.5 B	15.1 J	20 U				
Antimony	3 GV	7440-36-0	l/6n	2.1 U	1.10	20 U	5.75 J				
Arsenic	25 ST	7440-38-2	l/gu	1.9 U	4.4 U	17.1 J	16.9 ا				
Barium	1,000 ST	7440-39-3	l/gu	27.0 B	1.3 U	115	98				
Beryllium	3 GV	7440-41-7	l/Bn	0.13 U	₃.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	25.7 B	41.18	85	20 U				
Cadmium	5.ST	7440-43-9	l/gu	0.27 U	18 U	10 U	10 U				
Calcium	**	7440-70-2	l/6n	12,900	13,100	22,300	16200				
Chromium Hexavalent	50 ST	18540-29-9	l/gu	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/gu	8 68.0	0.02 U	Z0 U	20 U				
Cobalt		7440-48-4	l/gu	0.62 B	1.2 B	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	1.6B	0.52 U	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	1,570	2,630	40,800	37300				
Lead	25 ST	7439-92-1	1/gu	1.5 U	8.5	5.82 J	15 U				
Magnesium	35,000 GV	7439-95-4	l/gu	1,870 B	2000 B	3,180	2410				
Manganese	300 ST	7439-96-5	l/gu	81	228	2,190	2510				
Mercury	0.7 ST	7439-97-6	l/gu	0.10 UU*J*	10	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	8.5B	3.0 B	5.25 J	20 U				
Potassium	ii•	7440-09-7	l/gu	4520 B	4780 B	060'9	5130 J				
Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.4 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gn	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gu	9,120	10,000	12,900	9640				
Thallium	0.5 GV	7440-28-0	l/bn	2.7 U	3.2 U	15 U	15 U				100
Vanadium		7440-62-2	l/gn	.56 U	0.32 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gu	51.2	26.1	15.7 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10 U	41.7 UBJ	10 U				
Iron + Manganese	500 ST*	٠	l/gu	1,651	2,856	42,990	39810				
MOTES.											

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



	NYSDEC Class GA		SITE:	MW-04I	MW-04I	MW-04I	MW-041	MW-04I	MW-04I	MW-04I	MW-041
	Groundwater Standards/	CAS#	DATE:	11/13/2007	02/1108	5/15/2008	8/5/2008	11/3/2008	2/23/2009	8/12/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(I/Bn)	(l/gn)	(l/gn)	(l/gn)	(l/6n)	(l/6n)	(l/6n)
Aluminum	(*)	7429-90-5	l/bn	NA	ΝΑ	NA	NA	8,7 U	NA	12.5	24.6 B
Antimony	3 GV	7440-36-0	l/gn	NA	NA	ΝΑ	AN	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/Bn	ΑN	ΑN	Ą	NA AN	11.8	NA	12.5	2.3 ∪
Barium	1,000 ST	7440-39-3	l/Bn	NA	NA	NA	NA	33.6 B	NA	103 B	35.9 B
Beryllium	3 GV	7440-41-7	l/gu	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/6n	NA	NA	AN	Ā	81.8 BN	NA	125	94.3 B
Cadmium	5.ST	7440-43-9	l/gu	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	l/Bn	36,400	42,300	24,600	32,600	28,100	33,300	61,000	30,000
Chromium Hexavalent	50 ST	18540-29-9	l/Bn	NA	NA	NA	NA	0.45 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gn	ΑN	ΝΑ	AN	NA	0.02 U	NA	0.49 U	0.44 U
Cobalt	**	7440-48-4	l/bn	NA	NA	NA	NA	0.88 U	NA	0.80 B	1,2 U
Copper	200 ST	7440-50-8	l/bn	NA	ΑN	AN	NA	3.3B	NA	0.62 U	3.1B
Iron	300 ST	7439-89-6	l/gu	1,610	30,900	20,400	25,900	21,400	25,700	53,000	1,720 J*
Lead	25 ST	7439-92-1	l/gn	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	l/bn	3,800 B	4,580	2,700 B	3,760 B	3,060 B	3,520 B	6,110	3,250 B
Manganese	300 ST	7439-96-5	l/bn	75.1	666	765	1,100	1,060	1,230	3,060	366
Mercury	0.7 ST	7439-97-6	l/bn	NA	NA	NA	AN	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/bn	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium		7440-09-7	l/gu	7,640 J	7,430	5,510	7,140	0099	8,460	096'6	8,490
Sefenium	10 ST	7782-49-2	l l/bn	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/bn	14,600	26,600	14,400	19,600	17,500	34,700	53,000	31,000
Thallium	0.5 GV	7440-28-0	l/gu	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	(*)	7440-62-2	l/gu	NA	NA	NA	NA	0.74 U	NA	0,77 U	1.4 U
Zinc	2,000 ST	7440-66-6	l/gu	NA	NA	NA	NA	6.1B	NA	15,2 B	16.0 B
Cyanide	200 ST	0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	\$00 ST*	in the second	l/bn	1,685	31,899	21,165	27,000	22,460	26.930	090'99	2.086

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



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

E: 5/26/2011 8/27/2012 11/13/2013 03/18/2015 (ug/l) <		NYSDEC Class GA		SITE:	MW-041	MW-041	MW-041	MW-041	MW-041	MW-04I	MW-04I	MW-04I
Mathematical Continuous 7,229-95 ug/l (ug/l) (u		Groundwater Standards/	CAS#	DATE:	5/26/2011	8/27/2012	11/13/2013	03/18/2015				
National Color	CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/gn)	(l/gn)	(l/gn)	(ug/l)	(l/gn)	(ng/l)	(l/gn)
yy 3 GV 7440-36-0 ug/l 2:1 U 1:1 U 20 U n 1,25 ST 7440-38-2 ug/l 1:14 10.2 124 J n 1,000 ST 7440-38-2 ug/l 1:14 10.2 124 J m 3 GV 7440-41-7 ug/l 1:13 724 B 134 L m 5 ST 7440-42-8 ug/l 1:13 724 B 71 m 5 ST 7440-42-9 ug/l 1:13 724 B 71 m 5 ST 7440-42-9 ug/l 1:8 B 71 10U m 5 ST 7440-42-9 ug/l 1:8 B 71 10U m 5 ST 7440-43-9 ug/l 1:8 B 70 10U m 5 ST 7440-48-4 ug/l 1:8 B 1:0 20 U m 20 ST 7440-48-4 ug/l 1:6 B 2:0 10 m 20 ST7440-48-4 ug/l 1:6 B	Afuminum	*	7429-90-5	l/gu	8.2 U	38.2 B	7,13 J	6.67 J				
1.00 ST 1.40-38-2 ug/l 1.14 10.2 12.4J 1.000 ST 7440-38-3 ug/l 24.5B 38.6B 134 1.000 ST 7440-44-7 ug/l 1.13 72.4B 71 1.000 ST 7440-42-8 ug/l 1.13 72.4B 71 1.000 ST 7440-42-9 ug/l 1.18 72.4B 71 1.000 ST 7440-43-9 ug/l 16.200 26.800 1.000 ST 7440-43-9 ug/l 1.6B 1.0 1.0 1.000 ST 7440-43-9 ug/l 1.6B 1.0 2.0 1.0 1.000 ST 7440-43-9 ug/l 1.6B 1.0 2.0 1.0 1.000 ST 7440-43-9 ug/l 1.6B 1.7 2.0 1.0 1.000 ST 7439-85-4 ug/l 1.6B 1.7 2.0 1.0 1.000 ST 7439-85-4 ug/l 1.16B 1.2 1.0 1.000 ST 7439-85-4 ug/l 1.10 2.20 1.2 1.000 ST 7439-85-5 ug/l 1.10 2.20 1.2 1.000 ST 7439-85-5 ug/l 1.10 2.20 1.2 1.000 ST 7440-02-0 ug/l 1.10 2.20 1.2 1.000 ST 7440-02-0 ug/l 1.2 0.1 0.20 1.2 1.000 ST 7440-02-0 ug/l 1.2 0.1 0.20 1.2 1.000 ST 7440-02-0 ug/l 1.2 0.1 0.20 1.2 1.000 ST 7440-02-0 ug/l 1.2 0.1 0.2 0.2 1.000 ST 7440-02-0 ug/l 1.0 0.2 0.2 1.000 ST 7440-02-0 ug/l 1.0 0.2 0.2 1.000 ST 7440-02-0 ug/l 1.0 0.0 0.2 1.000 ST 7440-02-0 ug/l 1.0 0.0 0.0 1.000 ST 7440-02-0 ug/l 1.0	Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.1 U	20 U	7.58 J				
m 1,000 ST 7440-39-3 ug/l 24.3 B 38.6 B 134 m 3 GV 7440-41-7 ug/l 0.13 U .12 U 20 U m 5 ST 7440-42-8 ug/l 0.27 U .14 U 10 U m 5 ST 7440-42-9 ug/l 0.27 U .18 U 10 U nm Hexavalent 50 ST 7440-70-2 ug/l 16,200 26,800 26,800 nm Total 50 ST 7440-70-2 ug/l 16,200 .20 U 10 U nm Total 50 ST 7440-43-4 ug/l .55 B .52 U 20 U nm Total 50 ST 7440-43-4 ug/l .16 B .7 U 10 U nm Total 50 ST 7440-43-4 ug/l .16 B .7 U 20 U nm 20 ST 7440-43-4 ug/l .16 B .7 U 20 U nm 35,000 GV 7439-95-5 ug/l .1,100 .460 .2,20 nm	Arsenic	25 ST	7440-38-2	l/gu	11.4	10.2	12.4 J	11,1 J				
mm 3 GV 7440-41-7 ug/l 0.13 U 12 U 20 U mm 5 ST 7440-42-8 ug/l 113 72.4 B 77 mm 5 ST 7440-42-9 ug/l 0.27 U -18 U 10 U n - 7440-47-3 ug/l 16.200 26.800 26.800 nm Fotal 50 ST 18540-29-9 ug/l 1.8 B 10.0 20 U nm Total 50 ST 7440-47-3 ug/l 1.8 B 10.0 20 U nm Total 50 ST 7440-48-4 ug/l 1.8 B 1.0 20 U nm Total 50 ST 7440-48-4 ug/l 1.8 B 1.0 20 U nm Total 50 ST 7440-48-4 ug/l 1.8 B 1.0 20 U num 35,000 GV 7439-89-6 ug/l 1.180 4500 2.0 num 10 ST 7440-29-7 ug/l 1.180 4.50 2.0 num 10 ST	Barium	1,000 ST	7440-39-3	l/gu	24.3 B	38.6 B	134	116				
TA40-42-8 Ug/l 113 772-4B 771	Beryllium	3 GV	7440-41-7	l/Bn	0.13 U	.12 U	20 U	20 U				
mm 5 ST 7440-43-9 ugn/l 0.27 U -18 U 10 U nm Hexavalent 50 ST 7440-70-2 ugn/l 16,200 48,800 26,800 nm Hexavalent 50 ST 18540-28-9 ugn/l 16,200 2.0 10.0 nm Total 50 ST 7440-47-3 ugn/l 1.8 B 10.0 20.0 nm Total 200 ST 7440-48-4 ugn/l 1.8 B 1.0 D 20.0 nm 25 ST 7440-48-4 ugn/l 16,600 35,400 20.0 see 300 ST 7439-89-6 ugn/l 16,600 36,400 19,700 imm 35,000 GV 7439-89-4 ugn/l 11,0 1,1 0.25 U imm 35,000 GV 7439-89-5 ugn/l 4,690 2,740 imm 100 ST 7440-02-0 ugn/l 4,690 2,740 imm 10 ST 7440-22-4 ugn/l 1,10 2,20 imm 10 SGV 7440-22-	Boron	1,000 ST	7440-42-8	l/gn	113	72.4 B	71	20 U				
Hexavalent	Cadmium	5 ST	7440-43-9	l/gu	0.27 U	.18 U	10 U	10 U				
Lim Total 50 ST 18540-29-9 ug/l 20 U .2 U 10 U Im Total 50 ST 7440-47-3 ug/l 1.8 B 10.6 20 U Im Total 50 ST 7440-48-4 ug/l .55 B .52 U 20 U Stook ST 7440-50-B ug/l 1.6 B .7 U 20 U Im 25 ST 7439-89-C ug/l 1.6 B .7 U 20 U Im 35,000 GV 7439-85-C ug/l 1.6 b00 36,400 15,100 Im 35,000 GV 7439-85-C ug/l 1,6 b0 36,400 15,100 Im 35,000 GV 7439-85-C ug/l 1,100 4,600 2,00 Im 1,00 ST 7440-92-C ug/l 1,100 4,600 2,00 Im 1,00 ST 7440-92-C ug/l 1,2 U 49 B 2,0 Im 0,5 GV 7440-92-C ug/l 1,0 U 4,9 B 2,1,0 Im 0,5 GV	Calcium	1	7440-70-2	l/gu	16,200	48,800	26,800	35300				
Imm Total 50 ST 7440-47-3 ug/l 1.8 B 10.6 20 U Imm Total - 7440-48-4 ug/l .55 B .52 U 20 U 200 ST 7440-50-8 ug/l 1.6 B .7 U 20 U imm 25 ST 7439-89-6 ug/l 1.6 b00 36,400 191,00 imm 35,000 GV 7439-85-4 ug/l 5.1 1.8 B 1.5 U imm 35,000 GV 7439-85-5 ug/l 7,180 2,250 15.0 imm 0.7 ST 7439-85-5 ug/l 1,18 B 1,5 U 2,0 imm 1.00 ST 7440-95-5 ug/l 1,180 2,70 2,0 imm 1.00 ST 7440-92-7 ug/l 1,2 U 3,1 B 2,0 imm 1.00 ST 7440-92-7 ug/l 10,10 U 4,9 B 2,0 imm 1.00 ST 7440-22-4 ug/l 10,10 U 4,9 B 2,0 imm 0.5 GV	Chromium Hexavalent	50 ST	18540-29-9	l/gn	20 U	.2 U	10 U	10.0 U				
140-48-4 ug/l .55 B .52 U 20 U	Chromium Total	50 ST	7440-47-3	l/gu	1.8 B	10.6	20 U	20 U				
140-50-8 140-50-8 161 1.6 B 1.7 U 20 U	Cobalt	(2 to 1)	7440-48-4	l/gn	.55 B	.52 U	20 U	20 U				
Selum 25 ST 7439-89-6 ug/l 5.1 1.8 B 15 U 15	Copper	200 ST	7440-50-8	l/gu	1.6 B	.7 U	20 U	20 U				
Selum 25 ST 7439-92-1 ug/l 5.1 1.8 B 15 U Selum 35,000 GV 7439-95-4 ug/l 2,040 B 4530 B 2,250 Incese 300 ST 7439-96-5 ug/l 1,180 4,690 2,700 Incese 300 ST 7439-96-5 ug/l 1,180 4,690 2,700 Incese 0.7 ST 7439-97-6 ug/l 1,2 U 64 U 2,0 U Incese 100 ST 7440-02-0 ug/l 1,2 U 64 U 2,0 U Incese 50 ST 7440-02-4 ug/l 1,5 UU-1 4,9 B 2,0 U Incese 50 ST 7440-22-4 ug/l 1,0 B 3,1 B 15 U Incese 50,000 ST 7440-22-4 ug/l 1,0 B 23,1 U 15 U Incese 2,000 ST 7440-22-5 ug/l 1,0 B 23,1 B 15 U Incese 2,000 ST 7440-26-6 ug/l 1,0 B 2,1 U 1,5 U	Iron	300 ST	7439-89-6	l/gu	16,600	36,400	19,700	15300				
selum 35,000 GV 7439-95-4 ug/l 2,040 B 4530 B 2,250 sinese 300 ST 7439-96-5 ug/l 1,180 4,630 B 2,700 ry 0.7 ST 7439-97-6 ug/l 1,2 U 64 U 2,0 U ry 100 ST 7440-02-0 ug/l 1,2 U 84 U 20 U sium 10 ST 7782-49-2 ug/l 4510 B 5,450 13,100 n 50 ST 7440-02-4 ug/l 0,52 UU-J* 3,7 B 20 U n 20,000 ST 7440-22-4 ug/l 0,52 UU-J* 49 B 20 U imm 0.5 GV 7440-22-5 ug/l 1,960 54,200 20,800 imm 0.5 GV 7440-22-5 ug/l 1,0 B 47,1 15,1 UB test 2,000 ST 7440-26-6 ug/l 1,0 B 47,1 15,1 UB test 2,000 ST 0,0 ST ug/l 10,0 U 43,5 UB 43,5 UB	Lead	25 ST	7439-92-1	l/gu	5.1	1.8 B	15 U	15 U				
ranese 300 ST 7439-96-5 ug/l 1,180 4,680 2,700 Impact of the control of the co	Magnesium	35,000 GV	7439-95-4	l/6n	2,040 B	4530 B	2,250	2700				
ry 0.7 ST 7439-97-6 ug/l 0.10 UU-J* 0.1 0.25 U sium 100 ST 7440-02-0 ug/l 1.2 U .64 U 20 U sium 100 ST 7440-03-7 ug/l 4510 B 5,450 13,100 um 10 ST 7782-49-2 ug/l 2.6 UNL** 3.7 B 25 U n 20,000 ST 7440-22-4 ug/l 19,500 64,200 20,000 lim 0.5 GV 7440-23-5 ug/l 1,0 B 47.1 15.1 UB tem 2,000 ST 7440-28-0 ug/l 1,0 B 47.1 15.1 UB tem 2,000 ST 7440-28-0 ug/l 1,0 B 47.1 15.1 UB tem 2,000 ST 7440-68-6 ug/l 17,78 B 47.1 15.1 UB tem 2,000 ST 0,057-12-5 ug/l 10,0 U 43.5 UBJ	Manganese	300 ST	7439-96-5	l/gu	1,180	4,690	2,700	1850				
sium 100 ST 7440-02-0 ug/l 1.2 U .84 U 20 U um 10 ST 7440-09-7 ug/l 4510 B 5,450 13,100 um 10 ST 7782-49-2 ug/l 2.6 UN*J* 3.7 B 25 U n 20,000 ST 7440-22-4 ug/l 19,600 84,200 20,00 lim 0.5 GV 7440-28-0 ug/l 1,0 B 3.2 B 15 U lim 2,000 ST 7440-28-0 ug/l 1,0 B 47.1 15.1 UB se 2,000 ST 7440-28-0 ug/l 1,0 B 47.1 15.1 UB de 2,000 ST 7440-68-6 ug/l 10,0 U 43.5 UB Manganese 500 ST* ug/l 10,0 U 0,0 U 43.5 UB	Mercury	0.7 ST	7439-97-6	l/gn	0.10 UU*J*	0.1	0.25 U	0.25 U				
sium - 7440-09-7 ug/l 4510 B 5,450 13,100 um 10 ST 7782-49-2 ug/l 2.6 UNU-1* 3.7 B 25 U n 50 ST 7440-22-4 ug/l 19,600 50 U 20,000 m 0.5 GV 7440-23-5 ug/l 1,6 B 23 U 15 U lium - 7440-22-0 ug/l 1,0 B 23 U 20 U stem 2,000 ST 7440-66-6 ug/l 17,6 B 47,1 15,1 UB stem 200 ST 055-12-5 ug/l 10,0 U 0,0 U 43,5 UB Manganese 500 ST - ug/l 17,76 41,090 22,400	Nickel	100 ST	7440-02-0	l/gn	1.2 U	.64 U	20 U	20 U				
um 10 ST 7782-49-2 ug/l 2.6 UNU*J* 3.7 B 25 U n 50 ST 7440-22-4 ug/l 0.52 UU*J* .49 B 20 U n 20,000 ST 7440-23-5 ug/l 19,600 54,200 20,000 lim 0.5 GV 7440-28-0 ug/l 3.4 B 3.2 B 15 U lium 2,000 ST 7440-62-2 ug/l 1.0 B .23 U 20 U let 2,000 ST 7440-66-6 ug/l 17,6 B 47,1 15,1 UB let 200 ST 0057-12-5 ug/l 10,0 U 43.5 UBJ Manganese 500 ST* ug/l 17,76 41,090 22,400	Potassium	(4)	7440-09-7	l/bn	4510 B	5,450	13,100	19700 J				
n 20,000 ST 7440-22-4 ug/l 0.52 UU+3+ .49 B 20 U m 20,000 ST 7440-23-5 ug/l 19,600 54,200 20,000 Im 0.5 GV 7440-28-0 ug/l 3.4 B 3.2 B 15 U m 10.0 G GV 7440-28-0 ug/l 1.0 B .23 U 20 U m 10.0 G GV 7440-62-2 ug/l 1.0 B .23 U 20 U m 10.0 U 43.5 UB/l 10.0 UB/l	Selenium	10 ST	7782-49-2	l/gn	2.6 UNU*J*	3.7 B	25 U	25 U				
10 20,000 ST 7440-23-5 ug/l 19,600 54,200 20,800 11 0.5 GV 7440-28-0 ug/l 3,4 B 3,2 B 15 U 15	Silver	50 ST	7440-22-4	l/gu	0.52 UU*J*	.49 B	20 U	20 U				
lum 0.5 GV 7440-28-0 ug/l 3.4 B 3.4 B 15 U 15 U Idium 2.000 ST 7440-68-2 ug/l 1.0 B .23 U 20 U Ide 200 ST 7440-68-6 ug/l 17.6 B 47.1 15.1 UB + Manganese 500 ST ug/l 10.0 U 10.0 U 43.5 UBJ	Sodium	20,000 ST	7440-23-5	l/bn	19,600	54,200	20,800	9350				
Indigram 7440-62-2 ug/l 1,0 B .23 U 20 U 2,000 ST 7440-66-6 ug/l 17,6 B 47.1 15.1 UB iride 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 43.5 UBJ + Manganese 500 ST* ug/l 17,780 41,090 22,400	Thallium	0.5 GV	7440-28-0	l/gn	3.48	3.28	15 U	15 U				
ide 200 ST 7440-66-6 ug/l 17.6 B 47.1 15.1 UB ide 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 43.5 UBJ + Manganese 500 ST* ug/l 17.80 41,090 22,400	Vanadium		7440-62-2	l/gn	1.0 B	.23 U	20 U	20 U				
anganese 500 ST 0057-12-5 ug/l 10.0 U 10.0 U 43.5 UBJ anganese 500 ST* - ug/l 17,760 41,090 22,400	Zinc	2,000 ST	7440-66-6	l/gu	17.6 B	47.1	15.1 UB	20 U				
500 ST* - Lug/l 17,780 41,090 22,400	Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	43.5 UBJ	10 U				
	Iron + Manganese	500 ST*	ží	/bn	17,780	41,090	22,400	16850				

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard, GV: 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.



	NYSDEC Class GA		SITE	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S
	Groundwater Standards/	CAS#	DATE	11/13/2007	2/11/2008	2/11/2008	8/4/2008	11/3/2008	2/23/2009	8/12/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(l/6n)	(l/gn)	(l/gn)	(I/Bn)	(l/6n)	(I/6n)	(ng/l)
Aluminum	wit.	7429-90-5	J/Bn	NA	NA	AN	NA	2630	AN	42.3 B	1540
Antimony	3 GV	7440-36-0	l/bn	ΑΝ	Ą	A N	ΝΑ	2.6 B	N.	2.5 U	2.4 B
Arsenic	25 ST	7440-38-2	l/gu	AN	NA	AN	NA	11.0	AN	6.5 B	7.5 B
Barium	1,000 ST	7440-39-3	l/gu	Ą	ĄN	NA	ΝΑ	306	N A	284	304
Beryllium	3 GV	7440-41-7	l/Bn	AN	ΑN	NA	NA	0,21 B	NA	0.13 U	0.32 B
Boron	1,000 ST	7440-42-8	l/gu	ΑN	ĄN	NA	ΑN	195 BN	NA	154	179
Cadmium	5ST	7440-43-9	l/gu	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	l/gn	98,000	93,300	91,900	94,900	95,400	96,400	93,800	92,200
Chromium Hexavalent	50 ST	18540-29-9	l/gu	AN	ΝΑ	NA	NA	5,1B	AN	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gn	AN	AN	NA	NA	0.02 U	NA	2,3 B	3.7 B
Cobalt	30	7440-48-4	l/bn	AN	A'N	ĄN	AN	1.4 B	AN	8 06 0	1,4 B
Copper	200 ST	7440-50-8	l/bn	AN	N	NA	NA	15.0 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6	l/bn	51,600	43,400	46,400	48,300	53,700	49,800	45,300	48,800 J*
Lead	25 ST	7439-92-1	l/gu	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	l/gn	12,800	11,100	11,100	11,700	11,400	11,000	9,290	10,700
Manganese	300 ST	7439-96-5	l/gu	2,490	2,300	2,290	2,240	2,250	2,350	2,270	2,580
Mercury	0.7 ST	7439-97-6	l/Bn	ΑN	N.	ĄN	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/6n	NA	NA	NA	NA	4.9 B	NA	0.82 U	3.7 B
Potassium	(04	7440-09-7	l/6n	1,880 J	16,300	17,600	18,600	18,200	16,600	15,500	16,200
Selenium	10 ST	7782-49-2	l/gu	NA	NA	NA	NA	2.7 BN	AN	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gn	42,700	42,500	43,200	41,000	39,500	38,700	32,400	35,900
Thallium	0.5 GV	7440-28-0	l/bn	NA	NA	NA	NA	3.9 B	NA	3.9 ∪	3.2 U
Vanadium	•	7440-62-2	l/gu	ΝΑ	NA	NA	NA	10.5 B	NA	0.77 U	8.3 B
Zinc	2,000 ST	7440-66-8	l/gn	NA	NA	NA	NA	15.7 B	NA N	13.5 B	17.6 B
Cyanide	200 ST	0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	AN	10.0 U	10.0 U
Iron + Manganese	500 ST*		l/bn	64,090	45,700	48,690	48,540	55,950	52,150	47,570	51,380

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

GV: Guidance value. ST: Standard.

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J*:Value is an appronximate concentration of the analyte as determined by data validation. UJ: Value was not detected above quantitation limit but was an appoximate



	NYSDEC Class GA		SITE:	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S
	Groundwater Standards/	CAS #	DATE:	5/31/2011	8/27/2012	11/13/2013	03/18/2015				
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/gn)	(ng/l)	(l/6n)	(l/6n)	(l/6n)	(ng/l)
Aluminum		7429-90-5	l/gu	28.0 B	73.9 B	17.5 J	14.6 J				
Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.1 U	7,82 J	20 U				
Arsenic	25 ST	7440-38-2	l/bn	2.7 B	8.1B	10.2 J	155 U				
Barium	1,000 ST	7440-39-3	l/gn	298	379	282	293				
Beryllium	3 GV	7440-41-7	l/gn	0.19B	.12 U	20 U	70 N				
Boron	1,000 ST	7440-42-8	l/gu	181	213	158	20 N				
Садтіит	5 ST	7440-43-9	l/gu	0.27 U	. 18 U	10 U	10 U				
Calcium		7440-70-2	l/gu	90,100	129,000	84,500	96400				
Chromium Hexavalent	50 ST	18540-29-9	l/6n	20 U	0.02 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/6n	1.7B	13.3	Z0 U	20 U				
Cobalt		7440-48-4	l/6n	1.1B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	0.55 U	.7 U	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	39,000	60,200	37,200	39100				
Lead	25 ST	7439-92-1	l/gu	11.3	9.6	15 Մ	15 U				
Magnesium	35,000 GV	7439-95-4	l/gn	10,700	12,400	8,300	8880				
Manganese	300 ST	7439-96-5	l/gu	2,250	3,240	2,520	2800				
Mercury	0.7 ST	7439-97-6	l/gu	0.19 BNU*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	2.2 B	.64 U	5.04 J	20 U				
Potassium		7440-09-7	l/gn	18,400	20,600	15,200	17200 3				
Selenium	10 ST	7782-49-2	l/bn	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/bn	0.75 BN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gn	39,300	51,000	11,500	13300				
Thallium	0.5 GV	7440-28-0	l/gu	2.7 U	3.2 U	15 U	15 U				
Vanadium		7440-62-2	l/6n	2.9 B	1.5 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	ľgn	13.5	10.2 B	17 UB	20 U				
Cyanide	200 ST	0057-12-5	l/Bn	10.0 U	10.0 U	45.4 UBJ	10 U				
Iron + Manganese	500 ST*	(*)	l/bn	41,250	63,440	39,720	41900				

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guldance Value.

GV: Guidance value. ST: Standard.

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.



			i 0	UCU-WW	CCO-VAIM	CC-AAIAI	CCC-WM	CCO-MAIN	MW-05D	MW-05D	UCU-WIN
	Groundwater Standards/	CAS#	DATE:	8/14/2007	2/11/2008	5/15/2008	8/5/2008	11/5/2008	2/26/2009	8/17/2009	2/8/2010
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(l/6n)	(I/6n)	(l/bn)	(I/6n)	(ng/l)	(l/6n)	(na/l)
Aluminum		7429-90-5	l/bn	AN	AN	NA NA	NA	43.2 B	NA	108 B	1700
Antimony	3 GV	7440-36-0	l/bn	Ą	NA	Ą	ΑN	2,3 U	ΑN	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	AN	NA	ΝΑ	ΑN	1.8 U	ĄN	3.0 U	2,3 U
Barium	1,000 ST	7440-39-3	l/gn	Ą	NA	Ā	NA	48.4 B	NA	42.9 B	25.4 B
Beryllium	3.6V	7440-41-7	l/gu	AN	NA	NA	AN	U 960.0	NA	0.13 U	0,26 ∪
Boron	1,000 ST	7440-42-8	l/gn	AN	AN A	NA AN	NA	46.1 B	ĄN	36.6 B	42.0 B
Cadmium	5 ST	7440-43-9	l/6n	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	8	7440-70-2	l/gu	24,700	41,500	32,000	32,500	28,600	28,200	27,500	17,500
Chromium Hexavalent	50 ST	18540-29-9	l/bn	ΑN	NA	AN	ΝΑ	0.96 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gn	NA	Ą	AN	AN	0.02 U	ΑN	0.90 B	4.3 B
Cobalt	***	7440-48-4	l/bn	ΑN	ΑN	NA	AN	2.2 B	NA	2.1 B	1.4 B
Copper	200 ST	7440-50-8	l/gn	ΑN	N.	Ą	NA	2.7 B	AN	1.4 B	7.4 B
Iron	300 ST	7439-89-6	l/bn	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	l/gu	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	l/gn	6,890	12,800	10,500	10,500	8,930	009'2	7,760	7,960
Manganese	300 ST	7439-96-5	l/bn	086'6	13,800	3,290	10,200	7,760	7,740	6,820	1,870
Mercury	TS 7.0	7439-97-6	l/bn	NA	NA	ΝΑ	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	NA	6.5 B	NA	7.9 B	6.1 B
Potassium	(A	7440-09-7	l/6n	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	l/gu	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	NA	NA	NA	1.3B	NA	0.81 B	0.83 U
Sodium	20,000 ST	7440-23-5	l/gn	33,600	41,000	37,700	41,100	35,300	29,200	26,800	22,300
Thallium	0.5 GV	7440-28-0	l/gn	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	200	7440-62-2	l/gu	NA	AN	NA	AN	0.74 U	NA	U 77.0	4.2 B
Zinc	2,000 ST	7440-66-6	l/gu	NA	NA	NA	NA	4.3 B	NA	8.0 B	206
Cyanide	200 ST	0057-12-5	l/6n	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	\$000 ST*	٠	l/gu	10,295	13,885	4,216	10,213	7,809	7,750.2	6,830.2	4,520

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

	NYSDEC Class GA		SITE:	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D
	Groundwater Standards/	CAS#	DATE:	6/1/2011	8/28/2012	11/13/2013	03/19/2015				
CONSTITUENT	Guidance Values		UNITS:	(l/6n)	(ng/l)	(l/gn)	(l/gn)	(l/6n)	(l/gn)	(l/gn)	(ng/l)
Aluminum	1.00	7429-90-5	l/Bn	196 B	36,3 D	20 U	20 U				
Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.1 U	20 U	20 ∪				
Arsenic	25 ST	7440-38-2	l/gu	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/Bn	27.0 B	9.3 B	27.7	45.1				
Beryllium	3 GV	7440-41-7	l/gn	0.17 B	,12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	31,4 B	29.1 B	24	20 U				
Cadmium	5.81	7440-43-9	l/bn	0.27 U	. 18 U	10 U	10 U				
Calcium	*	7440-70-2	l/gu	14,900	4290 B	6,230	11100				
Chromium Hexavalent	50 ST	18540-29-9	l/Bn	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/bn	2.2 B	8.4	20 U	20 U				
Cobalt		7440-48-4	l/bn	12B	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/bn	1.8 B	U 2.	20 U	20 U				
Iron	300 ST	7439-89-6	l/bn	295	31,9 B	12.7 UB	13.5 UB				
Lead	25 ST	7439-92-1	l/Bn	5.6	6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/gu	7,380	1560 B	2,420	4260				
Manganese	300 ST	7439-96-5	l/Bn	1,580	25	352	244				
Mercury	0.7 ST	7439-97-6	l/bn	0.10 UNU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/Bn	19.0 B	5.6	20 U	20 U				
Potassium	250	7440-09-7	l/bn	2850 B	1400 B	1,620	2670				
Selenium	10 ST	7782-49-2	l/bn	2.6 UNU*J*	4.7 B	25 U	25 U				
Silver	50 ST	7440-22-4	l/gn	0.52 UN	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gu	23,500	18,500	5,450	6850				
Thallium	0.5 GV	7440-28-0	l/6n	2.7 U	32 ∪	15 U	15 U				
Vanadium	•	7440-62-2	l/6n	.68 B	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-86-6	l/6n	40.6	12 B	11.8 UB	20 U				
Cyanide	200 ST	0057-12-5	l/bn	10.0 U	10,0 U	43.4 UBJ	10 U				
Iron + Manganese	500 ST*	•	l/bn	1,855	25	352	244				
											J

NOTES:

Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value.

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

NA: Not analyzed.

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N: Matrix spike sampe recovery not within control limits.



CONSTITUENT Aluminum Antimony Arsenic Barlum Beryllum Beryllum Cadminn	Groundwater Standards/ Guidance Values	CAS #	DATE.								
CONSTITUENT Aluminum Antimony Arsenic Barium Beryllium Gadminm	Guidance Values		į	11/13/2007	2/11/2008	5/15/2008	8/5/2008	11/5/2008	2/26/2009	8/17/2009	2/8/2010
Aluminum Antimony Arsenic Barium Beryilium Cadmin	3 GV		:SLINO	(I/6n)	(ng/l)	(l/gn)	(l/bn)	(l/bn)	(l/gn)	(l/gn)	(I/gn)
Antimony Arsenic Barium Beryllium Boron	3.67	7429-90-5	l/gn	NA	NA	NA	NA	8.7 U	AN	105 B	2680
Arsenic Barium Beryllium Boron		7440-36-0	l/gu	ΑN	Α̈́	ΑΝ	ΑN	2.3 U	AN	2.5 U	2.1 U
Barium Beryllium Boron	25 ST	7440-38-2	l/gu	NA	ΑN	NA	ΑN	4.3 B	ΝΑ	3.2B	3,5 B
Beryllium Boron Cadmirm	1,000 ST	7440-39-3	l/gu	NA	AN	AN	NA	20.4 B	NA	21.9 B	46.8 B
Boron	3 GV	7440-41-7	l/gu	NA	ĄN	ΑN	N A	U 960.0	NA	0.13 U	0.26 U
Cadmirm	1,000 ST	7440-42-8	l/ĝn	NA	NA	AN	NA	84.5 B	AN	52.7 B	69.6 B
	5 ST	7440-43-9	/b̄n	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	(0	7440-70-2	l/gu	41,100	30,000	34,300	28,600	16,300	22,300	22,800	19,300
Chromium Hexavalent	50 ST	18540-29-9	l/gu	ΑN	ΝΑ	NA	ΑN	0,57 B	NA	0,02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	ΑN	AN	NA	Ā	0.02 U	ΑN	8 09'0	5,0 B
Cobalt	0	7440-48-4	l/gu	NA	AN	NA	ΝΑ	0,88 U	NA	0.76 U	1.3 B
Copper	200 ST	7440-50-8	l/gu	AN	ΑN	Ϋ́	ΑN	1.2 B	AN	0.80 B	7.78
Iron	300 ST	7439-89-6	l/gu	1,750	8,920	10,700	8,490	5,020	7,920	8,890	9,230
Lead	25 ST	7439-92-1	l/gu	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	l/gu	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	l/gn	398	2,290	2,880	2,410	1,580	2,520	3,150	1,840
Mercury	0.7 ST	7439-97-6	l/gu	AN	AN	NA	NA	0.28	AN	0,10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	AN	AN	NA	NA	1.2 U	NA	0.82 U	3.1B
Potassium		7440-09-7	l/bn	12,400 J	13,300	12,100	13,800	9250	7,510	7,650	9,130 J*
Selenium	10 ST	7782-49-2	l/gu	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gn	NA	NA	NA	NA	0.54 U	NA	0.44 B	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	33,700	30,000	28,300	28,100	21,600	21,400	17,000	16,700
Thallium	0.5 GV	7440-28-0	l/gn	AN	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	(#K)	7440-62-2	l/gn	NA	NA	NA	NA	0.74 U	NA	U 77.0	8.7B
Zinc	2,000 ST	7440-66-6	l/6n	NA	NA	NA	NA	5.0B	NA	9.5 B	386
Cyanide	200 ST	0057-12-5	l/gu	AN	NA	NA	NA	10.0 U	NA	10,0 U	10.0 U
Iron + Manganese	500 ST*		l/gn	2,148	11,210	13,580	10,900	009'9	10,440	12,040	11,070

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value,

ST: Standard. GV: Guidance value.

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Groundwater Standards/ Guidance Values CAS # 1729-90-5 DATE: UNITS: ULGIN] 6/11/2011 (ugli) 4/2.9B (ugli) 1/10 (ugli) 3 GV 7420-90-5 ug/l 2.1 U 1.1 U 2.5 ST 7440-38-2 ug/l 2.1 U 4.8 B 1,000 ST 7440-41-7 ug/l 3.4 B 20.6 B 3 GV 7440-41-7 ug/l 0.13 U 4.8 B 1,000 ST 7440-41-7 ug/l 0.13 U 4.8 B 5 ST 7440-41-7 ug/l 0.13 U 4.8 B 5 ST 7440-42-8 ug/l 0.13 U 0.2 U 5 ST 7440-42-8 ug/l 1.5 B 7.9 5 ST 7440-43-9 ug/l 1.5 B 7.9 5 ST 7440-43-9 ug/l 1.5 B 7.9 2 ST 7440-48-4 ug/l 1.5 B 7.9 2 ST 7440-48-4 ug/l 4.9 U 5.2 U 2 SST 7440-50-8 ug/l 4.9 U 5.2 U 2 SST <th></th> <th>NYSDEC Class GA</th> <th></th> <th>SITE:</th> <th>MW-051</th> <th>MW-051</th> <th>MW-051</th> <th>MW-05!</th> <th>MW-05I</th> <th>MW-05I</th> <th>MW-051</th> <th>MW-051</th>		NYSDEC Class GA		SITE:	MW-051	MW-051	MW-051	MW-05!	MW-05I	MW-05I	MW-051	MW-051
1,000 ST 7,428-96-5 1,007 1,10 1,1	FIGURE	Groundwater Standards/	CAS#	DATE:	5/31/2011	8/28/2012	11/13/2013	03/19/2015	(1011)	(/211)	(1001)	(//01/)
my 3 GV 7440-38-0 ug/l 2.1 U 1.1 U 8.59 J n 2.5 ST 7440-38-2 ug/l 1.9 U 4.8 B 25 U n 1.000 ST 7440-38-3 ug/l 0.13 U .12 U 20 U n 1.000 ST 7440-42-8 ug/l 0.13 U .12 U 20 U n 1.000 ST 7440-42-8 ug/l 0.27 U .12 U 20 U n 1.000 ST 7440-42-8 ug/l 0.27 U .12 U 20 U n 5 ST 7440-42-8 ug/l 0.27 U 0.2 U 10 U n 5 ST 7440-42-8 ug/l 7.9 U 0.2 U 10 U n 20 ST 7440-43-8 ug/l .4.9 U .7 U 20 U n 20 ST 7440-48-4 ug/l .4.9 U .7 U 20 U n 20 ST 7440-48-4 ug/l .4.9 U .7 U 20 U n 20 ST 7440-	Aluminum		7429-90-5	l/bn	36.4 B	42.9 B	L 29.7	9.05 J				
CC 25 ST 740-38-2 ug/l 1:9 U 4:8 B 25 U Index Strain 1,000 ST 7440-38-3 ug/l 3:4 IB 20.6 B 107 Index Strain 1,000 ST 7440-43-9 ug/l 5:4 IB 20.0 B 10 U Index Strain 1,000 ST 7440-43-9 ug/l 5:4 IB 43.9 B 51 Index Strain 5 ST 7440-43-9 ug/l 20.500 15,600 32,800 Index Strain 5 ST 7440-43-9 ug/l 20.0 10 U 10 U Index Strain 5 ST 7440-43-9 ug/l 4.9 U 7.9 20 U Index Strain 5 ST 7440-43-9 ug/l 4.9 U 7.9 20 U Index Strain 300 ST 7440-48-4 ug/l 4.9 U 7.0 20 U Index Strain 35:000 GV 7439-89-5 ug/l 4.9 U 1.9 B 15.0 Index Strain 35:000 GV 7440-80-8 ug/l 1.7 B 1.1 B<	Antimony	3 GV	7440-36-0	l/gn	2.1 U	1.10	8.59 J	20 U				
1,000 ST 740-39-3 ug/l 34.1B 20.6B 107 um 3 GV 740-48-3 ug/l 0,13 U .12 U 20 U um 5 ST 740-42-8 ug/l 0,27 U .6 B 10 U m 5 ST 740-43-9 ug/l 0,27 U .6 B 10 U m 5 ST 740-43-9 ug/l 20,500 15,600 32,800 m 50 ST 740-43-9 ug/l 20,00 10 U 10 U ium Hexavalent 50 ST 740-43-9 ug/l 20,00 10 U 10 U ium Hexavalent 50 ST 740-43-9 ug/l 1.5 B 7.9 20 U ium Total 50 ST 740-43-9 ug/l 1.5 B 7.9 20 U r 7 S ST 740-43-9 ug/l 1.2 B 7.9 20 U r 7 S ST 740-43-9 ug/l 1.2 B 7.9 20 U r 7 S S ST 7 439-89-6	Arsenic	25 ST	7440-38-2	l/gu	1.9 U	4.8 B	25 U	25 U				
Inm 3 GV 740-41-7 ug/l 0.13 U 12 U 20 U Inm 5 ST 7440-42-8 ug/l 54.4 B 43.9 B 51 Inm 5 ST 7440-42-8 ug/l 0.27 U 4.8 B 10 U Inm 50 ST 7440-70-2 ug/l 20,500 15,800 32,800 Inm 50 ST 740-48-4 ug/l 1.5 B 7.9 20 U Inm 200 ST 740-48-4 ug/l 1.5 B 7.9 20 U Inm 200 ST 740-48-4 ug/l 1.5 B 7.9 20 U Inm 200 ST 740-48-4 ug/l 4.9 U 5.2 U 20 U Inm 25 CO 740-48-4 ug/l 4.9 U 5.2 U 20 U Inm 25 CO 740-48-4 ug/l 4.9 U 5.2 U 20 U Inm 30.0 ST 7440-48-4 ug/l 4.9 U 5.2 U 20 U Inm 35.0 O 7.44	Barium	1,000 ST	7440-39-3	l/gu	34.1 B	20.6 B	107	65.2				
um 5ST 7440-42-8 ug/l 54.4 B 43.9 B 51 m 5ST 7440-43-9 ug/l 0.27 U .6 B 10 U m 5ST 7440-70-2 ug/l 20,500 15,600 32,800 ium Hexavalent 50 ST 7440-70-2 ug/l 1,6 B 7.9 20 U ium Hexavalent 50 ST 7440-70-3 ug/l 1,6 B 7.9 20 U ium Total 50 ST 7440-40-8 ug/l 1,6 B 7.9 20 U r 200 ST 7440-50-8 ug/l 1,6 B 7.0 20 U r 25 ST 7430-82-1 ug/l 1,9 B 1,1 B 20 U r 25 ST 7430-82-1 ug/l 1,3 B 1,1 B 20 U r 300 ST 7430-82-1 ug/l 1,7 B 1,1 B 20 U r 300 ST 7430-82-1 ug/l 1,7 B 1,1 B 20 U r 100 ST	Beryllium	3 GV	7440-41-7	l/bn	0.13 U	12 U	20 U	20 U				
umm 5 ST 7440-43-9 ug/l 0.27 U .6 B 10 U nm Fo ST 7440-70-2 ug/l 20,500 15,600 32,800 lum Hexavalent 50 ST 18540-29-9 ug/l 20,500 10 U 10 U r 200 ST 7440-44-3 ug/l -49 U 52 U 20 U r 200 ST 7440-48-4 ug/l -49 U 52 U 20 U r 200 ST 7440-48-4 ug/l -49 U 52 U 20 U r 200 ST 7440-48-4 ug/l -49 U -52 U 20 U r 25 ST 7439-89-6 ug/l -4.9 U -52 U 20 U sium 35,000 GV 7439-89-6 ug/l -1.9 B -1.9 B 15 U y 100 ST 7439-89-7 ug/l -1.9 B -1.9 B 15 U y 100 ST 7440-62-7 ug/l -1.8 BNU* -2.9 U 20 U m 0.5 SV	Boron	1,000 ST	7440-42-8	l/Bn	54.4 B	43.9 B	51	20 U				
num Hexavalent 50 ST 18540-29-9 ug/l 20,500 15,600 32,800 lum Hexavalent 50 ST 18540-29-9 ug/l 20 U 0.2 U 10 U lum Total 50 ST 7440-47-3 ug/l 1.5 B 7.9 20 U r 200 ST 7440-48-4 ug/l 1.5 B 7.9 20 U r 200 ST 7430-89-8 ug/l 4.9 U .7 U 20 U sium 35.00 GV 7439-89-4 ug/l 4.9 U .7 U 20 U sium 35.00 GV 7439-89-5 ug/l 4.9 U .7 U 20 U r 200 ST 7439-89-5 ug/l 4.9 U 1.3 B 15 U r 0.7 ST 7440-02-0 ug/l 1.7 B 1.1 B 20 U r 0.5 ST 7440-02-0 ug/l 1.7 B 1.1 B 20 U r 0.5 ST 7440-02-0 ug/l 1.0 B 2.2 U 2.0 U r	Cadmium	5 ST	7440-43-9	l/bn	0,27 U	.6 B	10 U	10 U				
tum Hexavalent 50 ST 18540-29-9 ug/l 20 U 0.2 U 10 U rum Total 50 ST 740-48-4 ug/l 1.5 B 7.9 20 U rum Total 50 ST 740-48-4 ug/l 1.5 B 7.9 20 U r 200 ST 740-48-8 ug/l 4.9 U .52 U 20 U r 200 ST 743-58-8 ug/l 1.0 0 7.0 20 U sium 35,000 GV 743-58-4 ug/l 4.9 U .52 U 20 U y 300 ST 743-58-5 ug/l 1.78 U 1.9 B 15 U y 0.7 ST 743-99-5 ug/l 1.7 B 1.1 B 20 U y 0.7 ST 740-02-0 ug/l 1.7 B 1.1 B 20 U inim 10 ST 7440-02-7 ug/l 10,500 9,20 U 2,20 U inim 10 ST 7440-02-7 ug/l 10,500 9,20 U 2,000 m 20 CO	Calcium	ř	7440-70-2	l/gu	20,500	15,600	32,800	19700				
tum Total 50 ST 7440-47-3 ug/l 1.5 B 7.9 20 U r 200 ST 7440-48-4 ug/l -49 U .52 U 20 U r 200 ST 7440-56-8 ug/l -74 U .7 U 20 U r 300 ST 7439-88-6 ug/l 12,800 4,33 6,110 r 35,000 GV 7439-88-5 ug/l 4,9 1,9 B 15 U r 35,000 GV 7439-88-5 ug/l 4,9 1,9 B 15 U r 300 ST 7439-88-5 ug/l 1,18 B 15 U r 100 ST 7439-87-6 ug/l 1,18 B 1,10 r 100 ST 7440-02-0 ug/l 1,18 B 1,110 r 100 ST 7440-02-0 ug/l 1,0,400 14,100 r 50 ST 7440-22-4 ug/l 1,0,400 14,100 r 0.5 GV 7440-22-4 ug/l 1,0,400 14,100	Chromium Hexavalent	50 ST	18540-29-9	l/gu	20 U	0.2 U	10 U	10.0 U				
reference of the control of the cont	Chromium Total	50 ST	7440-47-3	l/Sn	1.5 B	6.7	20 U	20 U				
Line 200 ST 740-50-8 ug/l 12,600 -7.0 20 U Line 300 ST 7439-89-6 ug/l 4,9 1.9 B 15.0 Line 35,000 GV 7439-89-6 ug/l 3,830 B 1.9 B 15.0 ese 300 ST 7439-86-5 ug/l 3,830 B 1840 B 3,510 ese 300 ST 7439-86-5 ug/l 1,78 1,130 2,450 m 0,7 ST 7439-96-5 ug/l 1,7 B 1,1 B 2,0 m 100 ST 7440-02-0 ug/l 1,7 B 1,1 B 2,0 m 10 ST 7440-02-0 ug/l 10,600 9,200 26,200 m 50 ST 7440-22-4 ug/l 16,400 14,100 m 0,5 GV 7440-22-5 ug/l 19,300 10,400 14,100 m 2,000 ST 7440-22-5 ug/l 7,18 13 B 11,10 B e 2,000 ST 2,00	Cobalt		7440-48-4	l/gu	.49 U	.52 U	20 U	20 U				
Lum 350 ST 7439-89-6 ug/l 4,9 4,34 6,110 Lum 25 ST 7439-92-1 ug/l 4,9 1.9 B 15 U ese 36,000 GV 7439-96-4 ug/l 3,830 B 1840 B 3,510 ese 300 ST 7439-96-5 ug/l 6,070 1,730 2,450 m 0,7 ST 7439-97-6 ug/l 0,1 B U/l 0,1 0,25 U m 100 ST 7440-02-0 ug/l 1,7 B 1,1 B 20 U m 10 ST 7782-49-2 ug/l 10,600 9,200 26,200 n 10 ST 7782-49-2 ug/l 10,400 14,100 n 50 ST 7440-22-4 ug/l 19,300 10,400 14,100 n 0,5 GV 7440-22-5 ug/l 19,300 10,400 14,100 n 2,000 ST 7440-62-2 ug/l 71,8 13 B 11,10 B n 200 ST 200 S	Copper	200 ST	7440-50-8	l/gu	0.55 U	U 2.	20 U	20 U				
Lum 25 ST 7439-92-1 ug/l 4.9 1.9 B 15 U Lum 35,000 GV 7439-95-4 ug/l 3,830 B 1840 B 3,510 ese 300 ST 7439-96-5 ug/l 5,070 1,730 2,450 m 0.7 ST 7439-97-6 ug/l 0.16 BNU* 0.1 0.25 U m 100 ST 7440-02-0 ug/l 1,7 B 1,1 B 20 U n 10 ST 7782-49-2 ug/l 1,6 BO 9,200 26,200 n 50 ST 7744-03-7 ug/l 10,600 9,200 26,200 n 50 ST 7440-22-4 ug/l 19,300 14,100 14,100 n 0.5 GV 7440-22-5 ug/l 19,300 10,400 14,100 m 2,000 ST 7440-62-2 ug/l 7,1B 13 B 11,1UB m 2,000 ST 200 ST ug/l 10,0U 40,3 UBJ 10,01 10,0U	Iron	300 ST	7439-89-6	/gu	12,600	4,330	6,110	3180				
lum 35,000 GV 7439-95-4 ug/l 3,830 B 1840 B 3,510 ese 300 ST 7439-96-5 ug/l 5,070 1,730 2,450 m 0,7 ST 7439-97-6 ug/l 0,16 BNU* 0,1 0,25 U m 100 ST 7440-02-0 ug/l 1,7 B 1,1 B 20 U m 10 ST 7480-09-7 ug/l 10,600 9,200 26,200 n 50 ST 7440-09-7 ug/l 10,600 9,200 26,200 n 50 ST 7440-22-4 ug/l 19,300 14,100 14,100 n 0,5 GV 7440-23-5 ug/l 19,300 14,100 14,100 m 2,000 ST 7440-28-0 ug/l 7,1 B 13 B 11,1 UB m 2,000 ST 7440-68-5 ug/l 7,1 B 13 B 11,1 UB m 2,000 ST 10,01 10,0 U 10,0 U 40,3 UB m 10,01	Lead	25 ST	7439-92-1	l/gu	4.9	1.9 B	15 U	15 U				
ese 300 ST 7439-96-5 ug/l 5,070 1,730 2,450 In	Magnesium	35,000 GV	7439-95-4	l/gu	3,830 B	1840 B	3,510	2010				
Lon ST 7439-97-6 ug/l 0.16 BNU* 0.1 0.25 U Imm 100 ST 7440-02-0 ug/l 1.7 B 1.1 B 20 U Imm 10 ST 7440-09-7 ug/l 10,600 9,200 26,200 Imm 50 ST 7782-49-2 ug/l 2,6 UNU*J* 2.8 U 25 U Imm 50 ST 7440-22-4 ug/l 19,300 14,100 14,100 Imm 0,5 GV 7440-28-0 ug/l 19,80 32 U 20 U Imm 2,000 ST 7440-68-5 ug/l 7.1 B 13 B 11,1 UB Imm 2,000 ST 0057-12-5 ug/l 7.1 B 10.0 U 40.3 UBJ Imm 2,000 ST 0057-12-6 ug/l 10,0 U 10.0 U 40.3 UBJ	Manganese	300 ST	7439-96-5	l/gu	5,070	1,730	2,450	1170				
Lim 100 ST 7440-02-0 ug/l 1.7 B 1.1 B 20 U Im 10 ST 7440-09-7 ug/l 10,600 9,200 26,200 Im 10 ST 7782-49-2 ug/l 10,600 9,200 26,200 Im 50 ST 7440-22-4 ug/l 16,300 14,100 20 U Im 0.5 GV 7440-28-0 ug/l 19,300 14,100 15,00 Im 2,000 ST 7440-88-0 ug/l 32 U 20 U 20 U Im 2,000 ST 7440-86-6 ug/l 7,1 B 13 B 11,1 UB Im 2,000 ST 0057-12-5 ug/l 10,0 U 10,0 U 40,3 UB	Mercury	0.7 ST	7439-97-6	l/ßn	0.16 BNU*	0.1	0.25 U	0.25 U				
Inm 10 ST 7440-09-7 ug/l 10,600 9,200 26,200 In 10 ST 7782-49-2 ug/l 2,6 UNU*J* 2.8 U 25 U 50 ST 7440-22-4 ug/l 16,300 10,400 14,100 In 0.5 GV 7440-23-5 ug/l 19,300 14,100 15 U In 0.5 GV 7440-22-0 ug/l 2.7 U 3.2 U 15 U In 2,000 ST 7440-86-0 ug/l 7.1 B 13 B 11.1 UB Inqualese 500 ST 00ST-12-5 ug/l 17,670 6,060 6,060	Nickel	100 ST	7440-02-0	l/gu	1.7 B	1.1B	20 U	20 U				
n 10 ST 7782-49-2 ug/l 2.6 UNU*J* 2.8 U 25 U 25 U 25 ST 740-22-4 ug/l 0.62 UN 32 U 20 U	Potassium	×	7440-09-7	l/gn	10,600	9,200	26,200	21200				
50 ST 7440-22-4 ug/l 0.62 UN .32 U 20 U 10 C000 ST 7440-23-5 ug/l 19,300 10,400 14,100 10 C0 ST 7440-28-0 ug/l 2.7 U 3.2 U 15 U 10 C0 ST 7440-62-2 ug/l 7.1 B 13 B 11.1 UB 10 C0 ST 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 40.3 UBJ Ianganese 500 ST 0057-12-5 ug/l 1760 6,660 8,560	Selenium	10 ST	7782-49-2	l/Bn	2.6 UNU*J*	2.8 U	25 U	25 U				
20,000 ST 7440-23-5 ug/l 19,300 10,400 14,100 In 0,5 GV 7440-28-0 ug/l 2,7 U 3,2 U 15 U Im 2,000 ST 7440-62-2 ug/l .98 B .23 U 20 U 2,000 ST 7440-66-6 ug/l 7,1 B 13 B 11,1 UB 200 ST 0057-12-5 ug/l 10,0 U 10,0 U 40,3 UBJ Ianganese 500 ST ug/l 17,670 6,660 8,560	Silver	50 ST	7440-22-4	l/Bn	0.52 UN	.32 U	20 U	20 U				20
lum 0.5 GV 7440-28-0 ug/l 2.7 U 3.2 U 15 U idum 2,000 ST 7440-68-8 ug/l 7.1 B 13 B 11.1 UB iride 200 ST 0657-12-5 ug/l 10,0 U 10,0 U 40,3 UBJ + Manganese 500 ST ug/l 17,670 6,060 8,580	Sodium	20,000 ST	7440-23-5	I/Bn	19,300	10,400	14,100	8190				
Idium 7440-62-2 ug/l :98 B :23 U 20 U 2,000 ST 7440-68-6 ug/l 7.1 B 13 B 11.1 UB iride 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 40.3 UBJ + Manganese 500 ST ug/l 17,670 6,060 8,580	Thallium	0.5 GV	7440-28-0	l/gu	2.7 U	3.2 U	15 U	15 U				
ide 2,000 ST 7440-66-6 ug/l 7.1 B 13 B 11.1 UB ride 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 40.3 UBJ + Manganese 500 ST ug/l 17,670 6,060 8,580	Vanadium	NO)	7440-62-2	l/gu	.98 B	.23 U	20 U	20 U				
200 ST 0057-12-5 ug/l 10.0 U 10.0 40.3 UBJ S00 ST*	Zinc	2,000 ST	7440-66-6	l ng/l	7.18	13 B	11.1 UB	20 U				
500 ST* Lg/l 17,670 6,060 8,580	Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	40.3 UBJ	10 U				
	Iron + Manganese	500 ST*	38.383	l/Bn	17,670	090'9	8,580	4350				

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guldance Value.

ST: Standard. GV: 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 critería

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

N: Matrix spike sampe recovery not within control limits.



	NYSDEC Class GA		<u>N</u>	SCO-MIM	SCO-MW	SCO-MM	MW-05S	SCO-AAM	SCO-MIN	SCO-MAIN	SCO-AAIAI
	Groundwater Standards/	CAS#	DATE	11/13/2007	2/11/2008	5/15/2008	8/5/2008	11/5/2008	2/26/2009	8/17/2009	2/8/2010
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(l/gn)	(l/6n)	(l/gn)	(I/Bn)	(ng/l)	(l/gn)	(l/gn)
Aluminum	*	7429-90-5	l/gu	NA	ΝA	ΑN	NA	85.0 B	NA	214	541
Antimony	3 GV	7440-36-0	l/gu	NA	NA	ΝΑ	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	AN	AN	NA	AN	3.4B	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/gn	AN	AN	ΑN	NA	300	NA	322	199 B
Beryllium	3 GV	7440-41-7	l/Bn	ĄN	AN	ΝΑ	NA	U 960.0	ΑN	0.13 U	0.55 B
Boron	1,000 ST	7440-42-8	l/gu	ĄN	ĄZ	NA	NA	223 B	ΑN	279	146
Сафтіит	5ST	7440-43-9	l/ĝn	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	l/gu	96,400	97,500	83,500	97,300	91500	89,400	103,000	62,600
Chromium Hexavalent	50 ST	18540-29-9	l/ĝn	ĄN	ΝΑ	AN	NA	1.8 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	1/gn	ΑN	ΑN	AN	NA	0.02 U	NA	1,38	2.6 B
Cobalt	**	7440-48-4	l/gu	ΝΑ	NA	ΑN	NA	3.4 B	ΝΑ	1.4 B	5.5 B
Copper	200 ST	7440-50-8	l/gn	ΑN	AN	ΑN	NA	4.5 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6	l/gn	55,300	42,500	38,400	42,100	40,000	36,900	41,000	20,500
Lead	25 ST	7439-92-1	l/gu	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	l/gu	12,500	12,300	10,900	12,800	11,700	11,400	13,000	8,300
Manganese	300 ST	7439-96-5	l/6n	42,400	4,850	4,100	4,480	4,550	4,420	4,710	2,520
Mercury	0,7 ST	7439-97-6	l/6n	AN	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	NA	5.9 B	NA	0.82 U	4.4 B
Potassium		7440-09-7	l ng/l	15,300 J	14,300	13,400	15,400	14900	12,900	13,800	10,800 J*
Selenium	10 ST	7782-49-2	l/gu	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/bn	AN	NA	NA	NA	0.65 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	31,800	32,900	28,400	30,600	28,500	25,900	27,800	2,400
Thallium	0.5 GV	7440-28-0	l/6n	NA	NA	NA	NA	4.4 B	NA	3,9 U	3.2 U
Vanadium	8)	7440-62-2	l/gn	NA	NA	NA	NA	3.4 B	NA	0.77 U	3.8 B
Zinc	2,000 ST	7440-66-6	l/gn	NA	ΝΑ	NA	NA	1.5 U	NA	14.3 B	22.7
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*		l/gn	97,700	47,350	42,500	46,580	44,550	41,320	45,710	23,020

J. Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: Guidance value.

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

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 appoxlmate

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

	NYSDEC Class GA		SITE:	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S
	Groundwater Standards/	CAS#	DATE:	5/31/2011	8/29/2012	11/13/2013	03/19/2015				
CONSTITUENT	Guldance Values		UNITS:	(l/6n)	(ng/l)	(l/gn)	(l/gn)	(l/gn)	(l/6n)	(l/6n)	(l/6n)
Aluminum		7429-90-5	l/bn	39.8 B	1050	19 J	19.6 J				
Antimony	3 GV	7440-36-0	l/gu	2.1B	1.8 B	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/Bn	1.9 U	4.3 B	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/bn	283	272	268	275				
Beryllium	3 GV	7440-41-7	l/gu	0.26 B	.3 B	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	197	163 B	144	20 U				
Cadmium	5 ST	7440-43-9	l/bn	0.27 U	8 6.	10 U	10 U				
Calcium		7440-70-2	l/gu	79,500	78,600	69,500	75600				
Chromium Hexavalent	50 ST	18540-29-9	l/gu	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/bn	2.1B	11.5	20 U	20 U				
Cobalt	(P)	7440-48-4	l/gu	1.0 B	1.5 B	20 U	20 U				
Copper	200 ST	7440-50-8	l/bn	0.55 U	11.1 B	20 U	20 U				
Iron	300 ST	7439-89-6	l/bn	29,200	35,900	24,800	25300				
Lead	25 ST	7439-92-1	l/bn	9.5	11.7	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/bn	10,600	8,880	8,360	8950				
Manganese	300 ST	7439-96-5	l/6n	4,280	5,280	4,770	5460				
Mercury	0.7 ST	7439-97-6	l/bn	0.10 UN	0.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0)/ōn	4.6 B	5.6 B	20 U	20 U				
Potassium		7440-09-7	l/gn	15,400	12,900	12,900	14500				
Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4] /jūn	0.52 UN	.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gu	30,600	27,900	10,400	11800				
Thallium	0.5 GV	7440-28-0	l/gn	2.7 U	2.9 U	15 U	15 U				
Vanadium	**	7440-62-2	l/gu	2.7 B	8.6B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gu	13.9B	82.5	13.3 UB	5.51 J				
Cyanide	200 ST	0057-12-5	l/gn	,10.0 U	10.0 U	47.2 UBJ	10 U				
Iron + Manganese	500 ST*		l/gu	29,210	35,912	29,570	30,760				
CLICA											

NOTES:

J: Estimated due to data validation criteria.

ST: Standard. GV: Guidance value.

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.



Groundw LITUENT Guid NY In In In In In In In In In I	ndards/	CAS# 7429-90-5 7440-38-0 7440-39-3 7440-41-7 7440-41-7	DATE: UNITS:	11/9/2007	2/11/2008	5/15/2008	8/4/2008	11/3/2008	2/23/2009	8/11/2009	2/4/2010
mm.	888	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7	UNITS:	(1)							
ny m m Hexavalent Lum Total sium lese		7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7		1150	(ng/l)	(I/Bn)	(l/6n)	(l/gn)	(l/gn)	(l/6n)	(l/gn)
m n n n n n n n n n n n n n n n n n n n		7440-36-0 7440-38-2 7440-39-3 7440-41-7	l/gu	NA	ΑN	NA	NA	8.7 U	NA	38.6 B	26.4 B
m n n um Hexavalent um Total sium sium		7440-39-3 7440-41-7	l/gu	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
m n n Hexavalent um Total sium lese		7440-39-3 7440-41-7	l/gu	NA	NA	NA	NA	1.8 U	NA	nε	2.3 U
m n n Hexavaient um Total sium tese		7440-41-7	l/gu	NA	ΑN	AN	NA	40.5 B	AN	49.5	3.5 B
m Um Hexavalent Um Total sium rese		7440 42 8	l/bn	AN	NA	AA	ΝΑ	U 960.0	NA	0,13 U	0,26 U
m hexavalent um Hexavalent um Total sium lese		0-74-044/	l/bn	AN	AN	AN	NA	151 BN	NA	186	157
um Hexavalent um Total sium lese		7440-43-9	l/Bn	0.32 U	0.33 B	0.27 U	0.39 B	0,35U	0.35 U	0.30 B	0.34 U
um Hexavalent um Total sium sese		7440-70-2	l/gu	5,670	7,010	6,330	8,040	7920	8,540	8,130	7,860
um Total sium sese		18540-29-9	l/6n	NA	NA	NA	NA	2.38	NA	0.02 U	0.02 U
ium lese		7440-47-3	l/gu	NA	NA	AN	NA	0,02 U	NA	8 09'0	0.72 B
ilum 1ese		7440-48-4	l/gu	ΑN	ΝΑ	NA	AN	9.5 B	ΝΑ	11.18	1.2 U
sium nese y		7440-50-8	l/gn	ΑN	NA	NA	AN	2.7 B	NA	0.62 U	2.2 B
sium nese y		7439-89-6	l/bn	1,010	4,600	2,210	5,190	5,920	6,670	080'9	232 J*
sium nese y		7439-92-1	l/gu	6.5 J	1.4 U	2.7 B	2.3 U	1.3 U	1.3 U	14.9	1.8 U
nese y		7439-95-4	l/bn	2,340 B	3,410B	3,070 B	4,540 B	4,270 B	4,580 B	4,250 B	4,430 B
٨		7439-96-5	l/gu	1,300	069'6	6,440	10,100	9,930	11,100	9,010	581
		7439-97-6	l/bn	ΑN	AN	NA	NA	0.13 U	NA	0.10 U	0,10 U
Nickel 100 ST		7440-02-0	l/gu	NA	NA	NA	NA	6.8 B	NA	7.2 B	1.4 U
Potassium -		7440-09-7	l/gu	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	l/gu	NA	NA	NA	NA	1.9 UN	NA	5,5	2.5 U
Silver 50 ST		7440-22-4	l/gn	ΝA	NA	NA	NA	1.7 B	NA	0.34 B	0.83 U
Sodium 20,000 ST		7440-23-5	l/Bn	9,930	10,500	11,300	15,200	17,300	16,100	18,100	15,600
Thallium 0.5 GV		7440-28-0	l/Bn	NA	ΑN	NA	- NA	2.4 B	NA	3.9 U	3.2 U
Vanadium		7440-62-2	l/bn	NA	VΝ	ΑN	NA	0.74 U	NA	U 77.0	1.4 U
Zinc 2,000 ST		7440-66-6	l/gu	NA	NA	AN	NA	1.5 U	NA	10.8 B	9.6 B
Cyanide 200 ST		0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese 500 ST*		7.60	l/gn	2,310	14,290	8,650	15,290	15,850	17,770	15,090	813

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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

	NYSDEC Class GA		SITE:	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D
	Groundwater Standards/	CAS #	DATE:	5/26/2011	8/27/2012	11/12/2013	03/18/2015				
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(l/6n)	(l/6n)	(l/gn)	(I/Bn)	(l/gn)	(l/gn)	(l/gn)
Aluminum	(2)	7429-90-5	l/ßn	8.2 U	36.7 B	20 U	20 U				
Antimony	3 GV	7440-38-0	l/gu	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	1/gn	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gn	31.6 B	1.3 U	54.1	49.9				
Beryllium	3 GV	7440-41-7	l/gu	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	105	120	54	20 U				
Cadmium	5 ST	7440-43-9	l/gu	0.27 U	.18 U	10 U	10 U				
Calcium	*	7440-70-2	l/gu	5,960	7,260	6,130	5360				
Chromium Hexavalent	50 ST	18540-29-9]/6n	20 ∪	.02 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/bn	1.8 B	7	20 U	70 O				
Cobalt		7440-48-4	l/gu	10.7 B	2 B	20 U	20 U				
Copper	200 ST	7440-50-8	1/gn	1.6 B	U 2"	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	159	1,060	122	10.3 UB				
Lead	25 ST	7439-92-1	l/gu	1.6 B	8.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/gn	3,580 B	3610 B	3,370	2870				
Manganese	300 ST	7439-96-5	l/gn	3,370	761	3,190	2220				
Mercury	0.7 ST	7439-97-6	l/gu	0,10 UU*J*	U I	0.25 U	0,25 U				
Nickel	100 ST	7440-02-0	l/gn	4.8 B	1.9 B	8.11 J	6.67 J				
Potassium	(*)	7440-09-7	l/gn	2,000 B	1560 B	2,060	2020 J				
Selenium	10 ST	7782-49-2	l/bn	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gu	0.52 UU*J*	.32 U	20 U	20 ∩				
Sodium	20,000 ST	7440-23-5	l/bn	18,500	17,800	3,260	4480			i i	
Thallium	0.5 GV	7440-28-0	ng/	2.7 U	3.2 U	15 U	15 U				
Vanadium	(9)	7440-62-2	na/	.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/Bn	7.4 B	103	15.8 UB	20 U				
Cyanide	200 ST	0057-12-5	l/Bn	10.0 U	10.0 U	42.1 UB	10 U				
Iron + Manganese	500 ST*	3 0	l/6n	3,529	1,821	3,312	2220				

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Concentration exceeds Standard/Guidance Value.

ST: Standard GV: Guidance value.

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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



	NYSDEC Class GA		SITE:	MW-061	MW-061	MW-06I	MW-061	MW-06I	190-MM	MW-061	MW-061
	Groundwater Standards/	CAS#	DATE:	11/9/2007	2/11/2008	5/15/2008	8/4/2008	11/3/2008	2/23/2009	8/11/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/gn)	(l/gn)	(I/6n)	(l/6n)	(l/gn)	(l/6n)	(l/6n)
Aluminum		7429-90-5	l/bn	AN	AN	NA	NA	8.7 U	AN	22.5 B	29.5 B
Antimony	3 GV	7440-36-0	l/b̄n	NA	NA	AN	A'A	2.3 U	ΑN	2.5 U	2.3 B
Arsenic	25 ST	7440-38-2	l/gu	NA	NA	AN	AN	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/gu	NA	NA	NA	NA	34.1 B	NA	39.1 B	40.2 B
Beryllium	3 GV	7440-41-7	l/gu	NA	NA	NA	NA	U 960.0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/bn	ΝΑ	NA	AN	NA	91.8 BN	AN	99.2 B	74.6 B
Cadmium	5 ST	7440-43-9	l/gu	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	l/gu	22,800	20,600	17,600	20,800	18,300	16,000	17,100	14,600
Chromium Hexavalent	50 ST	18540-29-9	l/gu	NA	ΝΑ	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	NA	NA	NA	NA	0.02 U	NA	1.2 B	0.67 B
Cobalt	-	7440-48-4	/Bn	NA	N.	NA	NA	0,88 U	NA	1,2 B	1.2 B
Copper	200 ST	7440-50-8	l/gn	ĄN	NA	NA	AN	10.9 B	ΑN	11.8 B	14.2 B
Iron	300 ST	7439-89-6	l/gu	660	406	1,530	124	146	20.0 B	1,960	875 J*
Lead	25 ST	7439-92-1	l/gu	1.8 JB	1.4 U	2,3 U	2.3 U	130	1.3 U	7.0	1.8 U
Magnesium	35,000 GV	7439-95-4	l/gu	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	l/Bn	190	224	172	198	198	180	202	182
Mercury	TS 7.0	7439-97-6	l/6n	NA	NA	NA	NA	0.16 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/Bn	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium		7440-09-7	l/gn	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	l/gn	AA	NA	NA	NA	1.9 UN	NA	5.3 U	3,1B
Silver	50 ST	7440-22-4	l/gn	NA	AN	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/gu	18,000	16,900	13,600	14,500	17,000	13,800	14,800	12,700
Thallium	0.5 GV	7440-28-0	l/bn	NA	NA	NA	NA	5.9 B	NA	3.9 U	3.2 U
Vanadium	ж.	7440-62-2	l/6n	NA	NA	NA	NA	0.74 U	NA	U 277 U	1,4 U
Zinc	2,000 ST	7440-66-6	l/6n	NA	NA	NA	NA	8.0 B	NA	19,7 B	22.8
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	AN	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	(4)]/6n	850	630	1,702	322	344	200	222	1,057

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Concentration exceeds Standard/Guidance Value.

GV: Guidance value, ST: Standard.

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 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



CONSTITUENT Groundwater Standards/	Standards/ Values	* 440	THE C	*********							
n n n hexavalent lium lesse lium m m m m m m m m m m m m m m m m m m	Values	# n <)	5	11.07/07/0	8/27/2012	11/12/2013	03/18/2015				
m m m In Hexavalent In Total sium lesse r m			UNITS:	(I/Bn)	(l/6n)	(I/6n)	(l/gn)	(l/6n)	(l/gn)	(l/6n)	(I/6n)
n m In Hexavalent Im Total ium ese		7429-90-5	/bn	8.2 U	97.4 B	5.36 J	20 U				
m m Im Hexavalent Im Total ium ese / m	>	7440-36-0	l/gu	2.1 U	1.1 U	20 U	20 U				
m Im Hexavalent Im Total ium esse	T:	7440-38-2	l/gu	1.9 U	4.4 U	25 U	25 U				
um Ium Ium Hexavalent um Total sium nese y y ium ium ium	ST	7440-39-3	l/bn	53.0 B	46.8 B	58.3	138				
um Aexavalent um Total sium nese y t ium ium ium	>	7440-41-7	l/Bn	0.13 U	12 U	20 U	20 U				
um Hexavalent um Total sium nese y min	ST	7440-42-8	l/gn	32.3 B	56.1 B	58	20 U				
um Hexavalent um Total sium nese y ium ium		7440-43-9	l/bn	0.27 U	18 U	10 U	10 U				
um Total um Total sium nese y ium ium		7440-70-2	l/gu	23,900	19,700	13,500	16000				
um Total sium nese y ium ium	T.	18540-29-9	l/gu	20 U	0.2 U	10 U	10.0 U				
sium nese y ium ium	15	7440-47-3	l/gu	1.0 B	8.5	20 U	20 U				
isium Pesse / / um m		7440-48-4	l/gu	U 64.	2.8 B	20 U	20 U				
ssium nnese ry sium um	ST	7440-50-8	l/6n	1.9 B	22.7 B	20 U	20 U				
ssium nnese ry sium um	ST	7439-89-6	i/gn	90.1 B	3,940	7.46 UB	9.48 UB				
ssium nnese ry sium um	TS.	7439-92-1	l/gn	1.5 U	9	15 U	15 U				
nnese ry sium um) GV	7439-95-4	l/gu	4,030 B	1900 B	1,450	1630				
ny sium um	ST	7439-96-5	l/bn	530	643	556	802				
nium um n	ST	7439-97-6	l/6n	0.10 UU*J*	0.1	0.25 U	0.25 U				
num um n	ST	7440-02-0	l/gu	1.2 U	2.8 B	20 U	20 U				
nm n		7440-09-7	l/gn	3,610 B	4920 B	8,220	16700 J				
и	ST	7782-49-2	l/gn	2.6 UNU*J*	2.8 U	25 U	25 U				
	TS.	7440-22-4	l/gn	0.52 UU*J*	.32 U	20 U	20 U				
) ST	7440-23-5	l/gu	29,700	19,200	4,110	14500				
Thallium 0.5 GV	3A	7440-28-0	l/gu	3.78	3.2 U	15 U	15 U				
Vanadium		7440-62-2	l/6n	.56 U	.48	20 U	20 U				
Zinc 2,000 ST	ST	7440-66-6	l/gu	13.3 B	95.4	10.7 UB	20 U				
Cyanide 200 ST	ST	0057-12-5	l/Bn	10.0 U	10.0 U	46.3 UB	10 U				
Iron + Manganese 500 ST*	ST*	*	l/gn	620.1	4,583.0	563,48	802				

NOTES:

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J*Value is an approximate concentration of the analyte as determined by data validation. N: Matrix spike sampe recovery not within control limits.



	NYSDEC Class GA		SITE:	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S
	Groundwater Standards/	CAS#	DATE:	11/9/2007	2/11/2008	5/15/2008	8/4/2008	11/3/2008	2/23/2009	8/11/2009	2/4/2010
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(l/gn)	(l/gn)	(l/gn)	(l/gn)	(J/Bn)	(l/gn)	(l/bn)
Aluminum	*	7429-90-5	l/gu	ΑN	NA	NA	NA	157 B	ΝΑ	165 B	40,5 B
Antimony	3 GV	7440-36-0	/b̄n	AN	NA	ΝA	NA	2.3 U	ΝΑ	3.78	2.1 U
Arsenic	25 ST	7440-38-2	l/b̄n	AN	NA	ΑN	NA	6.8 B	NA	35,0 J*	6,3 B
Barium	1,000 ST	7440-39-3	l/Bn	ΑN	NA	ΑN	NA	320	NA	261	246
Beryllium	3 GV	7440-41-7	l/gu	AN	NA	VΑ	NA	ก 960 ั0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/bn	AN	NA	AN	NA	273 BN	NA	184	162
Cadmium	5 ST	7440-43-9	∥⁄6n	0.32 U	1.4 B	0.27 U	0.67 B	1.0 B	0.35 U	1.1B	0,34 U
Calcium	33	7440-70-2	l/ßn	78,900	91,000	009'22	64,000	009'26	79,700	68,500	58,500
Chromium Hexavalent	50 ST	18540-29-9	l/6n	NA	NA	ΝA	NA	1.9 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/bn	ΑN	NA	NA	NA	0,02 U	NA	2.3 B	2.3 B
Cobalt	36	7440-48-4	/bn	NA	NA	ΑN	NA	U 88.0	ΝA	1.7 B	1,2 U
Copper	Z00 ST	7440-50-8	l/6n	NA	ΑN	NA	NA	7.4 B	AN A	0.62 U	0.83 U
Iron	300 ST	7439-89-6	l/gu	51,100	53,000	51,200	42,700	65,100	51,600	*L 008,56	50,600 J*
Lead	25 ST	7439-92-1	l/gu	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	l/gu	10,200	10,500	8,810	9 ,950	10,700	8,570	6,440	5,920
Manganese	300 ST	7439-96-5	l/gn	609	1,140	716	790	668	461	491	538
Mercury	0.7 ST	7439-97-6	l/ßn	AN	ΝΑ	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	NA	1.2 U	NA	0.82U	2.5 B
Potassium		7440-09-7	l/gu	11,200 J	10,100	10,500	8,880	12,200	9,410	8,210	9650
Selenium	10 ST	7782-49-2	I/Bn	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/bn	20,000	24,000	27,800	24,600	31,600	23,800	18,700	16,300
Thallium	0.5 GV	7440-28-0	l/gu	NA	NA	NA	NA	7.2 B	NA	3.9 U	3.2 U
Vanadium	*	7440-62-2	l/6n	NA	NA	NA	NA	3.5 B	NA	5.9 B	4.6 B
Zinc	2,000 ST	7440-66-6	l/gu	NA	NA	NA	NA	8.0 B	NA	23.0	11.8B
Cyanide	200 ST	0057-12-5	l/6n	NA	NA	NA	NA	10.0 U	NA	10.0 U	≥ 10.0 U
Iron + Manganese	500 ST*	- T	l/gu	61,709	54,140	51,916	43,490	65,768	52,061	94,291	51,138
NOTES											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value,

ST: Standard, GV: 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.



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

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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

	NYSDEC Class GA		SITE:	MW-071	MW-071	MW-071	MW-071	IWW-071	MW-071	MW-071	MW-071
FNEIFITWOOD	Groundwater Standards/	CAS#	DATE	11/9/2007	2/11/2008	5/19/2008	8/5/2008	11/5/2008	2/24/2009	8/14/2009	2/8/2010
Aluminum	×	7429-90-5	l/6n	NA	NA A	N.	Ā	870	A.	40.6 B	28.8 B
Antimony	36V	7440-36-0	J/Bn	NA	ΑN	ĄN	ΨN	2.3 U	ΑN	36.3 B	2.1 U
Arsenic	25 ST	7440-38-2	l/gn	AN	ΑN	NA	NA	1.8 U	A N	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/gu	NA	NA	NA	NA	33.5 B	NA	75.0 B	57.5 B
Beryllium	3 GV	7440-41-7	l/gu	ΝΑ	NA	ΝΑ	NA	U 960.0	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	NA	AN	AN	NA	33.7 B	NA	51.9 B	23.2 B
Cadmium	5 ST	7440-43-9	l/gu	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	9.35 U	0.40 B	0.34 U
Calcium		7440-70-2	l/Bn	73,600 J	18,700	20,900	21,600	28,400	19,800	24,800	14,000
Chromium Hexavalent	50 ST	18540-29-9	l/gu	NA	AN	ΝΑ	NA	0.52 B	AN	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	ΝA	NA	NA	NA	0.02 U	NA	5.3 B	0.58 B
Cobalt		7440-48-4	l/bn	AN	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	l/gn	NA	ΑN	ΑN	N A	1.0 B	A'	0.62 U	2.4B
Iron	300 ST	7439-89-6	l/gn	24,600	24.2 U	13.2 B	30.8 B	7.6 B	9.4B	26.6 B	62.6 B
Lead	25 ST	7439-92-1	l/bn	1.4 U	1.4 U	2.3 U	2.3 ∪	1.3 U	1.3 U	2.1 U	2.18
Magnesium	35,000 GV	7439-95-4	l/6n	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	1/6n	5,920.J	883	434	428	282	212	347	414
Mercury	0.7 ST	7439-97-6	l/bn	AN	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	NA	1.2 U	NA	3.0 B	1.4 U
Potassium		7440-09-7	l/bn	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	l/gu	NA	NA	NA	NA	1.9 U	NA	95.7	2.5 U
Silver	50 ST	7440-22-4	l/gn	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/6n	29,100 J	23,300	23,400	22,500	26,700	20,900	35,000	23,200
Thallium	0.5 GV	7440-28-0	l/6n	NA	NA	NA	NA	1.9 U	NA	20.0	3.2 U
Vanadium	140	7440-62-2	l/6n	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-68-8	l/gn	AN	NA	NA	NA	7.8 B	NA	7.6 B	14.9 B
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	*	l/bn	30,520	687	447.2	458.8	289.6	221.4	356.4	476.6

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guldance Value.

ST: Standard. GV: 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 appronximate concentration of the analyte as determined by data validation. UJ: Value was not detected above quantitation limit but was an appoximate



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

	NYSDEC Class GA		SITE:	MW-071	MW-071	MW-071	MW-071	MW-071	MW-071	MW-071	MW-071
	Groundwater Standards/	CAS#	DATE:	5/26/2011	8/27/2012	11/12/2013	03/18/2015				
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/Bn)	(ng/l)	(I/6n)	(l/Gn)	(l/gn)	(l/bn)
Aluminum	٠	7429-90-5	l/gu	8.2 U	46.7 B	5.13 J	6.44 J				
Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.1 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/Bn	1.9 U	4.4 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/Bn	46.3 B	23.7 B	37.5	67.7				
Beryllium	3 GV	7440-41-7	l/gu	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/Bn	51,0 B	45.7 B	37	20 U				
Cadmium	5.5T	7440-43-9	l/gu	0.27 U	18 U	10 U	10 U				
Calcium	(/#)	7440-70-2	/gn	38,000	21,900	12,700	14200				
Chromium Hexavalent	50 ST	18540-29-9	l/Bn	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/Bn	1.6B	8.0 B	20 U	20 U				
Cobalt	100 mg	7440-48-4	l/Bn	U 67'	.52 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/Bn	1.9 B	U 2.	20 U	20 U				
Iron	300 ST	7439-89-6	l/gu	31.8 B	20.1 B	13.5 UB	8.62 UB				
Lead	25 ST	7439-92-1	l/gu	1.5 U	3.6	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/Bn	6,020	1980 B	1,650	1850				
Manganese	300 ST	7439-96-5	l/Bn	971	506	1,600	2320				
Mercury	0.7 ST	7439-97-6	l/bn	0.10 UU*J*	0.1	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gu	1.2 U*J*	.8 B	20 U	20 U				
Potassium		7440-09-7	l/bn	3440 B	2850 B	1,790	2420 J				
Selenium	10 ST	7782-49-2	l/gu	2.6 UNU*J*	2.8 U	25 U	25 U				
Silver	50 ST	7440-22-4	l l/Bn	0.52 UU*J*	.32 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/bn	22,900	442	5,870	12700				
Thallium	0.5 GV	7440-28-0	l/bn	2.7 U	3.2 U	15 U	15 U				
Vanadium		7440-62-2	l/ōn	.56 U	.23 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/6n	8.1B	57.7	10.8 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gu	10.0 U	10.0 U	44.3 UB	10 U				
Iron + Manganese	500 ST*	*	l/gn	971	909	1,613.50	2320				
NOTES.											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.

J*:Value is an approximate concentration of the analyte as determined by data validation. U* or UB: Result qualified as non-detect based on validation criteria

N: Matrix spike sampe recovery not within control limits.



	NYSDEC Class GA		SITE	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D
CONSTITUENT	Groundwater Standards/ Guidance Values	CAS #	DATE: UNITS:	11/14/2007 (ug/l)	2/12/2008 (ug/l)	5/14/2008 (ug/l)	8/6/2008 (ug/l)	11/5/2008 (ug/l)	2/25/2009 (ug/l)	8/13/2009 (ug/l)	2/5/2010 (Ug/l)
Aluminum	*	7429-90-5	l/Bn	AN	NA	NA	NA	629	NA	494	16700
Antimony	3.6V	7440-36-0	l/bn	ΑN	NA	NA	NA	2.3 U	NA	2.5 U	2,1 U
Arsenic	25 ST	7440-38-2	l/bn	ΑN	ΑN	NA	ĄN	1.8 U	NA	3.0 U	10.5
Barium	1,000 ST	7440-39-3	l/bn	AN	AN	NA	NA	36.5 B	NA	20.0 B	120 B
Beryllium	3.6V	7440-41-7	l/gu	ΝΑ	NA	AN	ΝΑ	0.21 B	NA	0.20 B	0.72 B
Boron	1,000 ST	7440-42-8	l/bn	ΑN	NA	ΑN	NA	64.9 B	NA	57,8 B	42.6 B
Cadmium	5 ST	7440-43-9	l/gu	0.41B	0.45 B	0.27 U	0,50 B	0.35 U	0.35 U	0.26 U	0.82 B
Calcium	// <u>*</u>	7440-70-2	l/bn	11,300 J	066,6	7,730	009'2	7,350	6,450	8,020	43,500
Chromium Hexavalent	50 ST	18540-29-9	l/gn	ΑN	NA	ΑN	NA	1.6 B	ΑN	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	NA	AN	ΝΑ	NA	0.02 U	ΑN	1.5 B	38.5
Cobalt		7440-48-4	l/bn	AN	ΑN	NA	NA	0.88 U	NA	0.76 U	9.9 B
Copper	200 ST	7440-50-8	l/bn	AN	ΑN	ΑN	NA	0,98 B	AN	0.80 B	42.8
Iron	300 ST	7439-89-6	l/gu	986	264	116	107	27.7 B	42.0 B	128	19000 J*
Lead	25 ST	7439-92-1	l/gu	4.3	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	21.1	9.29
Magnesium	35,000 GV	7439-95-4	l/6n	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	l/Gn	482 J	328	240	240	242	180	118	375
Mercury	0.7 ST	7439-97-6	√gn	AN	ΑN	ΝΑ	ΑN	0,13 U	AN	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	ΑN	NA	ΝΑ	AN	16.4 B	NA	9.2 B	23.3 B
Potassium		7440-09-7	l/gu	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	l/gu	NA	NA	NA	NA	1.9 U	NA	5.3 U	3.0 B
Silver	50 ST	7440-22-4	l/6n	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/6n	17,400 J	17,800	17,700	17,800	18,300	16,700	35,000	39,400
Thallium	0.5 GV	7440-28-0	l/gu	AN	ΑN	NA	ΑN	1.9 U	NA	20.0	3.2 U
Vanadium	8 /	7440-62-2	l/gn	AN	ΑN	NA	NA	0.74 U	NA	U 77.0	39.8 B
Zinc	2,000 ST	7440-66-6	l/gn	AN	NA	NA	NA	11.2B	NA	7.6 B	209
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	*	l/gu	1,418	592	356	347	270	222	160	19,375

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard, GV: 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.



	NYSDEC Class GA		SITE:	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D
	Groundwater Standards/	CAS#	DATE:	5/27/2011	8/29/2012	11/14/2013	03/19/2015				
CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/gn)	(l/gn)	(I/6n)	(l/6n)	(ng/l)	(I/6n)
Aluminum	٠	7429-90-5	l/gu	29,600	330	692	2550				
Antimony	3 GV	7440-36-0	l/gn	3.18	2.8 B	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/gn	18.3	1.8 B	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gn	261	48.0 B	77.6	120				
Beryllium	3 GV	7440-41-7	l/gu	1.0 B	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	/bn	30,0 B	41B	48	20 U				
Cadmium	5.ST	7440-43-9	l/gu	1.8 B	0.3 B	10 U	10 U				
Calcium	*)	7440-70-2	l/gu	75,500	27,800	11,400	16300				
Chromium Hexavalent	50 ST	18540-29-9	l/gn	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/gn	73.1	1.0 B	20 U	8.39 J				
Cobalt	(i)	7440-48-4	l/gn	18.5 B	0.4 B	20 U	20 U				
Copper	200 ST	7440-50-8	l/bn	124	2,5 B	20 U	13.8 J				
Iron	300 ST	7439-89-6	l/gu	37,000	765	424	2020				
Lead	25 ST	7439-92-1	l/gn	174	20.6	15 U	18.2				
Magnesium	35,000 GV	7439-95-4	l/gu	17,000	5,800	3,660	5370				
Manganese	300 ST	7439-96-5	l/bn	1,020	150	147	131				
Mercury	0.7 ST	7439-97-6	l/gu	0.22 J*	0.1 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gu	57.7	15.2 B	17.9 J	25.8				
Potassium	2965	7440-09-7	l/gn	13,700	7,370	3,780	5320				
Selenium	10 ST	7782-49-2	l/bn	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/bn	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/6n	15,900	40,000	6,830	8650				
Thallium	0.5 GV	7440-28-0	l/gu	8.1B	2.9 U	15 U	15 U				
Vanadium		7440-62-2	l/gu	74.7	3.0 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gn	535	34.1	30.8 UB	160				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	43.4 UB	10 U				
Iron + Manganese	500 ST*	100	l/gn	38,020	915	57.1	2151				

NOTES

Estimated due to data validation criterla.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



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

	NYSDEC Class GA		SITE:	MW-111	MW-111	MW-111	MW-11]	MW-111	MW-111	MW-111	MW-111
	Groundwater Standards/	CAS#	DATE:	11/14/2007	2/12/2008	5/14/2008	8/6/2008	11/5/2008	2/25/2009	8/13/2009	2/5/2010
CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/gn)	(ng/l)	(l/gn)	(l/6n)	(l/gn)	(l/gn)	(l/gu)
Aluminum	(4)	7429-90-5	Vgu	AN	NA	NA	NA	8.7 U	AN	70.4 B	86.2 B
Antimony	3 GV	7440-36-0	l/gn	NA	AN	AN	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/Bn	NA	NA NA	AN	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/Bn	NA	AN	AN	NA	7.6 B	NA	2.9 U	6,2 B
Beryllium	3 GV	7440-41-7	l/gu	NA	ΝΑ	ΝΑ	NA	U 960.0	NA	0.13 U	0,26 U
Boron	1,000 ST	7440-42-8	l/bn	NA	NA	NA	NA	28.2 B	NA	4.3 U	22.7 B
Cadmium	5 ST	7440-43-9	l/gu	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	3	7440-70-2	l/gu	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	l/gu	ΑN	ΑN	Ā	ΑN	0.80 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	AN	NA	ĄN	AN	0.02 U	AN	0.49 U	0.88 B
Cobalt	14	7440-48-4	l/bn	AN	NA	ΑN	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	l/Bn	AN	NA	AN	ΝA	0.65 U	NA	0.90 B	2.0 B
Iron	300 ST	7439-89-6	l/Bn	25.1	24,2 ∪	280	6.6 U	10 B	13.7 B	10,9 B	125 J*
Lead	25 ST	7439-92-1	l/gu	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	l/gu	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	l/bn	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	l/gu	NA	NA	NA	ΥN	1.9 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gn	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	54	7440-09-7	l/gu	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	l/gn	NA	NA	NA	NA	0.54 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	l/gu	AN	NA	NA	NA	1.9 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/6n	5,510 J	5,430	7,860	6,770	5,500	4,960 B	N 55	4,510 B
Thallium	0.5 GV	7440-28-0	l /bn	AN	NA	NA	NA	0.74 U	NA	3.9 U	3.2 U
Vanadium		7440-62-2	l/bn	ΝΑ	NA	NA	NA	6.0 B	NA	U 277 U	1.4 U
Zinc	2,000 ST	7440-66-6	I/Bn	NA	NA	NA	NA	0.13 U	NA	6.7 U	16.8 B
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	10.0 U	NA	10 U	10.0U
Iron + Manganese	500 ST*	%€:	l/gn	125.1	71.2	372.2	34.9	21.8	22.3	11.3	236
NOTES:											

J: Estimated due to data validation criteria.

ST: Standard. GV: Guidance value.

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 appronximate concentration of the analyte as determined by data validation. UJ: Value was not detected above quantitation limit but was an appoximate

Appendix A-2

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

	NYSDEC Class GA		SITE:	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111
	Groundwater Standards/	CAS#	DATE:	5/27/2011	8/29/2012	11/14/2013	03/19/2015				
CONSTITUENT	Guidance Values		UNITS:	(l/6n)	(ng/l)	(ug/l)	(l/gn)	(l/gn)	(l/gn)	(l/6n)	(I/Bn)
Aluminum	8	7429-90-5	l/gu	8.2 U	30.0 B	20 U	11.2 J				
Antimony	3 GV	7440-36-0	l/gn	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/gn	1.9 U	1.5 U	25 U	25 U				100
Barium	1,000 ST	7440-39-3	l/gu	1.9 B	42 B	13.4 J	L 7.71				
Beryllium	3 GV	7440-41-7	l/gu	0.13 U	0.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	10.9 B	19.5 B	13	20 U				
Cadmium	5ST	7440-43-9	l/gu	0.27 U	0.10 B	10 U	10 U				
Calcium	**	7440-70-2	ng/l	968 B	7,740	2,480	3640				
Chromium Hexavalent	50 ST	18540-29-9	/Bn	20 U	0.2 U	10 U	10.0 U			5	
Chromium Total	50 ST	7440-47-3	l/b̄n	1.6 B	0.34 U	20 U	20 U				
Cobalt		7440-48-4	l/gu	.49 U	0.28 U	20 U	20 ∪				
Copper	200 ST	7440-50-8	l/6n	1.6 B	.52 U	7.89 J	20 U				
Iron	300 ST	7439-89-6	l/6n	37.9 B	3.78	15 UB	21.2 UB				
Lead	25 ST	7439-92-1	l/6n	1.5 U	7.8	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/bn	242 B	1660 B	612	686				
Manganese	300 ST	7439-96-5	l/6n	25.8	188.0	34.1	40.8				
Mercury	0.7 ST	7439-97-6	l/bn	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	1.2 U	1.4 U	20 U	20 U				
Potassium		7440-09-7	ng/	1050 B	4210 B	2140	2910				
Selenium	10 ST	7782-49-2	l/Bn	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gn	0.52 UU*J*	.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/gu	7,860	24,700	1,500	1770				
Thallium	0.5 GV	7440-28-0	l/gu	2.7 U	2.9 U	15 U	15 U				
Vanadium		7440-62-2	l/gu	0.56 U	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-86-6	l/gn	10.3 B	6.1B	12.7 UB	7.61 J				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	43.5 UB	10 U				
Iron + Manganese	500 ST*	*	l/gu	63.7	191.7	49.1	40.8				

J: Estimated due to data validation criteria.

ST: Standard. GV: Guidance value.

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.



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

	NYSDEC Class GA		SITE	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S
CONSTITUENT	Groundwater Standards/ Guidance Values	CAS#	DATE	11/14/2007 (ug/l)	2/12/2008 (ug/l)	5/14/2008 (ug/l)	8/6/2008 (ug/l)	11/5/2008	2/25/2009 (ug/l)	8/13/2009 (ua/l)	2/5/2010 (ua/l)
Afuminum	•	7429-90-5	l/gn	Ϋ́	Ą	AN	ΑΝ	2730	Ā	52.0 B	47.6 B
Antimony	3 GV	7440-36-0	l/gn	Ą	ΝΑ	Ϋ́	ΑN	2.3 B	ΨZ	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/bn	ΑN	NA	NA	NA	1.8 U	N.	3.0 U	2,3 U
Barium	1,000 ST	7440-39-3	l/bn	ĄN	NA	ΑN	ΝΑ	57.4 B	Ϋ́	32.3 B	41.4 B
Beryllium	3 GV	7440-41-7	l/gu	ĄN	NA	ΝΑ	ΑN	0,14 B	ΑN	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	ΝΑ	NA	NA	Ą	68.6 B	Ą	55.5 B	73.9 B
Cadmium	5.ST	7440-43-9	l/gu	0.32	0.32 U	0.27 U	0.27 U	0,35 U	0.35 U	0.26 U	0.34 U
Calcium	36 0	7440-70-2	l/gu	44,000 J	45,600	55,600	58,100	46,500	43,000	44,300	60,800
Chromium Hexavalent	50 ST	18540-29-9	l/ßn	ΑN	NA	ΑN	ΑN	0.02 U	W	0.02 U	0,02 U
Chromium Total	50 ST	7440-47-3	l/ßn	Ą	Ą	ΑN	Ϋ́	109	ĄN	6.8 B	47.9
Cobalt		7440-48-4	l/6n	ΝΑ	NA	ĄZ	A'N	3.6 B	ΑN	0.80 B	1.2 U
Copper	200 ST	7440-50-8	l/gu	ΑN	NA	ĄN	ĄN	12,6 B	A'N	1.9 B	3.6 B
Iron	300 ST	7439-89-6	l/bn	36.0 B	111	6,540	2,280	3,440	066	111	172 J*
Lead	25 ST	7439-92-1	l/bn	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	l/gn	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	l/gu	3,120 J	3,020	4,070	2,910	3,070	3,270	3,250	4,450
Mercury	0.7 ST	7439-97-6	l/gn	NA	NA	NA	Ν	0.13 U	NA	0.10 U	0,10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	AN	7.3 B	NA	1.8 B	3.1B
Potassium).	7440-09-7	l/gn	29,900	19,900	17,100	25,200	25,300	12,900	15,700	19000
Selenium	10 ST	7782-49-2	l/gn	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	l/gn	NA	NA	AN	NA	0.55 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	l/6n	54,900 J	36,500	45,300	52,400	56,200	38,300	38,900	58,800
Thallium	0.5 GV	7440-28-0	l/6n	NA	NA	ΑN	NA	1.9 U	NA	3,9 U	3.2 U
Vanadium	3	7440-62-2	l/gn	AN	NA	NA	NA	7.68	NA	U 277 U	1.4 U
Zinc	2,000 ST	7440-68-6	l/gn	NA	NA	NA	NA	17.2 B	NA	12.0 B	5.0 B
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	AN	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	•0	l/bn	3,156.0	3,131.0	9,610	5,170	6,510	4,260	3,361	4.622

J: Estimated due to data validation criteria.

GV: Guidance value. ST: Standard.

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.



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

	NYSDEC Class GA		SITE:	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S
	Groundwater Standards/	CAS#	DATE:	5/27/2011	8/29/2012	11/14/2013	03/19/2015				
CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/6n)	(l/gn)	(ng/l)	(l/gn)	(l/gn)	(l/6n)	(l/gn)
Aluminum		7429-90-5	l/gn	133 B	26.1 B	11.2 J	21.1				
Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.8 U	6.01 J	20 U				
Arsenic	25 ST	7440-38-2	l/gu	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gu	28.5 B	30.0 B	63.7	65.2				
Beryllium	3 GV	7440-41-7	l/bn	13 U	₁12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gn	38.5 B	52.8 B	62	20 U				
Cadmium	5 ST	7440-43-9	l/gn	U 27.	U 780.0	10 U	10 U				
Calcium	·	7440-70-2	l/gu	39,500	47,500	47,900	33400				
Chromium Hexavalent	50 ST	18540-29-9	l/bn	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/gu	9.1B	0.70 B	20 U	20 U				
Cobalt	•	7440-48-4	l/6n	.68 B	0.30 B	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	3.9 B	2.0 B	20 U	20 U				
Iron	300 ST	7439-89-6	l/bn	484	11.3 B	23.3 UB	50.1 UB				
Lead	25 ST	7439-92-1	l/gu	1.5 U	6.2	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/6n	5,940	6,300	6,500	5630				
Manganese	300 ST	7439-96-5	l/bn	2,440	1,140	668	541				
Mercury	0.7 ST	7439-97-6	l/gu	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gn	1.2 U	3.6 B	20 U	20 U				
Potassium	()	7440-09-7	l/gn	14,600	8,510	11,100	12900				
Selenium	10 ST	7782-49-2	/bn	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gu	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/Bn	44,100	57,000	14,900	13700				
Thallium	0.5 GV	7440-28-0	l/gu	2.7 U	2.9 U	15 U	15 U				
Vanadium	300	7440-62-2	l/gu	.72 B	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gn	12.5 B	6.0 B	8.65 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	42.9 UB	10 U				
Iron + Manganese	500 ST*		I/Bn	2,894	1,140	691.3	541				

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

ST: Standard. GV: 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.



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

CONSTITUENT Aluminum Antimony	Croundwister Standarde/				771-AAIA	771-MM	UZI-WIW				141147
CONSTITUENT Aluminum Antimony	GIOGILAWATE! STAILURIUS!	CAS#	DATE:	11/14/2007	2/12/2008	5/14/2008	8/6/2008	11/5/2008	2/25/2009	8/13/2009	2/5/2010
Aluminum Antimony	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/gn)	(l/6n)	(l/6n)	(l/gn)	(ng/l)	(l/gn)
Antimony		7429-90-5	l/bn	Ϋ́	AN	AN	ĄN	8.7 U	ΑN	12.5 U	101 B
	3 GV	7440-36-0	l/6n	ΑN	AN	AN	Ϋ́	2.3 U	ΑN	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	l/gu	NA	NA	AN	NA	1.8 U	ΝΑ	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	l/6n	AA	NA	Ϋ́	NA	4.7B	A A	6.6 B	7.5 B
Beryllium	3 GV	7440-41-7	/6n	NA	NA	NA	NA	U 960.0	AN	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	l/gu	AN	AN	ΑN	ΝΑ	19.5 B	NA NA	9.5 B	19.0 B
Cadmium	5 ST	7440-43-9	l/gu	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	ě	7440-70-2	l/gn	11,500 J	11,100	12,000	11,200	11,600	12,500	11,500	9,410
Chromium Hexavalent	50 ST	18540-29-9	l/gn	ΑN	AN	ΑN	Ϋ́	0,80 B	ĄV	0,02 U	0.02 U
Chromium Total	50 ST	7440-47-3	l/gu	AN	AN	ΑN	ΑN	0.02 U	ΑN	1.18	0.65 B
Cobalt		7440-48-4	l/bn	AN	AN	ΑN	AN A	0.88 U	Ą	U 92'0	1.2 U
Copper	200 ST	7440-50-8	l/gu	Ϋ́	AN	Ϋ́	Ą	0.65 U	Ą	0.90 B	2.9 B
Iron	300 ST	7439-89-6	l/gu	28.8 B	24.2 U	37.4B	0.9 0.9	9.2 B	12.6 B	12.4 B	139 J⁴
Lead	25 ST	7439-92-1	l/gu	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	l/gu	5,770 J	5,480	6,130	6,260	6,100	6,560	5,420	5190
Manganese	300 ST	7439-96-5	l/6n	1.9 JB	2.7 B	4.7 B	3.0 B	3.1B	3.6 B	2,6 B	8.9 B
Mercury	0.7 ST	7439-97-6	l/ßn	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	l/gu	NA	NA	AN	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	W.	7440-09-7	l/gu	878 B	945 B	1,030 B	1,340 U	1,060 B	1,150 B	1,210 B	1,400 B
Sefenium	10 ST	7782-49-2	l/gu	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	I/Bn	NA	ΝA	NA	NA	0.54 U	NA	0.33 U	U 583 U
Sodium	20,000 ST	7440-23-5	l/Bn	9,580 J	12,000	11,900	13,400	11,700	13,600	15,300	14,800
Thallium	0.5 GV	7440-28-0	l/gu	NA	ΝA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	**	7440-62-2	l/gu	NA	NA	NA	NA	0.74 U	NA	U 277 U	1.4 U
Zinc	2,000 ST	7440-66-6	ng/l	NA	NA	AN	NA	5.2 B	NA	22.3	13.7 B
Cyanide	200 ST	0057-12-5	l/gu	AN	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	35	l/gn	30.7	28.9	42.1	9.6	12.3	16.2	15.0	147.9

J. Estimated due to data validation criteria.

ST: Standard. GV: Guidance value.

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

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

	NYSDEC Class GA		SITE	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D
	Groundwater Standards/	CAS#	DATE:	5/27/2011	8/29/2012	11/14/2013	03/20/2015				
CONSTITUENT	Guidance Values		UNITS:	(ngn)	(ng/l)	(l/6n)	(l/gn)	(I/Bn)	(I/gn)	(ng/l)	(l/gn)
Aluminum		7429-90-5	l/gu	290	70.9 B	20 U	9.22 J				
Antimony	3 GV	7440-36-0	l/6n	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	/bn	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/Bn	8.0 B	4.3 B	L 79.7	9.53 J				
Beryllium	3 GV	7440-41-7	l/gn	0.13 U	0.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/6n	9.0 B	11 B	13	20 U				
Cadmium	5 ST	7440-43-9	l/gu	0.27 U	0.18	10 U	10 U				
Calcium		7440-70-2	l/bn	066'9	5,030	4,950	4710				
Chromium Hexavalent	50 ST	18540-29-9	l/bn	20 U	0.2 U	10 U	10,0 U				
Chromium Total	50 ST	7440-47-3	l/gn	2.4 B	1.18	20 U	20 U				
Cobalt	**	7440-48-4	l/Bn	0.49 ∪	.28 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/gn	4.18	1.2 B	20 U	20 U				
Iron	300 ST	7439-89-6	l/bn	541	83.8 B	11.2 UB	10.5 UB				
Lead	25 ST	7439-92-1	l/bn	2.8 B	6.7	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/bn	3,520 B	2400 B	2,540	2430		2		
Manganese	300 ST	7439-96-5	l/bn	14.8 B	23.5	20 U	21.2				
Mercury	0.7 ST	7439-97-6	l/bn	0.10U U*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/6n	1.2 U	1.1B	20 U	20 U		20		
Potassium		7440-09-7	/bn	1,590 B	85.3 U	629	748				
Selenium	10 ST	7782-49-2	l/gn	2.6 UNU*J*	2.1 U	25 U	25 U				
Silver	50 ST	7440-22-4	l/gu	0.52 UU*J*	0.29 U	20 U	20 U				
Sodium	Z0,000 ST	7440-23-5	l/gn	12,000	8,580	2,810	2780				
Thallium	0.5 GV	7440-28-0	l/gn	2,7 U	2.9 U	15 U	15 U				
Vanadium	*	7440-62-2	l/gu	1.1B	0.20 B	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gu	25.1	12.9 B	10.8 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gu	10.0 U	10.0 U	36.3 UB	10 U				
Iron + Manganese	500 ST*	W.	l/bn	555.8	107.3	11.2	21.2				
NOTES.											

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

GV: Guidance value. ST: Standard.

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 valldation.

N: Matrix spike sampe recovery not within control limits. UJ: Value was not detected above quantitation limit but was an appoximate



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

CONSTITUENT Control moderne "Standere" Standere" Stander		NYSDEC Class GA		SITE:	MW-12I	MW-12I	MW-12I	MW-12!	MW-12!	MW-12I	MW-12I	MW-121
TITLENT		Groundwater Standards/	CAS#	DATE:	11/14/2007	2/12/2008	5/14/2008	8/6/2008	11/5/2008	2/25/2009	8/13/2009	2/5/2010
y 7429-05-5 ug/l NA NA NA 87 U NA 125 U y GSV 7429-05-5 ug/l NA NA NA 87 U NA 25 U m 25 ST 7440-38-2 ug/l NA NA NA 138 U NA 25 B m 3 GV 7440-47-3 ug/l NA NA NA 138 U NA 25 B m 1,000 ST 7440-47-3 ug/l NA NA NA 0.78 U NA 23.0 B m 5 ST 7440-47-3 ug/l 0.32 U 0.32 U 0.27 U 0.37 U NA 0.30 B m 5 ST 7440-47-3 ug/l NA NA NA 0.41 U NA NA 0.42 U 0.32 U m 5 ST 7440-42-9 ug/l 0.32 U 0.32 U <th>CONSTITUENT</th> <th>Guidance Values</th> <th></th> <th>UNITS:</th> <th>(l/gn)</th> <th>(l/gn)</th> <th>(l/6n)</th> <th>(l/bn)</th> <th>(l/gn)</th> <th>(l/6n)</th> <th>(l/gn)</th> <th>(I/6n)</th>	CONSTITUENT	Guidance Values		UNITS:	(l/gn)	(l/gn)	(l/6n)	(l/bn)	(l/gn)	(l/6n)	(l/gn)	(I/6n)
by 3 GV 7440-38-0 ug/l NA NA NA NA 1,000 1,000 ST 7340-38-2 ug/l NA NA NA 1,00 NA 1,00 m 1,000 ST 7440-38-2 ug/l NA NA NA 1,00 NA 1,00 m 1,000 ST 7440-42-3 ug/l NA NA NA 1,00 NA 1,00 m 1,000 ST 7440-42-3 ug/l NA NA NA NA 1,00 NA 1,00 m 5 ST 7440-42-3 ug/l NA NA NA NA 1,00 1,10 NA 1,00 1,10 NA 1,10 1,10 NA 1,10 1,10 NA 1,10 1,10 NA 1,10 1,10 NA NA 1,10 1,10 NA NA NA NA NA 1,10 1,10 NA NA NA NA NA <td< td=""><td>Aluminum</td><td>1 (6)</td><td>7429-90-5</td><td>Vān</td><td>AN</td><td>NA</td><td>NA</td><td>NA</td><td>8.7 U</td><td>AN</td><td>12.5 U</td><td>190 B</td></td<>	Aluminum	1 (6)	7429-90-5	Vān	AN	NA	NA	NA	8.7 U	AN	12.5 U	190 B
December Color St T440-392 Ug/l NA	Antimony	3 GV	7440-36-0	/ßn	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Maintenance 1,000 ST 7440-28-3 ug/l NA NA NA NA NA NA 13.0 B NA 28.5 B	Arsenic	25 ST	7440-38-2	l/gu	AN	NA	NA	ΝΑ	1.8 U	AN	3.0 U	2.3 U
mm 3 GV 7440-41-7 ug/l NA NA NA 0.096 U NA 0.10 mm 3 GV 1,000 ST 7440-42-8 ug/l NA NA NA 0.09 NA 0.27 U 0.27 U 0.27 U 0.28 U<	Barium	1,000 ST	7440-39-3	l/gu	NA	NA	NA	NA	13.0 B	NA	28.5 B	23.4 B
mm 5ST 7440-42-8 ug/l NA NA NA NA 30.7 B NA 23.9 B 23.9 B 23.9 B 23.0 B NA NA NA NA 0.27 U 0	Beryllium	3 GV	7440-41-7	l/gn	NA	NA	NA	ΝA	U 960.0	ΝΑ	0.13 U	0.26 U
Immatished 5 ST 740-43-9 ug/l 6.32 U 0.27 U 0.27 U 0.35 U 0.35 U 0.25 U Immericand - 1 440-70-2 ug/l 6,78 U 6,480 7,480 6,570 1,1800 9,260 Immericand 50 ST 18640-28-9 ug/l NA NA NA 0.41 U NA 0.43 U NA 0.43 U 0.43 U 0.43 U 0.44 U 0.44 U NA NA NA 0.04 U NA 0.04 U NA 0.44 U 0.44 U NA NA NA 0.44 U 0.44 U 0.44 U NA NA NA 0.74 U NA 0.74 U NA 0.74 U NA 0.76 U 0.75 U 0.76 U	Boron	1,000 ST	7440-42-8	l/6n	AN	NA	NA	NA	30.7 B	NA	23.9 B	22.4 B
Interpretation Figo 1 6,480 7,190 7,480 6,570 11,800 9,260 Inm Hoxavalent 50 ST 1840-29-9 ug/l NA NA NA NA 0,41 U NA 0,02 U NA 0 0,02 U <t< td=""><td>Cadmium</td><td>5 ST</td><td>7440-43-9</td><td>l/gu</td><td>0.32 U</td><td>0.32 U</td><td>0,27 U</td><td>U 72.0</td><td>0.35 U</td><td>0.35 U</td><td>0.26 U</td><td>0.97 B</td></t<>	Cadmium	5 ST	7440-43-9	l/gu	0.32 U	0.32 U	0,27 U	U 72.0	0.35 U	0.35 U	0.26 U	0.97 B
um Flexavalent 50 ST 18540-29-9 ug/l NA NA NA NA 0.41 U NA 0.02 U	Calcium	3≸1	7440-70-2	l/gu	5,780 J	6,480	7,190	7,480	6,570	11,800	9,260	8,260
num folal 50 ST 7440-47-3 ugli NA NA NA NA 0.02 U NA 0.49 U rum folal 7440-47-3 ugli NA NA NA 0.02 U NA 0.76 U ref 200 ST 7440-50-8 ugli 24.2 U 264 66.6 B 12.0 B 7.8 B 9.2 B 14.0 B rese 300 ST 7439-92-1 ugli 24.2 U 264 66.6 B 12.0 B 7.8 B 9.1 B 14.0 B 1.2 U 7.8 B 9.2 B 14.0 B 1.3 U 1.3 U 9.1 B 1.0 B 1.3 U 1.3 U 1.3 U 9.1 B 1.0 B 1.3 U	Chromium Hexavalent	50 ST	18540-29-9	l/gu	NA	NA	NA	ΝΑ	0.41 U	NA	0.02 U	0,02 U
TA40-48-4 ug/l NA NA NA NA 0.86 U NA 0.70 U TA40-50-8 ug/l NA NA NA 0.65 U NA 0.70 U TA40-50-8 ug/l NA NA 0.65 U NA 0.70 U Sisum 25 OS ST 7439-89-4 ug/l 14.0 1.40 U 1.20 B 1.30 U 1.30 U 1.40 B y 25,000 GV 7439-89-5 ug/l 14.0 1.40 B 1.00 B 1.30 U 1.30 U 1.30 U 1.30 U 1.40 B 1.30 U 1.30 U 1.40 B 1.30 U 1.3	Chromium Total	50 ST	7440-47-3	l/gu	AN	NA	ΝΑ	NA	0.02 U	ΑN	0.49 ∪	1.0 B
sign NA NA NA NA 0.65 U NA 0.70 B sign 300 ST 7439-89-6 ug/l 24.2 U 264 66.6 B 12.0 B 7.8 B 92.8 I 14.9 B sign 25 ST 7439-89-4 ug/l 14 U 1.4 U 2.3 U 1.3 U 1.3 U 1.3 U 1.3 U 1.3 U 9.1 sign 35,000 GV 7439-96-5 ug/l 650 J 91 1,100 B 1,200 2,650 3,760 no 0.3 ST 100 ST 1439-96-5 ug/l NA NA NA 1,200 1,600 B 3,760 nm 0.0 ST 1439-96-5 ug/l NA NA NA 1,200 1,600 B 1,600 B sigm 0.0 ST 1440-02-0 ug/l NA NA NA NA 1,200 1,600 B	Cobalt	1162	7440-48-4	l/Bn	NA	NA	ΝΑ	ΑN	0.88 U	AN	0.76 U	1.2 U
Signature 24.2 U 264 U 66.6 B 12.0 B 7.8 B 9.2 B 14.9 B 14.0 B 14.0 B 12.0 B 13.0 B 14.9 B 14.0 B 14.0 B 13.0 B<	Copper	200 ST	7440-50-8	l/gn	NA	NA	AN	ΝA	0.65 U	NA	0,70 B	4.1 B
Signature 25 ST 7439-92-1 ug/l 14 U 1.4 U 2.3 U 1.3 U 1.3 U 1.3 U 9.1 Signature 35,000 GV 7439-95-4 ug/l 660 B 1,120 B 1,040 B 199 B 1,070 B 1,070 B ny 0.7 ST 7439-97-6 ug/l NA NA NA 0.13 U NA 0.10 U ny 0.7 ST 7440-02-0 ug/l NA NA NA 0.13 U NA 0.10 U ny 0.7 ST 7440-02-0 ug/l NA NA NA 0.13 U NA 0.10 U ny 0.7 ST 7440-02-0 ug/l NA NA NA 0.13 U NA 0.10 U ny 0.0 ST 7440-02-4 ug/l NA NA NA 0.13 U NA NA 0.10 U NA	Iron	300 ST	7439-89-6	l/6n	24.2 U	264	66,6 B	12.0 B	7.8 B	9.2 B	14.9 B	161 J*
seium 35,000 GV 7439-95-4 ug/l 660 U 916 B 1,00 B 1,040 B 699 B 1,040	Lead	25 ST	7439-92-1	l/6n	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	9.1	1.8 U
sing 300 ST 7439-96-5 ug/l NA NA NA 1,200 2,650 3,760 ry 0.7 ST 7439-97-6 ug/l NA NA NA 0.13 U NA 0.10 U ry 0.7 ST 7440-02-0 ug/l NA NA 1.2 U NA 0.13 U rim 100 ST 7440-02-7 ug/l NA NA 1.2 U NA 0.82 U rim 50 ST 7440-02-7 ug/l NA NA NA 1.9 U NA 5.3 U rim 0.5 GV 7440-22-4 ug/l NA NA NA 1.9 U NA 0.33 U rim 0.5 GV 7440-22-4 ug/l NA NA NA 1.9 U NA 1.400 rim 0.5 GV 7440-22-5 ug/l NA NA NA NA NA 0.74 U	Magnesium	35,000 GV	7439-95-4	l/gu	889 JB	960 B	1,120 B	1,040 B	899 B	1,530 B	1,070 B	984 B
ryy 0.7 ST 7439-97-6 ug/l NA NA NA 0.13 U NA 0.10 U sium 100 ST 7440-02-0 ug/l NA NA NA 1.2 U NA 0.03 U um 100 ST 7440-02-0 ug/l NA NA 1.2 U NA 0.03 U um 10 ST 7440-02-1 ug/l NA NA 1.9 U NA 5.3 U n 20,000 ST 7440-22-4 ug/l NA NA NA 1.9 U NA 1.4500 14,500 lim 0.5 GV 7440-22-4 ug/l NA NA NA 1.490 NA 1.9 U NA 14,500 lim 0.5 GV 7440-22-5 ug/l NA NA NA 0.74 U NA 0.74 U NA 0.77 U see 2.000 ST 740-26-6 ug/l NA NA NA NA NA NA 0.74 U NA NA	Manganese	300 ST	7439-96-5	l/6n	650 J	918	1,040	1,540	1,200	2,650	3,760	457
sium 100 ST 7440-02-0 ug/l NA NA NA 1.2 U NA 0.82 U um 10 ST 7440-09-7 ug/l 2,150 B 2,750 B 3,950 B 3,920 B 3,870 B 5,630 C um 10 ST 7782-49-2 ug/l NA NA NA 1,9 U NA 5,3 U m 20,000 ST 7440-23-5 ug/l NA NA NA 1,400 14,500 14,500 14,500 lim 0.5 GV 7440-22-5 ug/l NA NA NA 1,8 U NA 3.9 U lim 2,000 ST 7440-22-6 ug/l NA NA NA 1,8 U NA 0,74 U NA 0,77 U see 2,000 ST 140-66-6 ug/l NA NA NA 10.0 U NA 10,0 U see 200 ST -90 ST -9 I ug/l NA NA 10.0 U NA 10,0 U see	Mercury	0.7 ST	7439-97-6	l/6n	NA	NA	NA	ΝΑ	0.13 U	NA	0.10 U	0,10 U
signm - 7440-09-7 ug/l 2,150 B 2,750 B 3,300 B 3,320 B 3,870 B 5,630 B 5,630 B um 10 ST 7782-49-2 ug/l NA NA NA 1,9 U NA 5,3 U S 3,9 U S 3,9 U NA 1,9 U NA 5,3 U S 3,0 U S 3,0 U S 3,0 U NA NA NA 1,9 U NA 5,3 U NA 5,3 U NA 3,3 U NA 1,4 U NA NA 1,4 U NA 1,1 U 1,1	Nickel	100 ST	7440-02-0	l/gu	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
um 10 ST 7782-49-2 ug/l NA NA NA NA 1.9 U NA 5.3 U S.3 U S.3 U NA S.3 U NA NA NA NA NA NA NA S.3 U NA NA S.3 U NA	Potassium	160	7440-09-7	/gn	2,150 B	2,750 B	3,300 B	3,950 B	3,320 B	3,870 B	5,630	5020
TA40-22-4 Ug/I NA NA NA NA NA NA 0.54 U NA 0.33 U III 20,000 ST 7440-23-5 Ug/I 10,700 J 11,700 11,700 10,700 14,500 14,500 III 0.5 GV 7440-28-0 Ug/I NA NA NA 1,9 U NA 3.9 U III 10.00 ST 7440-62-2 Ug/I NA NA NA 1,9 U NA 3.9 U III 2,000 ST 2,000 ST 2,000 ST 0,74 U NA 10.0 U	Sefenium	10 ST	7782-49-2	l/gn	NA	NA	NA	NA	1.9 U	NA	5.3 U	2,5 U
Imm 20,000 ST 7440-23-5 ug/l 10,700 J 11,400 12,400 11,700 10,700 J 14,500 14,500 um 0.5 GV 7440-28-0 ug/l NA NA NA 1,9 U NA 3.9 U dium - 7440-62-2 ug/l NA NA NA 0,74 U NA 3.9 U dium 2,000 ST 7440-66-6 ug/l NA NA NA 2.8 B NA 2.9 B ide 200 ST 057-12-5 ug/l NA NA NA 10.0 U NA 10.0 U Manganese 500 ST ug/l 674 1,162 1,106.6 150.7 S 2,659.2 3,769.2 3,769.2	Silver	50 ST	7440-22-4	l/gn	NA	NA	NA	NA	0.54 U	NA	0,33 U	0.83 U
um 0.5 GV 7440-28-0 ug/l NA NA NA 1.9 U NA 3.9 U dlum - 7440-62-2 ug/l NA NA NA 0.74 U NA 0.77 U dlum 2,000 ST 7440-66-6 ug/l NA NA NA NA 0.77 U ide 200 ST 0.057-12-5 ug/l NA NA NA NA 10.0 U NA 10.0 U Manganese 500 ST - ug/l 674 1,182 1,106.6 150.7.8 2,659.2 3,769.2 3,769.2	Sodium	20,000 ST	7440-23-5	l/gn	10,700 J	11,400	12,400	11,700	10,700	14,900	14,500	9,940
dium - 7440-62-2 ug/l NA NA NA O.74 U NA 0.77 U de 2,000 ST 7440-66-6 ug/l NA NA NA 2.8 B NA 29 ide 200 ST 0057-12-5 ug/l NA NA NA 10.0 U NA 10.0 U Manganese 500 ST - ug/l 674 1,182 1,106 150.2 2,659.2 3,769.2	Thallium	0.5 GV	7440-28-0	l/gn	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
2,000 ST 7440-66-6 ug/l NA NA NA NA 2.8 B NA 29 ide 200 ST 0057-12-5 ug/l NA NA NA 10.0 U NA 10.0 U Manganese 500 ST - ug/l 674 1,182 1,106 1502 2,659.2 3,769.2	Vanadium	300	7440-62-2	l/gu	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
200 ST 0057-12-5 ug/l NA NA NA 10.0 U NA 10.0 U NA 10.0 U NA 10.0 U	Zinc	2,000 ST	7440-66-6	l/gn	NA	NA	NA	NA	2.8 B	NA	29	65.5
500 ST* - lug/l 674 1,182 1,106.6 1552 1207.8 2,659.2 3,789.2	Cyanide	200 ST	0057-12-5	l/gu	NA	NA	NA	NA	10.0 U	NA	10,0 U	10.0 U
	Iron + Manganese	500 ST*	*	l/6n	874	1,182	1,106.8	1552	1207.8	2,659.2	3,769.2	618

J: Estimated due to data validation criteria.

ST: Standard. GV: Guidance value.

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*:∀alue is an approximate concentration of the analyte as determined by data validation. UJ: Value was not detected above quantitation limit but was an appoximate



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

	NYSDEC Class GA		SITE	MW-12I	MW-12I	MW-121	MW-12I	MW-121	MW-12I	MW-12I	MW-12!
	Groundwater Standards/	CAS#	DATE:	5/27/2011	8/29/2012	11/14/2013	03/20/2015				
CONSTITUENT	Guidance Values		UNITS	(ngn)	(ng/l)	(I/Bn)	(l/gn)	(I/Bn)	(l/gn)	(l/6n)	(l/6n)
Aluminum		7429-90-5	l/Bn	562	299	7.24 J	6.86 J				
Antimony	3 GV	7440-36-0	l/gu	2.1 U	1.8 U	20 U	20 U				
Arsenic	25 ST	7440-38-2	l/gu	1.9 U	1.5 U	25 U	25 U				
Barium	1,000 ST	7440-39-3	l/gu	18.8 B	22.1 B	37.3	56.8				
Beryllium	3 GV	7440-41-7	l/gu	0.13 U	.12 U	20 U	20 U				
Boron	1,000 ST	7440-42-8	l/gu	13.0 B	18.3 B	19	20 U				
Cadmium	5ST	7440-43-9	l/gu	2.5 B	4.2 B	10 U	10 U				
Calcium		7440-70-2	l/gu	6,930	9,490	20,100	34700				
Chromium Hexavalent	50 ST	18540-29-9	l/gu	20 U	0.2 U	10 U	10.0 U				
Chromium Total	50 ST	7440-47-3	l/gu	2.6 B	3.0 B	20 U	20 U				
Cobalt	K	7440-48-4	l/bn	0.49 U	0.28 U	20 U	20 U				
Copper	200 ST	7440-50-8	l/gu	8.4 B	1.9 B	20 U	20 U				
Iron	300 ST	7439-89-6	l/Bn	878	343	23.5 UB	13.8 UB				
Lead	25 ST	7439-92-1	l/gu	5.0	5.5	15 U	15 U				
Magnesium	35,000 GV	7439-95-4	l/Bn	1210 B	1470 B	4510	4790				
Manganese	300 ST	7439-96-5	l/gn	1,620	3,710	2,830	819				
Mercury	0.7 ST	7439-97-6	l/bn	0.10 UU*J*	0.10 U	0.25 U	0.25 U				
Nickel	100 ST	7440-02-0	l/gu	1.2 U	1.4B	20 U	20 U				
Potassium	180	7440-09-7	l/bn	4050 B	6,670	2910	4160				
Selenium	10 ST	7782-49-2	l/gn	2.6 UNU*J*	2.5 BJ	25 U	25 U				
Silver	50 ST	7440-22-4	l/bn	0.52 UU*J*	0.60 B	20 U	20 U				
Sodium	20,000 ST	7440-23-5	l/bn	8,910	29,300	6,140	7740				
Thallium	0.5 GV	7440-28-0	//bn	2,8 B	2.9 U	15 U	15 U				
Vanadium	×	7440-62-2	l/gn	2.3 B	0.18 U	20 U	20 U				
Zinc	2,000 ST	7440-66-6	l/gn	53.4	27	14.7 UB	20 U				
Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10	45.1 UB	10 U				
Iron + Manganese	500 ST*	ж	l/6n	2,498	4,053	2,853,50	819				
NOTES:		38									

NOTES:

J. Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

GV: Guidance value. ST: Standard.

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



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

CONSTITUENT Aluminum Antimony Arsenic Bartum Beryllium Bron	Croundwister Standarde/										
CONSTITUENT Aluminum Antimony Arsenic Barlum Beryllium Boron	Glodildwarel Stalldalus	CAS#	DATE:	8/16/2007	11/14/2007	2/12/2008	5/14/2008	8/6/2008	11/5/2008	2/25/2009	8/13/2009
Auminum Antimony Arsenic Barlum Beryllium Boron	Guldance Values		UNITS:	(l/gn)	(l/ān)	(l/gn)	(l/6n)	(l/6n)	(l/gn)	(l/gn)	(ng/l)
Antimony Arsenic Barlum Beryllium Boron	ï	7429-90-5	l/gu	ΝΑ	AN	AN	AN	NA	6710	NA	12.5 U
Arsenic Barlum Beryllum Boron	3 GV	7440-36-0	l/gu	ΑN	ΑΝ	NA	Ā	WA	2.3 U	Ą	2,5 U
Barjum Berylium Boron	25 ST	7440-38-2	/bn	ΝΑ	ΝΑ	ΑN	ΑN	NA	6.0 B	ΝΑ	3.0 U
Boron	1,000 ST	7440-39-3	l/gu	AN	AN	ΝΑ	NA	NA	47.18	ΑN	26.7 B
Boron	3 GV	7440-41-7	l/gu	ΑN	NA	ΝΑ	NA	ΑN	0.38 B	Ą	0.13 U
	1,000 ST	7440-42-8	l/ĝn	ΝΑ	NA	NA	NA	NA	55.4 B	NA	38.1 B
Cadmium	5 ST	7440-43-9	/gn	0.28 U	0,32 U	0,32 U	0.27 U	0.27 U	0,35 U	0.35 U	0.26 ∪
Calcium	44	7440-70-2	l/gu	24,600	27,000 J	30,400	26,900	29,200	29,900	28,200	30,800
Chromium Hexavalent	50 ST	18540-29-9	l/gu	ΑN	NA	NA	NA	NA	0.02 U	AN	0.02 U
Chromium Total	50 ST	7440-47-3	l/bn	ΑN	ΑN	ΝΑ	NA	AN	203	NA	3.2 B
Cobalt	10	7440-48-4	l/gu	ΝΑ	NA	NA	NA	NA	5.4 B	NA	0.76 U
Copper	200 ST	7440-50-8	l/gu	ΝΑ	ΑN	NA	NA	Ą	12.8 B	NA	0.90 B
Iron	300 ST	7439-89-6	l/gu	21.2 B	132	3,080	884	3,630	10,500	110	64.6 B
Lead	25 ST	7439-92-1	/bn	1.7 U	1.4 U	1.4 U	2.3 U	2.8 B	5.0	1.3 U	6.7
Magnesium	35,000 GV	7439-95-4	l/Bn	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	l/gn	2.2 B	2.8 JB	17.7	28.5	139	357	24.4	10,0 B
Mercury	0.7 ST	7439-97-6	l/bn	ΝΑ	AN	NA	NA	NA	0.13 U	NA	0.10 U
Nickel	100 ST	7440-02-0	l/gn	NA	NA	NA	NA	NA	19.7 B	NA	2.1 B
Potassium	74:	7440-09-7	l/gu	17,900	17,800	14,400	11,200	19,900	20,100	15,300	15,400
Selenium	10 ST	7782-49-2	l/gu	AN	AN	ΑN	NA	NA	1.9 U	NA	5.3 U
Silver	50 ST	7440-22-4	l/6n	AN	NA	NA	NA	NA	0.54 U	NA	0.33 U
Sodium	20,000 ST	7440-23-5	l/6n	*n	22,000 J	26,300	22,400	28,200	39,800	31,600	24,400
Thallium	0.5 GV	7440-28-0	//bn	NA	NA	NA	NA	NA	1.9 U	NA	3.9 U
Vanadium	X	7440-62-2	l/gn	NA	AN	NA	NA	NA	15.9 B	NA	0,77 U
Zinc	2,000 ST	7440-66-6	l/gn	NA	NA	NA	NA	NA	23.9	ΝΑ	8,3 B
Cyanide	200 ST	0057-12-5	l/gn	NA	NA	NA	NA	NA	10.0 U	NA	10.0 U
Iron + Manganese	500 ST*		l/gu	23.4	134.8	3,062.8	892.5	3,769	10,857	134.4	74.6

J: Estimated due to data validation criteria.

"F": Filterd by lab for dissolved metals

ST: Standard. GV: Guidance value.

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 appronximate concentration of the analyte as determined by data validation. UJ: Value was not detected above quantitation limit but was an appoximate



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

CONSTITUENT		NYSDEC Class GA		SITE:	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S
TitolePit		Groundwater Standards/	CAS#	DATE:	2/5/2010	5/27/2011	8/29/2012	11/14/2013	03/20/2015			
umm - 7429-90-5 ug/l 157 B 1480 64.3 B 131.1 iny 3 GV 740-39-0 ug/l 2.1 U 1.1 B 6.04 c 2.6 ST 7440-39-3 ug/l 2.1 U 1.1 B 6.04 n 1,000 ST 7440-43-3 ug/l 2.5 B 1.6 B 55.1 n 1,000 ST 7440-43-3 ug/l 2.2 B 1.6 B 55.1 n 1,000 ST 7440-43-3 ug/l 2.2 B 2.6 B 1.6 B 55.1 n 1,000 ST 7440-43-3 ug/l 2.2 B 2.6 B 1.0 B 1.0 D m 5 ST 7440-43-3 ug/l 2.2 B 1.0 B 1.0 D m 5 ST 7440-43-3 ug/l 1.6 B 2.0 D 0.1 D r 2 ST 7440-43-3 ug/l 1.6 B 2.0 D 1.0 D r 2 ST 7440-43-3 ug/l 1.6 B 2.0 D 1.0 D	CONSTITUENT	Guidance Values		UNITS:	(ng/l)	(ng/l)	(l/gn)	(l/6n)	(J/Gn)	(l/6n)	(l/6n)	(ng/l)
roy 3 GV 7440-38-0 ug/l 2.1 U 1.8 U 6.04 L c 2.5 ST 1,000 ST 7440-38-2 ug/l 2.3 U 1.9 U 1.5 U 2.9 U 1.9 U 1.5 U 2.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.0 U 1.0 U <td< td=""><td>Aluminum</td><td>*</td><td>7429-90-5</td><td>l/bn</td><td>157 B</td><td>1480</td><td>64.3 B</td><td>13.1 J</td><td>56.5</td><td></td><td></td><td></td></td<>	Aluminum	*	7429-90-5	l/bn	157 B	1480	64.3 B	13.1 J	56.5			
C C C Mode ST 7440-38-2 (ng/l color ST) 7440-38-2 (ng/l color ST) 1,900 ST 7440-38-3 (ng/l color ST) 1,91 (no ST) 1,51 (no ST) 25.1 (no ST) 1,92 (n	Antimony	3 GV	7440-36-0	l/gu	2.1 U	2.1 U	1.8 U	6.04 J	6.6.3			
Interval of the control of	Arsenic	25 ST	7440-38-2	/6n	2.3 ∪	1.9 U	1.5 B	25 U	25 U			
Image: Line Bill Bill Bill Bill Bill Bill Bill Bil	Barium	1,000 ST	7440-39-3	l/gu	25.1 B	52.0 B	19.6 B	55.1	163			
um 5ST 7440-42-8 ug/l 42.9 B 26.5 B 41.0 B 36 um 5ST 7440-43-9 ug/l 0.34 U 0.07 U 0.10 B 10 U imm Hexavalent 5ST 1740-43-9 ug/l 28,000 35,200 10 U 0.2 U 10 U imm Hexavalent 50 ST 18540-29-9 ug/l 20 U 0.2 U 10 U 10 U 0.2 U 10 U	Beryllium	36V	7440-41-7	l/6n	0.26 U	0.13 U	0.12 U	20 U	20 U			
mm 5 ST 7440-43-9 ug/l 0.34 U 0.27 U 0.10 B 10 U mm Fo ST 7440-70-2 ug/l 28,900 35,200 41,600 30,900 mm Fo ST 7440-70-3 ug/l 28,900 35,200 41,600 30,900 mm Fo ST 7440-48-4 ug/l 32 B 35,1 20 U 10 U mm 200 ST 7440-48-4 ug/l 32 B 35,8 4,3 B 20 U mm 25 ST 7440-48-4 ug/l 118 U 9,7 5,9 15 U limm 25 ST 7439-89-6 ug/l 118 U 9,7 5,9 15 U limm 35,000 GV 7439-89-7 ug/l 118 U 9,7 5,9 15 U limm 35,000 GV 7440-38-5 ug/l 136 B 3540 B 17,8 U 17,8 U limm 0,7 ST 7440-32-4 ug/l 74,1 11,6 B 74,7 11,8 U 11,8	Boron	1,000 ST	7440-42-8	l/Bn	42.9 B	26.5 B	41.0 B	36	20 U			
mm Fo ST 7440-70-2 ug/l 28,900 35,200 41,600 30,300 mm Total 50 ST 18540-29-9 ug/l 0,02 U 20 U 0,2 U 10 U mm Total 50 ST 7440-48-4 ug/l 1,180 53.1 20 U 10 U m 200 ST 7440-48-4 ug/l 1,180 9.7 43.8 20 U mm 25 ST 7439-89-6 ug/l 1,100.* 9.7 5.9 15 U lum 35,000 GV 7439-89-6 ug/l 1,100.* 9.7 5.9 15 U see 300 ST 7439-89-5 ug/l 1,100.* 9.7 5.9 17 U see 300 ST 7439-89-5 ug/l 1,100.* 9.7 5.9 17 U m - 100 ST 7440-02-0 ug/l 7,10 0.10 U 11,18 7,38 U 11,18 U m - 10 ST 1,440-02-0 ug/l 14,00 11,18	Cadmium	5 ST	7440-43-9	l/gu	0,34 U	0.27 U	0.10 B	10 U	10 U			
mm Hexavalent 50 ST 18540-29-9 ug/l 0.02 U 20 U 10 U nm Total 50 ST 7440-47-3 ug/l 152 1,350 53.1 20 U nm Total - 7440-48-4 ug/l 2.4B 10.1B 1.4B 20 U nm Zoo ST 7440-48-4 ug/l 2.4B 3.5B 4.3B 20 U nm 35,000 ST 7439-89-5 ug/l 1.8U 9.280 4.3B 20 U see 300 ST 7439-89-5 ug/l 1.8U 9.280 4.3B 2.400 see 300 ST 7439-89-5 ug/l 1.8U 9.280 1.5U 1.5U nm - 7440-02-0 ug/l 7.9B 7.4.7 11.6B 7.3B J nm - 7440-02-0 ug/l 7.9B 7.4.B 2.5D 1.50 nm - 7440-02-0 ug/l 7.9B 1.6B 2.0U 1.50 n - - <td>Calcium</td> <td>3</td> <td>7440-70-2</td> <td>l/gu</td> <td>28,900</td> <td>35,200</td> <td>41,600</td> <td>30,900</td> <td>43400</td> <td></td> <td></td> <td></td>	Calcium	3	7440-70-2	l/gu	28,900	35,200	41,600	30,900	43400			
mm Total 50 ST 7440-47-3 ug/l 152 1,360 53.1 20 U mm Total - 7440-48-4 ug/l 2.4 B 10.1 B 1.4 B 20 U lim 200 ST 7440-48-4 ug/l 3.2 B 3.5 G 4.3 B 20 U lim 300 ST 7439-82-1 ug/l 1.8 U 9.7 G 4.3 B 20 U see 300 ST 7439-82-4 ug/l 1.8 U 9.7 G 5.9 G 1.5 U see 300 ST 7439-82-4 ug/l 1.8 U 9.7 G 1.5 U 1.5 U m 0.7 ST 7439-92-6 ug/l 1.9 U 0.10 UU-r 0.10 U 0.10 UU-r 1.8 BO 1.7 BO m - 100 ST 7440-02-7 ug/l 1.9 BO 1.4 BO 2.0 U 1.7 BO 1.7 BO 1.7 BO 1.5 BO	Chromium Hexavalent	50 ST	18540-29-9	l/gu	0.02 U	20 U	0.2 U	10 U	10.0 U			
1480-8-4 1481 10.1 B 14.8 14.8 12.0 B 14.8	Chromium Total	50 ST	7440-47-3	l/gu	152	1,350	53.1	20 U	5.39 J			
Lon ST 7440-50-8 ug/l 3.2 B 3.6 B 4.3 B 20 U Lium 300 ST 7439-89-6 ug/l 1,100 J* 9,260 624 40.3 UB Lium 25 ST 7439-89-6 ug/l 1,8 U 9,7 5.9 15 U ese 300 ST 7439-89-5 ug/l 1,8 U 9,7 5.9 15 U ese 300 ST 7439-89-5 ug/l 1,8 U 9,7 5.9 1,5 U m 0,7 ST 7439-97-6 ug/l 1,9 G 0,10 U 0,1	Cobalt	E .	7440-48-4	l/gu	2.4 B	10.1 B	1.4 B	20 U	20 U			
lum 300 ST 7439-89-6 ug/l 4,100 Jr 9,280 624 40.3 UB lum 25 ST 7439-92-1 ug/l 1.8 U 9,7 5.9 15 U ese 300 ST 7439-95-4 ug/l 2,620 B 3,980 B 3540 B 2,400 ese 300 ST 7439-96-5 ug/l 136 652 696 17.8 J m 0,7 ST 7439-96-5 ug/l 0,10 U 0,10 U/l 0,25 U 17.8 J m 10 ST 7440-02-0 ug/l 19500 18,300 15,300 22,000 n 50 ST 7440-03-7 ug/l 2,5 U 2,4 BJ 2,4 BJ 2,00 n 50 ST 7440-03-7 ug/l 2,5 U 2,4 BJ 2,4 BJ 2,00 n 0,5 ST 7440-22-4 ug/l 2,5 U 2,0 U 2,0 U n 0,5 GV 7440-23-5 ug/l 2,5 U 2,0 U 2,0 U n 2,000 S	Copper	200 ST	7440-50-8	l/gn	3.2 B	35.6	4.3 B	20 U	5.15 J			
lum 25 ST 7439-92-1 ug/l 1,8 U 9,7 5.9 15 U ese 35,000 GV 7439-96-4 ug/l 2,620 B 3,980 B 3540 B 2,400 ese 300 ST 7439-96-5 ug/l 136 652 666 17.8 J m 0,7 ST 7439-97-6 ug/l 0,10 U 0,10 UU ⁻¹ /- 0,10 U 0,25 U m 100 ST 7440-02-0 ug/l 19500 18,300 12,000 22,000 n 10 ST 7440-03-7 ug/l 0,52 UU ⁻¹ /- 2,4 BJ 2,00 22,000 n 50 ST 7440-03-7 ug/l 2,5 U 2,4 BJ 2,0 U 20 n 60 SST 7440-22-4 ug/l 2,5 U 2,4 BJ 15,00 10 n 60 SST 7440-22-4 ug/l 2,5 U 2,0 U 1,2 U 1,2 U n 60 SST 7440-23-5 ug/l 1,1,6 B 42.9 37.6 12,7 UB	Iron	300 ST	7439-89-6	l/gn	1,100 J*	9,280	524	40.3 UB	94			
lum 35,000 GV 7439-96-4 ug/l 2,600 B 35,000 GV 7439-96-5 ug/l 136 652 560 B 2,400 2,400 ese 300 ST 7439-96-5 ug/l 136 652 566 17.8 J 17.8 J 17.8 J 17.8 J m 0.7 ST 7439-97-6 ug/l 7.9 B 74.7 11.6 B 7.38 J 17.8 J m 100 ST 7440-02-0 ug/l 19500 18,300 15,300 22,000 n 50 ST 7440-22-4 ug/l 0.52 UU** 2.4 BJ 2.5 U n 0.05 ST 7440-22-4 ug/l 2.5 U 2.9 U 15,00 n 0.05 ST 7440-23-5 ug/l 2.5 U 2.7 U 2.9 U 15,00 n 0.05 ST 7440-23-5 ug/l 2.6 B 16.5 B 10.0 U 2.9 U 15.7 UB n 0.05 ST 7440-23-5 ug/l 2.6 B 10.0 U 2.9 U 10.0 U 10	Lead	25 ST	7439-92-1	l/ßn	1.8 U	9.7	5.9	15 U	15 U			
ese 300 ST 7439-96-5 ug/l 136 562 596 17.8 J 17.8	Magnesium	35,000 GV	7439-95-4	l/bn	2,620 B	3,980 B	3540 B	2,400	3430			
Mathematical Mathemat	Manganese	300 ST	7439-96-5	l/gu	136	552	596	17.8 J	122			
Interpretation of the control of the	Mercury	0.7 ST	7439-97-6	l/6n	0.10 U	0.10 UU*J*	0.10 U	0.25 U	0.25 U			
Imm 10 ST 7440-09-7 ug/l 15500 15,300 22,000 Imm 10 ST 7782-49-2 ug/l 2,5 U 2,6 UNU-1* 2,4 BJ 25 U So ST 7440-22-4 ug/l 0.63 U 0.52 UU-1* 0.29 U 20 U Imm - 7440-28-0 ug/l 3,00 2,7 U 2,9 U 15 U Imm - 7440-28-0 ug/l 2,6 B 16.9 B 0.80 B 20 U Imm - 7440-28-0 ug/l 2,6 B 16.9 B 0.80 B 20 U Imm - 7440-28-0 ug/l 2,6 B 16.9 B 0.80 B 20 U Imm - 7440-68-8 ug/l 10.0 U 10.0 U 10.0 U 50.7 UB Imm - 0.05 ST ug/l 10.0 U 10.0 U 50.7 UB 50.7 UB	Nickel	100 ST	7440-02-0	l/gu	7.9 B	7.47	11.6 B	7.38 J	19 J			
n 10 ST 7782-49-2 ug/l 2.5 U 2.6 UNU** 2.4 BJ 2.5 U 2.5 U 2.4 BJ 2.5 U	Potassium	36	7440-09-7	l/gn	19500	18,300	15,300	22,000	27200			
50 ST 7440-22-4 ug/l 0.63 UU-1* 0.29 UU 20 U 1 20,000 ST 7440-23-5 ug/l 30,800 29,100 12,500 1 0.5 GV 7440-28-0 ug/l 3.2 U 2.7 U 2.9 U 15 U 1 0.5 GV 7440-22-2 ug/l 2.6 B 16.9 B 0.80 B 20 U 2 0.00 ST 7440-66-6 ug/l 11.6 B 42.9 37.6 12.7 UB 200 ST 0.05 ST ug/l 10.0 U 10.0 U 50.7 UB 100 ST ug/l 11.26 9,832 11,120 58.1	Selenium	10 ST	7782-49-2	l/gn	2.5 U	2.6 UNU*J*	2.4 BJ	25 U	25 U			
20,000 ST 7440-23-5 ug/l 30,800 38,800 29,100 12,500 In 0.5 GV 7440-28-0 ug/l 3.2 U 2.7 U 2.9 U 15 U In 2,000 ST 7440-68-8 ug/l 11.8 B 42.9 37.6 12.7 UB 200 ST 200 ST 10.0 U 10.0 U 10.0 U 50.7 UB 50.7 UB ianganese 500 ST* - ug/l 11.26 9,832 11,10 56.7 UB	Silver	50 ST	7440-22-4	l/gu	0.83 U	0.52 UU*J*	0.29 U	20 U	20 U			
n - 7440-28-0 ug/l 3.2 U 2.7 U 2.9 U 15 U 1	Sodium	20,000 ST	7440-23-5	l/gu	30,800	38,800	29,100	12,500	32100			
n - 7440-62-2 ug/l 2.6 B 16.9 B 0.80 B 20 U 2,000 ST 7440-66-6 ug/l 11.6 B 42.9 37.6 12.7 UB 200 ST 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 10.0 U 50.7 UB 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 10.0 U 50.7 UB 20.7	Thallium	0.5 GV	7440-28-0	l/gu	3,2 U	2.7 U	2.9 U	15 U	15 U			
2,000 ST 7440-66-6 ug/l 11.6 B 42.9 37.6 12.7 UB 12.7 UB 200 ST 0057-12-5 ug/l 10.0 U 10.0 U 10.0 U 50.7 UB 30.3 UB 20.7 UB 20	Vanadium	W.	7440-62-2	l/gn	2.8 B	16.9 B	0.80 B	20 U	20 U			
200 ST 0057-12-5 ug/l 10.0 U 10.0 U 10.0 ST. 80.7 UB singlenese 500 ST* ug/l 1,126 9,832 1,120 58.1	Zinc	2,000 ST	7440-66-6	l/gn	11.68	42.9	37.6	12.7 UB	34			
500 ST* - ug/l 1,236 9,832 1,120 58.1	Cyanide	200 ST	0057-12-5	l/gn	10.0 U	10.0 U	10.0 U	50.7 UB	10 U			
	Iron + Manganese	500 ST*	(A)	l/gu	1,236	9,832	1,120	58.1	216			Sa.

NOTES: J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

"F": Filterd by lab for dissolved metals

ST: Standard. GV: 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.



Monitoring Well Sample Results - Volatile Organic Compounds

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

11,157,157,157,157,157,157,157,157,157,1	ompounds sale e ne pane pane cotopropane e (total) nne nne nne nne nne nne nne n		(ug/l) 5 U	(l/gu)	(/pn)	(l/gu)	(/bii)	(ua/l)	(l/gu)	(Von)	
March Marc			50		113		10,000			7110000	STANDARD/GUIDANCE VALL
March Marc	pane pane pane se ene	1-55-6 1-34-5 1-30-5 1-30-5 1-35-4 1-38-6 1-12-8 1-12-8	5.0	5.0	200	50	5.0	5.0	2.0 U	2.0 U	5ST
Company Comp	Dane Carte C	9-34-5 9-00-5 7-34-3 7-35-4 1-58-6 5-12-8		5.0	5.0	5.0	5.0	5.0	2.0 U	0.53 J	5ST
March Marc	pane ene	3-00-5 5-34-3 5-35-4 3-58-6 5-18-4 5-12-8	50	50	5.0	50	20	5.0	2.0 U	2.0.0	5.ST
10,000075434 1,000075434	pane pane	5-34-3 5-35-4 3-59-6 5-18-4 5-12-8	50	50	50	5.0	90	50	2,0 U	2.0 U	5 ST
10,000755454 S. D. 1, T. 3.1 S. D.	pane	3-58-6 3-18-4 5-12-8	5.0	3.1*	5.0	5.0	5.0	3.3	0.65 J	1.0.5	5.ST
March Marc	pane (3-58-6 3-18-4 5-12-8	5.0	1.0*	3.7	50	50	1.3	2.0 U	2,0 U	1 5ST
1970 1970	pane ()	5-18-4	NA	NA	NA	NA	NA	NA	NA	NA	1 5ST
10,000,000,000,000,000,000,000,000,000,	pane	5-12-8	20	5.0	2.0	20	9.0	2.0	2,0 U	2.0 U	0.04 ST
10,000016-20-4 5 1 5	e e e e e e e e e e e e e e e e e e e	7 50 7	50	50	50	9.0	50	5.0	2.0 U	2.0 U	0.04 ST
10,000054554 S. U. S	9 BTG	1-00-0	5 U	50	50	90	90	20	2.0 U	2.0 U	5ST
Decided Service	e ene	5-50-1	511	il se	115	115	511	11.5	2.0 U	200	357
1	a se	2-06-2	110	2 2	213	200	113	2 2	2011	1.000	1980
10,000074572 S.M. C. M. C.	e ene	7-00-7	000		0.00		000		20.5	0000	600
000005424	e e e	0-28-0	NA.	N	NA	NA.	NA.	Y.	N.W.	YN.	190
000074547 5 U	8 8 B T G C	3-87-5	20	20	20	20	20	20	2.0 0	Z.0 U	1S
10000162-63 5 U 5	s ere:	5-46-7	50	50	50	50	50	50	2.0 U	2.0 U	357
1000106-17-15 5.0	s e e e e e e e e e e e e e e e e e e e	3-93-3	50	50	5.0	50	50	20	5.0 U	5.0 U	50 GV
10000074-614 S. U	e en e	1-78-6	50	5.0	5.0	9.0	50	50	500	5.0 U	50 GV
000075424	e ere	3-10-1	5.0	50	50	5.0	5.0	5.0	5.0 U	5.0 U	
D000714425 5 U	s e en e	7-84-1	-	•0	511	18.1	20.	20	5.0 U	2.7 UB	50 GV
000075-29-2 5 U <th< td=""><td>e ene</td><td>7-13-1</td><td>511</td><td>211</td><td>2115</td><td>2118</td><td>211</td><td>200</td><td>2011</td><td>2011</td><td>T-0.4</td></th<>	e ene	7-13-1	511	211	2115	2118	211	200	2011	2011	T-0.4
000075244 5 1	s ene	1.43.0	2	200					2011	2011	Tot
000075524 5 U	s ene	2007	200	0 4	0	200	200	200	1100	1100	100
CONTINUES STATE OF THE PARTY STATE OF THE PAR	e en e	0-76-4	000	0.0	0.0	000	000	000	2002	2011	1991
March Marc	e e e e e e e e e e e e e e e e e e e	4-77-0	000	200	200	000	000	000	2.0.0	2.00	VS 00
00000764359 5 U 5	ene .	5-25-2	20	20	50	20	50	20	Z.0 U	2.0 U	50 GV
0000015-51-50 5 U <	e ene	4-83-9	50	5.0	50	20	50.3	50	2.0 U	4.0 U	5ST
0000056-25-5 5 U <t< td=""><td>8 8 6 8 10 8 10 8 10 8 10 8 10 8 10 8 10 8 10</td><td>5-15-0</td><td>50</td><td>50</td><td>20</td><td>20</td><td>50</td><td>50</td><td>2.0 U</td><td>2.0 U</td><td>VD 09</td></t<>	8 8 6 8 10 8 10 8 10 8 10 8 10 8 10 8 10 8 10	5-15-0	50	50	20	20	50	50	2.0 U	2.0 U	VD 09
0000705-07-3 5 U <t< td=""><td>ene .</td><td>8-23-5</td><td>5.0</td><td>50</td><td>5.0</td><td>5.0</td><td>5.0</td><td>5.0</td><td>2.0 U</td><td>2.0 U</td><td>5ST</td></t<>	ene .	8-23-5	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5ST
000075-26-3 5 U <th< td=""><td>e ene</td><td>2-06-8</td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td>2.0 U</td><td>2.0 U</td><td>5.ST</td></th<>	e ene	2-06-8	50	50	50	50	50	50	2.0 U	2.0 U	5.ST
000076-56-3 SU 5U SU	8 64 846 846 846 846 846 846 846 846 846	5-00-3	50	90	50	90	5.0	50	2.0 U	2.0 U	5ST
000074-87-3 5 U <th< td=""><td>ene.</td><td>7-86-3</td><td>5.0</td><td>200</td><td>50</td><td>5.0</td><td>5.0</td><td>50</td><td>2.0 U</td><td>2.0 U</td><td>7.87</td></th<>	ene.	7-86-3	5.0	200	50	5.0	5.0	50	2.0 U	2.0 U	7.87
1000165-58-2 5 to 5	e ere:	4-87-3	511	25	213	211	511	511	2.0 U	2.0 U	5.87
100061-01-5 5	s erie	6-50-2	211	511	2	511	411	511	200	0.52.1	581
000074-48-1 5 U 5	ene ene	1-01-5	2 2	2	2 2	- u	2	2 2	2011	2011	DA ST
Control of the cont	rmethane zene han	4-48-1	200	213	200	21.5	211	200	2611	2011	20.62
Particular	Trentane Takene	1-04-4							200	100	1500
100075-244 5 U	Tizzene Tizzene Tizzene Tizzene ne chloride oroethene 2-Dichloroethene 4-Dichloro-Z-butene ethere filluoromethane etizie	4-95-3	20	200	200	200	20	200	2,00	2,00	S C
The choice Control of the following state Control of the following Control of t	hane ne chloride orcethene 2-Dichloroethene 4-Dichloro-2-butene ethene ofluoromethane	0-41-4	20	20	20	50	20	20	2.0.0	200	5.81
Superiories Control Superiories Supe	ne chloride orcethene 2-Dichloroethene 4-Dichloropropene 4-Dichloroz-2-butene oethene fluoromethane	4-88-4	20	90	20	20	20	20	1,0 U	NA	581
conclusioner theme 000106-32-5 5 U 5 U 5 U 5 U 2 U U	oroethene 2-Dichloroethene 2-Dichloroethene 4-Dichloro-2-butene 6-Dichloro-2-butene 6-Dichloromethane 6-Dichloromethane 6-Dichloromethane	5-09-2	5.0	50	503*	50	50	50	5.5 UB	9.7 UB	5.87
000127-164 5U 2U 2.0 U 2.0 U <th< td=""><td></td><td>0-42-5</td><td>5.0</td><td>5.0</td><td>50</td><td>5.0</td><td>5.0</td><td>5.0</td><td>2.0 U</td><td>2.0 U</td><td>5.ST</td></th<>		0-42-5	5.0	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1000108-88-3 5 U 5		7-18-4	50	2.3	5.0	50	5.0	50	2.0 U	2.0 U	5.ST
000156-60-5 5 U 5 U 5 U 5 U 2.0 U		8-88-3	5.0	5.0	5.0	5.0	5.0	50	2.0 U	2.0 U	5ST
010061-02-6		6-60-5	50	20	50	5.0	50	90	2.0 U	2.0 U	5ST
000710-57-6 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5		1-02-6	5.0	5.0	20	5.0	5.0	50	2.0 U	2.0 U	0.4 ST
000078-01-6 5 U 5		0-57-6	5.0	5.0	5.0	5.0	5.0	5.0	1,0 U	2.0 U	5.ST
000075-58-4 5 U 5		9-01-6	5.0	50	50	5.0	5.0	50	2,0 U	2.0 U	5ST
Compound was found at a concentration below the detection limit, value estimated Compound was found as non-detect based on validation criteria Compound was found as concentration below the detection limit, value estimated Compound was found as non-detect based on validation criteria Compound was found as concentration below the detection limit, value estimated Compound was found as a secondary dilution. Compound was found as concentration below the detection limit, value estimated Compound was found as concentration below the detection limit, value estimated Compound was found as concentration below the detection limit, value estimated Compound was found as concentration below the detection limit, value estimated Compound was found as concentration was well as w		5-69-4	5.0	5.0	1 S U	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1	50	8-05-4	5.0	90	5.0	5.0	5.0	50	2.0 U	2.0 U	
001330-20-7		5-01-4	5 U	5.0	5.0	5.0	50	50	2.0 U	2.0 U	2.ST
1000095-47-5		0-20-7	AN	AN	NA	NA	NA	NA	4.0 U	4.0 U	5ST
1		5-47-6	NA	NA	NA	ΑN	AN	NA	2.0 U	2.0 U	5.ST
AUALFIERS QUALFIERS Compound was found in the method blank as well as the sample U: Compound was found at a concentration below the detection limit, value estimated E: Commound was found at a concentration below the detection limit, value estimated E: Compound was found at a concentration below the detection limit, value estimated E: Commound was found at a concentration below the detection limit, value estimated E: Commound was found at a concentration range, value estimated E: Compound was found at a concentration range, value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at a concentration range value estimated E: Compound was found at the case of concentration range value estimated E: Compound was found at the case of concentration range value estimated E: Compound was found at the case of concentration range value estimated E: Compound was found at the case of concentration range value estimated E: Compound was found at the case of concentration range value estimated	otal)	0-20-7	5.0	5.0	9.0	50	50	50	NA	NA	5ST
B: Compound was found in the method blank as well as the sample Compound was found in the method blank as well as the sample U: Compound was analyzed for but not detected at the detection limit, value estimated U: Compound was found at a concentration below the detection limit, value estimated U: Compound was found at a concentration below the detection limit, value estimated U: Compound was found at a scondary dividing and the detection limit and the stimated U: Compound was found at a scondary dividing and the detection is secondary dividing and the detection of the detection is secondary dividing and the detection of the detection is secondary dividing and the detection of the detection is secondary dividing and the detection of the detection is secondary dividing the detection of the detection is secondary dividing the detection is secondary dividing the detection of the detection is secondary dividing the detect			=	9	3.3	5.0	5.0	.4	0.65	2.95	
blank as well as the sample detected at the detection limit shown. ST: Standard In blook the detection limit, value estimated NA: Not Analyzed Illustrion range; value estimated NS: Not Sampled ndary difulion. SS: Sesuit quelified as		QUALIF	FIERS					NOTES			
detected at the defection limit shown. ST: Standard hard standard NA; Not Analyzed shifted settimated the settimated standard shifted settimated. NS; Not Sampled at based on validation criteria		B: Com	pound was four.	nd in the method bis	ink as well as the sam	ple		GV: Guidance Value	ø.		
tion below fre defection limit, value estimated silbration range; value estimated. NS; Not Sampled dary difulion. It based on validation criteria		U: Com	pound was and	lyzed for but not de	tected at the detection	Ilmit shown.		ST: Standard			
NS; Not Sampled		C. Com	pound was foun	id at a concentratio.	n below the detection	limit, value estimated		NA: Not Analyzed	obcoope reference	. Chandord Cuidonoo	
Ildation criteria		1 6	se mest codes to	and mountained comme	naudii laliye, value o.	all larea.		NIC- Not Campled	algillotel execeus		
		D: Kesi	JIt taken from Bi	naiysis at a second	ary dirullon.	-		nai noi sampled		:	
		U. o. U	B: Result qualit	led as non-detect b	ased on validation cri.	eria		J.: Kesult qualified	as estimated based on	validation criferia	

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

Sample ID		MW-011	MW-011	MW-01I	MW-01I	MW-011	MW-01I	MW-011	MW-011	NYSDEC Class GA
Valatile Organic Compounds:	#SAC	(110/1)	(11/3/2008	((nu())	(lap/l)	(a)	(1/07/10/10/10/10/10/10/10/10/10/10/10/10/10/	(l/a/l)	(l/bn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	50	50	50	500	50	50	2,0 U	2.0 U	SST
1.1.1-Trichloroethane	000071-55-6	5.0	50	5.0	5 UJ*	5.0	50	2,0 U	2.0 U	5ST
1,1,2,2-Tetrachloroethane	000079-34-5	20	50	5.0	sun.	20	50	2.0 U	2.0 U	5.5⊤
1.1.2-Trichloroethane	000079-00-5	50	50	20	503*	50	5.0	2.0 U	2.0 U	5ST
1,1-Dichloroethane	000075-34-3	90	50	20	503	20	20	2,00	2.0 U	58
1,1-Dichloroethene	000075-35-4	50	20	20	5 UJ*	20	20	2.0 U	2.0 0	587
1.1-Dichloropropene	000563-58-6	Y N	NA.	NA	NA	NA	NA	NA C	AN C	- S.O.
1.2.3-1 richloropropane	0000086-18-4	200	200	000	S CO	000	200	2.00	2.0 0	0.0451
1.2-Dibromo-3-chloropropane	000096-12-8	000	000	000	200	000	0	2.00	2000	0.04 81
1,2-Dibromoethane	000106-93-4	000	200	000	2000	000	000	2002	2.00	100
1,2-Dichlorobenzene	000085-50-1	200	000	200	- COG	000	000	2002	200	100
1,2-Dichloroethane	2-90-101-00-	ne.	000	nc	503	n c	7	2,00	2.0 0	0.681
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA.	AA	NA	NA	AN	NA	5ST
1,2-Dichloropropane	000078-87-5	20	50	50	-£03-	20	20	2.0 U	2.0 U	15T
1,4-Dichlorobenzene	000106-46-7	50	20	50	5 UJ*	20	50	2,0 U	2,00	3.ST
2-Butanone	000078-93-3	5.0	.50	50	503*	50	20	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-8	50	5.0	5.0	503*	50	50	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	20	20	5.0	-Fn9-	1 50	5.0	5.0 U	0 0°S	3.00
Acetone	000067-64-1	20	50	5.0	5UJ*	\$∪*	5.0	5.0 U	2.5 UB	50 GV
Acrylonitrile	000107-13-1	50	50	50	*CO 2	50	5.0	2.0 U	2.0 U	587
Benzene	000071-43-2	5.0	50	5.0	5 UJ*	50	50	2.0 U	2.0 U	181
Bromochloromethane	000074-97-5	9.0	50	50	5UJ*	50	5.0	2.0 U	2.0 U	5.S.T
Bromodichloromethane	000075-27-4	50	50	50	503	5.0	5.0	2.0 U	2.0 U	50 GV
Вготобогт	000075-25-2	50	50	50	5 UJ*	50	50	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	20	500	20	5UJ*	50.7	20	2.0 U	4.0 U	5.87
Carbon disulfide	000075-15-0	50	50	50	503*	50	50	2.0 U	2.0 U	V9 09
Carbon tetrachloride	000056-23-5	200	200	200	5133*	50	50	2.0 U	200	5.51
Chlorobenzene	000108-90-7	50	50	5.0	503	50	50	2.0 U	2.0 U	185
Chloroethane	000075-00-3	20	20	50		20	20	2.0 U	2.0 U	5.87
Chloroform	0000012853	115	2 4	115	1115	211	2.1	2.0.0	0.53.1	7.ST
Chloromethane	000074-87-3	211	2 10	50	511.1*	50	2 2	2.0 U	200	5.51
ris-1 2-Dichloroethene	0.00158-59-2	2 2	2112	2 2	21114	211	1 4	2011	2011	4.ST
cis-1 3-Dichloropropapa	010061-01-5	11.5	211	25	511.1*	200	111111111111111111111111111111111111111	2.0.0	2.6 U	0487
Dibromochloromethane	000124-48-1	511	213	115	511.1*	115	2	2.0 U	2.0 U	50.67
Dibromomethane	000074-95-3	511	200	211	5113	211	120	200	2.0 U	SST
Ethylbenzene	000017-33-3	200	2 4	2 4	*1114	200	200	200	2.0.0	100
Constitutions	000074-88-4	2 2		200	2112	200	114	1101	NA	For
Mathylana oblozida	000025 00 3	2 4	2 4	2 4	* : :	200	2 4	501IR	98138	Toru
Shippo	000000000	2 4	2 4	000	200	2	2	1100	2011	1004
Totalio	0000427 48 4	2			3 *	200		1100	1000	100
anacino cemene	\$1-171.000 \$100.000	000	200	000	***************************************	0.4	000	20.7	2002	TS H
Industrial 2-Dichloroothono	000100000	0 2	004	000	*11.4	11.5	0 4	2011	2011	100 Fort
trans-13-Dichloropropene	010061-02-8	200	2 4	2	1112	2	25	2011	2011	0.4 ST
trans-1 4-Dichlorn-2-hiltena	000110-57-6	200	511	115	*1115	200	25	1.0 U	2.0 U	TS:S
Trichlorethene	000079-01-6	0.50		213	*P103	25.0	200	2.0 U	2.0 U	5.87
Trichlorofluoromethane	000075-69-4	50	50	50	5 UJ*	50	SU	2.0 U	200	5.S.T
Vinyl Acetate	000108-05-4	5.0	5.7*	5.0	507	50	50	2,0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	5.0	5.0	5 U.	50	5.0	2.0 U	2.0 U	2 ST
m.p-Xylene	001330-20-7	NA	NA	NA	NA	NA	AN	4.0 U	4.0 U	5ST
o-Xylene	0000095-47-6	NA	NA	NA	NA	AN	AN	2.0 U	2.0 U	5ST
Xylene (lotal)	001330-20-7	5.0	90	50	5 UJ*	50	50	ΑN	AN	5ST
TOTAL VOCs		ח	>	0	207,	50	33	0	0.53	
		QUALIFIERS					NOTES			
		B: Compound was i	B: Compound was found in the method bl	blank as well as the sample	тріе		GV: Guidance Value	9		
		U: Compound was	U: Compound was analyzed for but not detected at the detection limit shown.	etected at the detective	U: Compound was analyzed for but not detected at the detection limit shown.		ST: Standard			
		5: Concentration exceeds instrument	ceeds instrument cali	ation below tile detection fiftilit, vali calibration range; value estimated.	stimated.	_	NA. NOI Alialy cou	: Parameter exceed:	Parameter exceeds Standard/Guidance Value	e Value
		D: Result taken from	m analysis at a second	dary dilution.			NS: Not Sampled			
		I or IR. Result an	1)* or (18: Result mailfied as non-detect based on walldation criteria	hased on validation o	rlharla		* Besult dualified	as perlimated based or	n validation criteria	*
		-					- No standard or gu	Nessur quanties as estimated based on validation criteria No standard or guildance value	Validation of the	
							D IN COMPLIANT OF THE	2211. 2210000		

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

Cugal)	Volatile Organic Compounds 1.1.1.2-Tertachloroethane 1.1.1.2.2-Tertachloroethane 1.1.2.2-Tertachloroethane 1.1.2.7-Tichloroethane 1.1.2.1-Lichloroethane 1.1.2.1-Dichloroethane 1.1.2.1-Dichloroethane 1.1.0-Dichloroethane		1007/17/7			ULLUCIVIC.	1100/a0/1	6/00/00/0	14/12/2013		E STANGER CONTRACTOR
Procession	1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	CAS#	(Van)	(l/an)	(na/l)	(l/bn)	(nan)	(na/l)	(l/Bn)	(l/gu)	STANDARD/GUIDANCE VALUE
Part	1.1.1-Trichloroethane 1.1.2-Tetrachloroethane 1.1.2-Trichloroethane 1.1-Dichloroethane 1.1-Dichloroethane 1.1-Dichloroethane	000630-20-6	5.0	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5ST
Part	1,12.2-Tetrachloroethane 1,12-Trichloroethane 1,1-Dichloroethane	000071-55-6	5.0	5.0	5.0	50	50	5.0	2.0 U	2.0 U	5.ST
Particular Control Particular Partic	1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	0000079-34-5	5.0	50	50	5.0	5.0	5.0	2.0 U	2.0 U	5ST
Control	1,1-Dichloroethane	000079-00-5	5.0	50	5.0	50	50	50	2.0 U	2.0 U	557
Continue	1,1-Dichloroethene	000075-34-3	20	90	20	20	90	20	2,00	2,0 U	5ST
Company Comp	4 4 01-11-1-1-1-1	000075-35-4	200	20	20	50	200	20	2.0.0	200	581
Control Cont	1,1-Uchloropropene	000000-28-6	\$	AN .	NA.	S. S.	Y S	N. S.	YN.	NA.	100
Controlled Con	1,2,3-i richioropropane	000036-18-4	000	0	000	000	000	000	2.00	2,00	0.04 81
March Marc	1,2-Dibromo-3-chloropropane	000096-12-8	000	200	200	200	20.3	200	2.0.0	2.0.0	0.04 &
Controlled Service Control	1,2-Unformostnane	000109-93-4	0			0	0	0	2.00	2.0.0	100
The control of the	1,z-Dichigrapenzene	000000-20-1	0	0	000	000	000	000	2.00	2.00	300
Controlled State	- Calcinotoemane	2-02-701000	000		0.00		0	000	2.00	2.0.0	1000
Minute COOKERS S. C.	1,2-Dichloremene (total)	000040-98-0	2	2	NA.	4	NA.	Y S	1100	1100	100
	1,2-Uichioropiopane	9-78-97000	000	0	0	0	0 3	200	2.00	200	101
	1,4-Dichlorobenzene	000106-46-7	000	200	200	000	000	200	2.0.0	2,00	380
Control	Z-Buranone	000078-93-3	n c	0.0	200	200	000	200	0.00	0.00	20 60
Controlled	Z-Hexanone	9-87-169000	0.0	200	90	20	20	ne	0.0.0	0.00	50 GV
Continue	4-Methyl-2-pentanone	000108-10-1	50	5U	20	5.0	90	50	5.0 U	5.0 U	
Control	Acetone	000067-64-1	20	20	20	187	20.	20	5.0 U	2.2 UB	50 GV
State	Acrylonitrie	000107-13-1	50	20	20	20	50	20	2.0 U	200	58T
State	Benzene	000071-43-2	50	5 U	SU	5.U	20	20	2.0 U	200	1ST
March Marc	Bromochloromethane	000074-97-5	50	SU	5 U	90	5.0	50	2.0 U	2.0 U	5ST
Control	Bromodichloromethane	000075-27-4	50	5.0	50	50	50	50	2.0 U	2.0 U	50 GV
en 0000754839 5 U 5 U 5 U 5 U 4 D U fielde 0000754839 5 U 5 U 5 U 5 U 5 U 4 D U fielde 0000754839 5 U 5 U 5 U 5 U 5 U 4 D U fielde 0000754834 5 U 5 U 5 U 5 U 5 U 5 U 2 D U propertie 0000744873 5 U 5 U 5 U 5 U 5 U 5 U 2 D U propertie 0000744873 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 2 U 2 U 2 U 2 U 5 U 5 U 2 U <td>Bromoform</td> <td>000075-25-2</td> <td>5.0</td> <td>5.0</td> <td>50</td> <td>5.0</td> <td>5.0</td> <td>5.0</td> <td>2.0 U</td> <td>2.0 U</td> <td>50 GV</td>	Bromoform	000075-25-2	5.0	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	50 GV
60 de Goodo-Grafica de La Conceptation de Conceptatio	Bromomethane	000074-83-9	5.0	5.0	5.0	5 U	50.7	5.0	2.0 U	4.0 U	5.ST
COUNTY-SECOND-16-1-1-2 S. 10 S.	Carbon disulfide	000075-15-0	90	5.0	50	9.0	50.7	5.0	2.0 U	2.0 U	VS 09
Controlled Service	Carbon tetrachloride	000056-23-5	50	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	55T
CO000755043 5 U SU S	Chlorobenzene	000108-90-7	5.0	50	50	5.0	50	50	2,0 U	2.0 U	5.ST
10000574523	Chloroethane	000075-00-3	5.0	5.0	50	20	50	50	2.0 U	2.0 U	5ST
10000744373 5 U 5	Chloroform	000067-66-3	5.0	5.0	20	50	5.0	SU	2.0 U	2.0 U	7.ST
Particle	Chloromethane	000074-87-3	5.0	20	50	50	50	50	2.0 U	2.0 U	5ST
Depropered Original Strategy Strategy	cis-1,2-Dichloroethene	000156-59-2	20	20	20	20	20	20	2.0 U	200	581
March Marc	CIS-1,3-Dichloropropene	910061-01-5	000	000	000	200	0 :	000	2.00	200	0.481
1000/02439-3 5 U 5	Upromocnioromemane	000124-48-1	000	0	200	200	000	200	2.00	2.0.0	20 60
March Marc	Ubromemane	0000/4-95-3	000	200	200	200	200	200	2.0.0	2.0 0	186
March Marc	Ethylbenzene	4-14-001000	200	000	000	200	000	200	2.00	2.0 U	200
Substitute	iodometriane	000077 00 0	000	000	000	200	000	000	0.0.0	AN C	100
Compound was found in the method blank as well as the sample Concentration exceeds instrument and are somewhere Concentration exceeds instrument and are a somewhere Concentration exceeds instrument and are a secondary dilution: Concentration exceeds instrument and are a secondary dilution or dilution exceeds instrument and are a secondary dilution or dilution exceeds instrument and are a secondary dilution o	Methylene chloride	2-60-0000	20	20	sug.	20	20	200	57.08	9.4 UB	581
100106-86-5 5 U 5	Styrene	000100-42-5	200	200	200	200	200	200	200	2.00	180
1001/06-06-05 5	Tetrachioreemene	00012/-18-4	000	000	000	00	000	0.0	2.00	200	000
100 100	trans-1 2-Dichlorosthone	000 100-88-5	0 0	0 4	0 4	0 =	0 0	000	2002	2007	Test.
600713-3-6 5 U 5 U 5 U 5 U 1.0 U 2.0 U 2.0 U e 000073-01-6 5 U 5 U 5 U 5 U 5 U 2.0 U	trans-13-Dichloropropene	010061-02-6	511	211	511	115	5.11.12	o u	2.0 0	2.0 U	0.4.87
e 600073-01-6 5 U 5 U 5 U 5 U 5 U 5 U 5 U 2	trans-1,4-Dichloro-2-butene	000110-57-6	50	50	50	5.0	50.7	50	1.0 U	2.0 U	5.S.T.
Marchane 000075-69-4 5 U	Trichtoroethene	000079-01-6	5.0	5.0	50	5.0	50	5.0	2.0 U	2.0 U	5ST
0000198-05-4	Trichforofluoromethane	000075-69-4	5.0	50	50	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
000305-01-4	Vinyl Acetate	000108-05-4	50	50	50	5.0	50	5.0	2.0 U	2.0 U	
MA	Vinyl chloride	000075-01-4	20	50	50	ຣິບ	5.0	50	2,0 U	2.0 U	2.ST
NA	m.p-Xylene	001330-20-7	NA	AA	AA	NA	NA	NA	4.0 U	4.0 U	5.ST
901330-20-7 900 OUALIFIERS B: Compound was found in the method blank as well as the sample C: Compound was found as analyzed for but not defected at the defection limit, value estimated C: Compound was found as analyzed for but not defected at the defection limit, value estimated C: Compound was found at a secondary dilution. D: Result laken from analyzis at a secondary dilution. U** or UB: Result qualified as non-detect based on validation criteria ST ST ST ST Analyzed ST ST ST ST ST Analyzed ST S	o-Xylene	0000095-47-6	¥.	NA	NA	NA A	NA	NA	2.0 U	2.0 U	5 ST
QUALIFIERS B. Compound was found in the method blank as well as the sample C. Compound was analyzed for but not detected at the detection limit shown. U. Compound was found at a concentration below the detection limit, value estimated C. Compound was found at a concentration name; value estimated E. Concentration exceeds instrument calibration range; value estimated E. Concentration exceeds instrument calibration range; value estimated D. Result laken from analysis at a secondary dilution. NS: Not Sampled U' or UB: Result qualified as non-detect based on validation criteria "": Result qualified as	Xylene (total)	001330-20-7	50	50	2.0	20	20	20	NA	AN	SST
NOTES OV GUARDO Value ST: Standard NA: Not Analyzed NS: Not Sampled J': Result qualified as	TOTAL VOCs		٥	D	٥	20	50		0	0	*
OV: Cutulander Value ST: Standard NA: Not Analyzed NS: Not Sampled J*: Result qualified as		5	QUALIFIERS		men of the second	1		NOTES Value			
NA: Not Analyzed NS: Not Sampled J*: Result qualified as			Compound was in Compound was ar		tected at the detection	fimit shown.		ST: Standard	11		
NS: Not Sampled J*: Result qualified as		,	J: Compound was for	und at a concentration	I below the detection I	imit, value estimated		NA: Not Analyzed			
Idation criteria			E: Concentration exc	eeds Instrument calit	ration range; value es	timated,			: Parameter exceeds	s Standard/Guidance	Value
			D: Result taken from	analysis at a second	ary dilution.			NS: Not Sampled			
			U* or UB: Result qua	lified as non-detect b.	ased on validation crit	erla		J*: Result qualified .	as estimated based on	n validation criteria	

D&B ENGINEERS
AND
ARCHITECTS, P.C.

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

(up) (up) <th< th=""><th>Sample ID Date of Collection</th><th></th><th>MW-02D 02/22/07</th><th>MW-02D 11/3/2008</th><th>MW-02D 8/14/2009</th><th>MW-02D 2/8/2010</th><th>MW-02D 5/31/2011</th><th>MW-02D 8/28/2012</th><th>MW-02D 11/12/2013</th><th>3/17/2015</th><th>NYSDEC Class GA GROUNDWATER</th></th<>	Sample ID Date of Collection		MW-02D 02/22/07	MW-02D 11/3/2008	MW-02D 8/14/2009	MW-02D 2/8/2010	MW-02D 5/31/2011	MW-02D 8/28/2012	MW-02D 11/12/2013	3/17/2015	NYSDEC Class GA GROUNDWATER
March Marc	Volatile Organic Compounds	CAS#	(l/Gn)	(l/an)	(l/bn)	(l/an)	(//Bn)	(I/Bn)	(l/gn	(l/bn	STANDARD/GUIDANCE VALUE
The control of the	1.1.1.2-Tetrachforoethane	000630-20-6	5.0	50	5.0	50	20	50	2.0 U	2,0 U	557
The control of the	1.1.1-Trichloroethane	000071-55-6	5.0	50	5.0	5.0	5.0	SU	2.0 U	2.0 U	5ST
Part	1,1,2,2-Tetrachloroethane	000079-34-5	50	50	em.	50	5.0	50	2.0 U	Z:0 U	5.ST
Particular	1,1,2-Trichtoroethane	000029-00-2	9.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Particular Par	1,1-Dichloroethane	000075-34-3	50	5.0	5.0	50	50	5.0	2,0 U	2.0 U	5ST
Particular	1,1-Dichloroethene	000075-35-4	20	50	50	5.0	50	5.0	2.0 U	2.0 U	5.ST
Controller Control C	1,1-Dichloroproperie	000563-58-6	NA	NA	NA	NA	NA	NA	NA	AN C	5 ST
	1,2,3-Trichloropropane	000096-18-4	5.0	50	503	20	200	20	2,0 U	2.0 U	0.04 ST
Particular Par	1,2-Dibramo-3-chloropropane	000096-12-8	20	50	5.0	50	50	503	2.0 U	2.0 U	0.04 \$1
Perfection	1,2-Dibromoethane	000106-93-4	50	50	20	50	50	50	2.0 U	2.0 0	5ST
Participation	1,2-Dichlarobenzene	000095-50-1	50	50	50	50	50	20	2.0 U	2.0 U	3ST
Particular Par	1,2-Dichloroethane	000107-06-2	5.0	50	50	50	50	5U	2.0 U	2.0 U	0.6 ST
Particular	1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	Ϋ́	NA NA	NA	A'A	5ST
biorizone CORDIGAÇAP SL	1,2-Dichloropropane	000078-87-5	5.0	50	5.0	50	50	5.0	2.0 U	200	15T
	1,4-Dichlorobenzene	000106-46-7	5.0	20	5.0	5.0	50	50	2.0 U	2,0 U	38T
0000109-17-14 5 U <	2-Butanone	000078-93-3	SU	50	5.0	5.0	50	503	5.0 U	5.0 U	50 GV
0000057641-1 5U	2-Hexanone	000591-78-6	5.0	5.0	50,3	5.0	5.0	5.0	5.0 U	5.0 U	\$0.GV
000076:14-1 5 U 5 U 5 U 5 U 5 U 5 U 2 U <th< td=""><td>4-Methyl-2-pentanone</td><td>000108-10-1</td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td>5.0 U</td><td>2,0 U</td><td></td></th<>	4-Methyl-2-pentanone	000108-10-1	50	50	50	50	50	50	5.0 U	2,0 U	
000077-43-1 5U	Acetone	000067-64-1	5.0	90	50	50	5 ∪*	5.0	5.0 U	2.2 UB	50.GV
(00074247.5 5.0 <th< td=""><td>Acrylonitrile</td><td>000107-13-1</td><td>5.0</td><td>50</td><td>50</td><td>5.0</td><td>50</td><td>5 0.3</td><td>2.0 U</td><td>2.0 U</td><td>5 ST</td></th<>	Acrylonitrile	000107-13-1	5.0	50	50	5.0	50	5 0.3	2.0 U	2.0 U	5 ST
000075-27-4	Верхере	000071-43-2	510	5.0	50	50	50	50	2,0 U	2.0 U	181
000075-25-4 5.0 <th< td=""><td>Bromochloromethane</td><td>000074-97-5</td><td>22.0</td><td>200</td><td>50</td><td>5.0</td><td>200</td><td>20</td><td>2.0 U</td><td>2.0 U</td><td>5ST</td></th<>	Bromochloromethane	000074-97-5	22.0	200	50	5.0	200	20	2.0 U	2.0 U	5ST
000075-58-2 5U	Bromodichloromethane	000075-27-4	10.5	50	50	50	50	5.0	2.0 U	2.0 U	50 GV
000075489 5U	Bromoform	000075-25-2	250	20	50	50	50	5.0	2.0 U	200	50 GV
0000054364 SU	Bromomethane	000074-83-9	50	50	5.0	5 U.	50.7.	50	2.0 U	4.0 U	5ST
0000158-23-5 5.U 5.U <t< td=""><td>Carbon disulfide</td><td>000075-15-0</td><td>50</td><td>50</td><td>50</td><td>5.0</td><td>5.0</td><td>50</td><td>2.0 U</td><td>2.0 U</td><td>60 GV</td></t<>	Carbon disulfide	000075-15-0	50	50	50	5.0	5.0	50	2.0 U	2.0 U	60 GV
000074-86-3 5U	Carbon tetrachloride	000056-23-5	5.0	50	5.0	50	5.0	5.0	2.0 U	2.0 U	5 ST
000075-60-3 5U 5U 5U 20U 20U 000075-60-3 5U 1J 1J 5U 5U 20U 20U 000075-60-3 5U 5U 5U 5U 5U 5U 20U 20U 000074-87-3 5U 5U 5U 5U 5U 5U 20U 20U 000074-87-3 5U 5U 5U 5U 5U 5U 20U 20U 000074-87-3 5U 5U 5U 5U 5U 5U 20U 20U 0001024-48-1 5U 5U 5U 5U 5U 5U 20U 20U 0001024-48-1 5U	Chlorobenzene	000108-90-7	5.0	50	5.0	5 U	50	5.0	2,0 U	2.0 U	5 ST
000012-48-15 5U 1J 1J 1J 5U 5U 5DU 2DU 000012-48-15 5U 6U 5U 5U 5U 5U 20U 20U 00012-48-15 5U 6U 5U 5U 5U 5U 20U 20U 00012-48-11 5U 5U 5U 5U 5U 5U 20U 20U 00012-48-11 5U 5U 5U 5U 5U 5U 20U 20U 00012-48-11 5U 5U 5U 5U 5U 5U 20U 20U 00012-48-12 5U 5U 5U 5U 5U 5U 20U 20U 00012-48-1 5U 5U<	Chloroethane	000075-00-3	50	50	50	9.0	50	50	2.0 U	2,0 U	5ST
00007487.3 \$U	Chloroform	000067-66-3	50	٠,٢	1.7	1,1	50	5.0	0.50 J	2.0 U	7.ST
000156-59.2 5U 5U 5U 5U 20U 20U 010061-01-5 5U 5U 5U 5U 5U 5U 20U 20U 0100124-48-3 5U 5U 5U 5U 5U 5U 20U 20U 000074-95-3 5U 5U 5U 5U 5U 5U 20U 20U 000074-95-3 5U 5U 5U 5U 5U 20U 20U 20U 000074-95-3 5U 5U 5U 5U 5U 5U 20U 20U 000075-09-2 5U 5U 5U 5U 5U 3U 5U	Chloromethane	000074-87-3	20	50	50	503	50	50	2.0 U	2.0 U	5ST
0.0001-01-5 5 U <th< td=""><td>cls-1,2-Dichloroethene</td><td>000156-59-2</td><td>50</td><td>50</td><td>50</td><td>50</td><td>50</td><td>5.0</td><td>2.0 U</td><td>20 U</td><td>5.ST</td></th<>	cls-1,2-Dichloroethene	000156-59-2	50	50	50	50	50	5.0	2.0 U	20 U	5.ST
00012448-1 5U 5U 5U 5U 20U 20U 20U 000012448-1 5U 5U 5U 5U 5U 5U 20U 20U 20U 00001248-4 5U	cis-1,3-Dichloropropene	010061-01-5	5.0	5.0	50	50	5.0	50	2.0 U	2.0 U	0.4 ST
(a) 000074-95-3 5 U	Dibromochloromethane	000124-48-1	5.0	50	50	50	50	50	2.0 U	2.0 U	50 GV
oride 000100-414 5 U <t< td=""><td>Dibromomethane</td><td>000074-95-3</td><td>5.0</td><td>50</td><td>50</td><td>5.0</td><td>5.0</td><td>50</td><td>2.0 U</td><td>2.0 U</td><td>5ST</td></t<>	Dibromomethane	000074-95-3	5.0	50	50	5.0	5.0	50	2.0 U	2.0 U	5ST
thane 000074-884 5 U <t< td=""><td>Ethylbenzene</td><td>000100-41-4</td><td>50</td><td>5.0</td><td>5.0</td><td>20</td><td>50</td><td>5.0</td><td>2.0 U</td><td>2.0 U</td><td>5.ST.</td></t<>	Ethylbenzene	000100-41-4	50	5.0	5.0	20	50	5.0	2.0 U	2.0 U	5.ST.
re chloride 000075-09-2 5 U	lodomethane	000074-88-4	50	50	20	50	20	20	1,0 U	NA	5.ST
conditional continuence of the first offices and the first offices are as a continuence of a continuence of a continuence offices are as a continuence offices are as a continuence of a continuence of a continuence offices are as a continuence of a continuence offices are as a continuence offices are as a continuence office and a continuence offices are as a continuence of a co	Methylene chloride	000075-09-2	5.0	50	suj.	5.0	20	20	3.9 UB	9.9 UB	5ST
000102-184 5U 5U 5U 5U 2.0U 2	Styrene	000100-42-5	20	20	50	50	20	20	2.0 U	2.0 U	5ST
000105-68-3 5U 5U 5U 5U 2.0U	Tetrachloroethene	000127-18-4	50	20	20	3.0	9.0	50	2.0 0	2.0 0	5.8T
000155-60-5 5.0 5.0 5.0 5.0 5.0 2.0 2.0 000165-60-5 5.0 5.0 5.0 5.0 5.0 2.0 2.0 2.0 000176-72-6 5.0 5.0 5.0 5.0 5.0 2.0	Toluene	000108-88-3	20	20	20	20	20	20	2.0 U	2.0 U	28
0001064-22-6 5U 5U 5U 5U 2.00 2.00 2.00	trans-1,2-Dichloroethene	000156-60-5	20	20	20	200	200	20	2.0 0	2,00	551
0000716-71-6 5U 5U 5U 5U 5U 5U 5U 5	trans-1,3-Dichloropropene	010061-02-6	20	20	20	20	20	20	2.0 0	2.0.0	0.48
rene 000075-901-6 5.U 5.U 5.U 5.U 2.UU	trans-1,4-Dichloro-2-butene	000110-57-6	50	50	50	50	20	5 UJ	1.0 U	200	581
promortisme 000075-89-4 5U 5U 5U 2.0U	Trichlaraethene	000079-01-6	50	50	50	50	50	20	2:0 O	2.0 U	5.ST
100 100	Trichlorofluoromethane	000075-69-4	20	50	50	50	20	20	2.0 U	2.0 U	5.ST
Je 000075-01-4 5U 5U 5U 5U 2.0 U 2.0 U <td>Vinyl Acetate</td> <td>000108-05-4</td> <td>5.0</td> <td>50</td> <td>50</td> <td>suj.</td> <td>90</td> <td>5 UJ</td> <td>2.0 U</td> <td>2.0 U</td> <td>3.</td>	Vinyl Acetate	000108-05-4	5.0	50	50	suj.	90	5 UJ	2.0 U	2.0 U	3.
001330-20-7 NA NA NA NA NA NA NA NA 2.0 U 2.0 U 2.0 U 1.7 1.1 5.0 5.0 5.0 0.5 0	Vinyl chloride	000075-01-4	50	20	50	5 UJ*	50	20	2.0 U	2.0 U	2.ST
Osio0395-47-6 NA	m,p-Xylene	001330-20-7	NA A	AN.	NA	¥	AA	NA	4,00	4.0 U	5.ST
001330-20-7 5U 5U 5U 5U 5U 5U NA NA NA 13 5U 5U 5U 0.5 0	o-Xylene	000005-47-6	NA	NA	WA	NA A	NA	NA	2.0 U	200	2021
1, 50 50 50	Xylene (total)	001330-20-7	20	50	20	50	20	200	A V	AN C	5.ST
	TOTAL VOCs		ח	1.7"	1.7	50	50	50	0.5	0	•

QUALIFIERS

B. Compound was found in the method blank as well as the sample

B. Compound was snalyzed for but not defected at the detection limit shown.

J. Compound was found at a concentration below the detection limit, value estimated

E. Compound was found at a secondarity and the detection limit, value estimated

E. Compound from analysis at a secondary dilution.

U. exult taken from analysis at a secondary dilution.

NOTES
GV: Guldance Value
ST: Standard
NA: Not Analyzed

Parameter exceeds Standard/Guidance Value

NS: Not Sampled

J:: Result qualifled 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		MW-02!	MW-02I	MW-02I	MW-021	MW-02I	MW-02I	MW-021	MW-021	NYSDEC Class GA
Volatile Organic Compounds	CAS#	(1/0/1)	(\alpha\)	(1/0/1)	(//a//)	(l/au/)	(/ממ/)	(l/Bn)	(l/Bn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5.0	50	50	50	50	50	2.0 U	2.0 U	5.ST
1,1,1-Trichloroethane	000071-55-6	5 0	5.0	50	5.0	20	5.0	2.0 U	2.0 U	5.ST
1,1,2,2-Tetrachloroethane	000079-34-5	5.0	50	5.0	5.0	5.0	5.0	2.0 ህ	2.0 U	5.ST
1,1,2-Trichloroethane	000079-00-5	S.U	50	50	5.0	50	20	2.0 U	2.0 U	5.S.T
1,1-Dichloroethane	000075-34-3	50	20	50	50	20	20	2.0 U	2.0 U	587
1,1-Dichloroethene	000075-35-4	50	50	20	5.0	50	50	2.0 U	2.0 U	5ST
1.1-Dichloropropene	000563-58-6	NA	AN	NA	WA	AN	NA	NA	NA	5ST
1,2,3-Trichloropropane	000096-18-4	20	50	50	5.0	50	50	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000008-12-8	20	50	20	50	20	50	2.0.0	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	50	50	50	5.0	50	50	2.0 U	2.0 U	5.ST
1,2-Dichlorobenzene	000095-50-1	5 U	5.0	20	5.0	50	20	2.0 U	2.0 U	3.ST
1,2-Dichloroethane	000107-06-2	5 U	50	50	5.0	50	50	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (lotal)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5ST
1,2-Dichloropropane	000078-87-5	5.0	50	5.0	5.0	50	50	2.0 U	2.0 U	1.8⊤
1,4-Dichlorobenzene	000106-46-7	50	50	50	50	50	20	2.0 U	2.0 U	35T
2-Butanone	000078-93-3	5 U	50	5.0	50	50	5.0	5.0 U	200	50 GV
2-Hexanone	000591-78-6	5.0	50	5.0	5.0	50	5.0	5.0 U	0.03	50 GV
4-Methyl-2-pentanone	000108-10-1	5 U	50	5.0	5.0	50	5.0	5,0 U	5.0 U	9.
Acetone	000067-64-1	5.0	50	5.0	5.0	su.	5.0	0'S	2,7 UB	50 GV
Acrylonitrile	000107-13-1	5.0	9.0	5.0	50	50	5.0	2.0 U	200	5.ST
Benzene	000071-43-2	50	50	50	50	50	5.0	2.0 U	2.0 0	1ST
Bromochloromethane	000074-97-5	9.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Bromodichloramethane	000075-27-4	5.0	20	5.0	9	50	50	2.0 U	2.0 U	50 GV
Вготобогт	000075-25-2	50	50	50	su	50	5.0	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	50	50	50	5 UJ.	50.1	50	2.0 U	400	5.ST
Carbon disulfide	000075-15-0	90	50	20	50	90	50	2.0 U	200	VS 09
Carbon tetrachloride	000056-23-5	5.0	5.0	50	อร	50	5.0	2.0 U	2.0 U	5ST
Chlorobenzene	7-08-90-0	20	50	5.0	5.0	5.0	50	2.0 U	2.0 U	5ST
Chloroethane	000075-00-3	50	90	50	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Chloroform	000067-66-3	50	50	5.0	5.0	ns	5.0	2.0 U	2.0 U	7.ST
Chloromethane	000074-87-3	50	50	50	5 UJ*	50	5.0	2.0 U	2.0 U	5 ST
cis-1.2-Dichloroethene	000158-59-2	50	90	50	5.0	50	50	2,0 U	2.0 U	5.ST
cis-1,3-Dichloropropene	010061-01-5	90	50	5.0	50	9.0	5.0	2,0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	50	50	50	50	5.0	50	2,0 U	200	50 GV
Dibromomethane	000074-95-3	50	20	50	20	20	5.0	2.0 U	2.0 U	5ST
Ethylbenzene	000100-41-4	50	5.0	SU	5.0	50	50	2.0 U	2.0 U	5.ST
lodomethane	000074-88-4	50	50	50	9.0	90	50	1.0 U	ΑN	5ST
Methylene chloride	000075-09-2	50	5.0	503*	5.0	5.0	50	6.0 UB	8.7 UB	587
Styrene	000100-42-5	50	20	50	50	20	50	2.0 U	200	5.ST
Tetrachloroethene	000127-18-4	20	50	5.0	5.0	5.0	50	2.0 U	2.0 U	5ST
Toluene	000108-88-3	20	5.0	5.0	20	20	5.0	2.0 U	200	5ST
trans-1,2-Dichloroethene	000156-60-5	5.0	50	5.0	90	5.0	5.0	2.0 U	2.0 U	5ST
trans-1,3-Dichloropropene	010061-02-6	50	50	20	50	20	20	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	20	20	20	20	20	20	1.00	200	5581
Trichloroethene	000079-01-6	50	20	20	20	20	50	2.0.0	2.0 U	581
Trichloroffuoromethane	000075-69-4	20	20	20	20	20	20	2.0 0	200	18g
Vinyl Acetate	000108-05-4	20	20	20	503	200	20	2.0.0	200	. 0
Vinyl chloride	000075-01-4	20	20	20	200	50	20	2.00	2.0 U	281
m.p-Xylene	001330-20-7	W.	¥.	W.	AN:	¥.	AN	0.00	0.0.0	200
o-Xylene	000095-47-6	NA:	NA C	AN .	NA.	NA C	a S	2.0.0	2.00	100
TOTAL WOOL	1-02-05100	000	2	0	0	0	0	W. C	5 6	000
IOIAL VOCS		O INTERPO			000	200	NOTES 30			
		COALIFICATION was found in the method		blank as well as the sample	nnla		GV. Guidance Value	a		
		U: Compound was	analyzed for but not de	stected at the detection	n limit shown.		ST: Standard			
		J: Compound was for	ound at a concentratio	n below the detection	J: Compound was found at a concentration below the detection limit, value estimated		NA: Not Analyzed		:	
		E: Concentration ex	ceeds instrument calli	oration range; value e	stimated.			: Parameter exceeds Standard/Guidance Value	s Standard/Guidano	e Vafue
		D: Result taken fror	n analysis at a second	ary dilution.			NS: Not sampled	:	:	
		U* or UB: Result qu	U* or UB: Result qualified as non-detect based on validation criteria	ased on validation cr	Iterla		J*: Result qualified	J*: Result qualified as estimated based on validation criteria	n validation criterla	
							-: No standard or gu	uldance value		

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

Controlled Con	Voletile Organic Compounds 11.1.2. Tetrachlorocethane 11.1.2. Tetrachlorocethane 11.2. Ticklorocethane 11.2. Ticklorocethane 11.2. Ticklorocethane 11.2. Ticklorocethane 11.2. Dichloropropane 12. Dichloropropane 12. Dichloropropane 12. Dichloropropane 12. Dichlorocethane 13. Dichlorocethane 13. Dichlorocethane 14. Dichlorocethane 12. Dichlorocethane 13. Dichlorocethane 14. Dichlorocethane 14. Dichlorocethane 15. Dichlorocethane 16. Dichlorocethane 17. Dichlorocethane 18. Dichlorocet	CAS # 000630-20-6 000071-55-6	(1,04)			2/4/2010	6/1/2011	8/28/2012	11/13/2013	3/16/2015	GROUNDWATER
Particular	1.1.1.2-Tetrachloroethane 1.1.1.Trichloroethane 1.1.1.2.Trichloroethane 1.1.2.Trichloroethane 1.1.2.Dichloroethane 1.1.2.Dichloroethane 1.2.Dichloroethane	000630-20-6	(uRn)	(l/5n)	(hgu)	(na/l)	(ng/l)	(I/Bn)	(l/gn)	(l/gn)	STANDARD/GUIDANCE VALUE
Control	1,1,1,1,2,1 richlotocethane 1,1,2,1 richlotocethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane	000071-55-6	50	50	50	20	50	50	2.0 U	2.0 U	5.ST
Controlled Con	11.2.2.1 etrachloroethane 11.2.2.1 etrachloroethane 11.0.2.1 ichloroethane 11.0.2.1 ichloroethane 11.0.2.1 ichloroethane 12.0.2.1 ichloropropane 12.0.2.1 ichloropropane 12.0.2.1 ichloropropane 12.0.2.1 ichloropropane 12.0.2.1 ichloroethane 12.0.2.1 ichloroethane 12.0.2 ichloroethane 12.0.2 ichloroethane 12.0.2 ichloroethane 12.0.2 ichloropropane 12.0.2 ichloropropane 12.0.2 ichloropropane 12.0.3 ichloropropane 12.0 ichloropropane 13.0 ichloropropane 14.0 ichloropropan		50	20	SU.	SU	50	90	2.0 U	2.0 U	5ST
Continue	1.1-Dichloroethane 1.1-Dichloroethane 1.1-Dichloroethane 1.1-Dichloroptopene 1.2-Dichloroptopene 1.2-Dichloroptopene 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroptopane 1.2-Dichloropto	000078-34-5	000	0	200	000	000	000	2.00	200	100
State	1.1-Dichlorostition 1.1-Dichlorostition 1.1-Dichlorostition 1.2-Dichlorostopene 1.2-Dichlorostopene 1.2-Dichlorostition 1.2-Di	000075-34-3	200	0 2	200	0.00	0 2	0 2	2010	2011	100
The control of the	1.1-Dichloropropene 1.2.3-Trichloropropane 1.2.3-Trichloropropane 1.2Disponocethane 1.2-Dichloroberzene 1.2-Dichloroberzene 1.2-Dichloroberzene 1.2-Dichloroberzene 1.2-Dichloroberzene 1.2-Dichloroperane 1.2-Dichloropera	000075-35-4	200	200	50	20	20	20	2.0 0	2.0 U	188
Controlled Con	1.2.3-Trichloropropane 1.2-Dibromo-3-chloropropane 1.2-Dibromo-1-ane 1.2-Dishloroperane 1.2-Dishloroperane 1.2-Dishloroperane 1.2-Dishloroperane 1.2-Dishloroperane 1.2-Dishloroperane 1.2-Dishloroperane 2-Butanone 2-Hatthyl-2-pentanone 4-Metthyl-2-pentanone Acetone Acetone Remonchiloromethane	000563-58-6	NA AN	AN	NA	NA	AN	NA NA	NA	NA	587
Control	12-Dibromo-3-chloropropane 12-Dibromo-3-chloropropane 12-Dibromoethane 12-Dichlorobenzene 12-Dichloropropane 12-Dichloropropane 12-Dichloropropane 14-Dichloropropane 14-Dichloropropane 14-Dichloropropane 2-Butanone 2-Haxanone 4-Methyl-2-pentanone Acetona Acetona Borzene	000096-18-4	5.0	5.0	5.0	5.0	50	5.0	2.0 U	2.0 U	0.04 ST
Control Cont	1.2-Dichonoethane 1.2-Dichlorobenzene 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 1.2-Dichloroethane 2-Butanane 2-Hexanane 4-Methyl-2-pentanane Acetone Acetone Acetone Borzene	0000096-12-8	5.0	9.0	5.0	5.0	5.0	5 0.1	2,0 U	2.0 U	0.04 ST
Control	1.2-Dichlorobenzene 1.2-Dichloroethane 1.2-Dichloroethane (total) 1.2-Dichloroptropane 1.4-Dichloroptropane 1.4-Dichloroptropane 1.4-Dichloroptropane 1.4-Dichloroptropane 2-Haxanone 4-Mayly2-penlanone Acytonitrile Borscene	000106-93-4	5.0	5.0	20	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
The control of the	1.2-Dichloroethane 1.2-Dichloroethane (total) 1.2-Dichloropenae 1.4-Dichlorobenzene 2-Butanone 2-Butanone 2-Hwatnyl-2-pentanone Acetone Acetone Borzene	000095-50-1	5.0	5.0	9.0	5.0	50	20	0.56 J	2.0 U	3.S.T
March Control Contro	1.2-Dichloroethene (lotal) 1.2-Dichloropenae 1.2-Dichloropenae 2-Butanone 2-Butanone 4-Methyl-2-pentanone Acetona Acetona Barcaene	000107-06-2	5 U	5.0	50	SU	50	5.0	2,0 U	2.0 ህ	0.6 ST
Part	1.2-Dichloropropane 1.4-Dichloropropane 1.4-Dichlorobenzene 2-Hexanone 4-Metryl-2-pentanone Accelone Accelone Borzenene	000540-59-0	¥	NA	NA	NA	NA	NA	NA	NA	5ST
Control	1.4-Dichlorobenzene 2-Butanone 2-Butanone 4-Methyl-2-pentanone Acztone Benzene Benzene	0000078-87-5	50	20	50	5.0	5 U	5.0	2,0 U	2.0 U	1ST
Marchelle	2-Butanone 2-Hexanone A-Methyl-2-panlanone Acctone Acrytonitrile Benzenen	000106-46-7	20	20	2 N	50	20	20	0.70 J	20 U	3ST
Control	2-Hexanone 4-Weltyl-2-pentanone Acciona Acrylonitrile Barcacene Barcace	000078-93-3	20	5.0	20	50	5.0	500	5.0 U	5.0 U	50 GV
Control	4-Methyl-z-pentanone Acebone Acrylonitrile Benzene	000591-78-6	20	20	5.0	20	20	20	9.0 0	200	50 GV
March Marc	Acetone Acadonitrile Benzene Bromochloromethane	000108-10-1	50	50	20	5.0	50	50	5.0 U	5.0 U	9
Marchester	Actylonitrile Benzene Bromochloromethane	000067-64-1	50	20	90	3	20.	50	5.0 U	4.4 UB	50 GV
Particular	Bromochloromethane	000107-13-1	50	20	50	20	0.8	5 U.J	2.0 U	2.0 U	5ST
Marchester	Bromochloromethane	000071-43-2	20	20	50	50	20	20	200	2.0 U	181
Control		000074-97-5	20	20	20	20	20	20	2.0 U	2.0 U	SST
10000043242	Bromodichloromethane	000075-27-4	20	20	20	20	20	20	2.0 U	2.0 U	50 GV
Controlled State S	Bromoform	000075-25-2	20	20	20	SU	SU	SU	2.0 U	2.0 U	50 GV
Decide	Bromomethane	000074-83-9	5.0	20	50	20	\$0.7	20	2.0 U	4.00	5ST
10000054245 100000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 1000000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 10000054245 1000000054245 10000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 100000054245 10000000054245 100000054245 100000054245 1000000054245 100000054245 100000054245 1000000054245 1000000054245 1000000054245 1000000054245 10000000054245 10000000054245 10000000000054245 100000000000000000000000000000000000	Carbon disultide	000075-15-0	50	20	20	50	20	20	2.0 0	2.0 U	VD 09
OUNDESCRIPTS SU	Carbon tetrachloride	000056-23-5	503	20	20	20	20	20	2.00	2.0.0	SST
Octobres Strict	Chloropenzene	0.00 35.000	0	0	000	0	000	0	2.00	2.00	100
Composed State Comp	Chloroethane	0000/2-00-3	200	0	0	000	200	000	2.00	007	200
1000166-25-2	Chloroform	000001-66-3	000	000	000	000	0	200	2.00	2.0 0	10/
Marchanes	omorphisms and	0000450000	0 0	000	000	0	000	200	0.00	2007	100
The composition of the control of the composition of the control	vis-1,2-Dichlorographene	040084-04-5	0 1	0 4	000	0.00	000	000	20.5	2007	1000
Compound was analyzed for but not detected in this thorn. Compound was analyzed for but not detected in the receipt and contributed as a concentration was cased in stationard was analyzed for but not detected in the resting and concentration was cased in stationard was analyzed for but not detected in the resting and concentration was cased instituted as a converted in the resting and concentration. Compound was analyzed for but not detected in the det	Oibromochloromethane	000124-48-4	200	200	200	200	200	000	2011	202	70.03
Control of the cont	Dibromomethane	000124-05-3	2 2	200	2	2	25	2 2 2	1106	2011	1996
1,000 1,00	Ethylbenzepe	000004-33-3	2 2 2	200	250	115	200	200	200	2011	TO Y
Substitute	lodomethane	000074-88-4	2	200	2 2	115	200	25	101	NA	Tor
Control 6-15-5 Str.	Methylene chloride	000075-09-2	50	200	511.1	250	511	119	4.9 UB	82.08	
Substitute	Styrene	000100-42-5	50	50	50	50	50	50	2.0 U	2.0 U	TSS.
conditioned 500 50	Tetrachloroethene	000127-18-4	50	50	50	50	20	50	2:0 U	2.0 U	- Sec
100016-60-5 5 to 5	Toluene	000108-88-3	5.0	50	50	50	50	50	2.0 U	2.0 U	SST
00001-02-6 5 U 5 U 5 U 5 U 20 U <	trans-1,2-Dichloroethene	000156-60-5	20	20	20	50	5.0	5.0	2.0 U	2.0 U	5.ST
1000176-57-6 5 U 5	trans-1,3-Dichloropropene	010061-02-6	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	0.4 ST
Compound was found in the method blank as well as the concentration exceeds institument calibration restricted 1. or Use	trans-1,4-Dichloro-2-butene	000110-57-6	5.0	50	50	20	50	503	1,0 U	2.0 0	5ST
Marchane 000075-694 5 U	Trichloroethene	000079-01-6	5.0	50	20	50	50	20	2.0 U	2.0 U	SST
000075-01-4 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5	Trichlorofluoromethane	000075-69-4	200	20	20	20	20	50	2.0 U	2.0 U	5.ST
100095-47-6	Vinyl Acetate	000100-03-4	000	0.0	000	0.00	000	25.00	2000	2000	. 6
1000352-47-6	VIIIVI CRIGHTEE	004930 20 7	0 0 0	200	000	0.0	0.0	0.0	2.00	2.00	202
Compound was analyzed from the method blank as well as the sample U. Compound was found at a concentration below the detection limit value estimated E. Concentration exceeds instrument calibration reviers a second product of the concentration analysis at a second product of the concentration criteria. U. Compound was nalyzed for but not defection limit shown. U. Compound was found at a concentration below the detection limit value estimated U. Compound was found at a concentration below the detection limit value estimated U. Compound was found at a concentration palow the detection limit value estimated U. Compound was found at a concentration palow the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the detection limit value estimated U. Compound was nanalyzed for but not defeated at the de	III.p-Aylene	000005 47 6	× × ×	Y.Y	Y V	NA NA	NA	A ST	0.00	2011	100
Under the second state of the s	Vilone (fetal)	001000-47-6	NA I	Y S	NA U	NA.	Y S	N N	2.0.0	2.0 0	180
QUALIFIERS QUALIFIERS B. Compound was found in the method blank as well as the sample U: Compound was found in the method blank as well as 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 laken from analysis at a secondary diffution. U.* or UB: Result mullified as non-detect hased on valifierin criteria. Wis Not Sample of the concentration in the concentration below the definition. Wis Not Sample of the concentration in the concentration below the definition. Wis Not Sample of the concentration in the concentration belongs the concentration in the concentration in the concentration belongs the concentration in the concentration in the concentration belongs the concentration belongs the concentration in the concentration belongs the concentration in the concentration belongs the concentration in the concentration belongs the concentration	TOTAL VOCe	2020200	2 =			2 4	2 -		1.28	ج کے	100
GV: Guldance Value ST: Standard Ue estimated NS: Not Amalyzed NS: Not Sampled:	200		DUALIFIERS								
own. ST: Standard Us estimated NA: Not Analyzed NS: Not Sampled ''. Result minifilation			3: Compound was fo	und in the method bia	nk as well as the sart	ple		GV: Guidance Value	60		
NS: Not Sampled NS: Not Sampled		_ `	J: Compound was a	nalyzed for but not de	tected at the detection	limit shown.		ST: Standard			
NS: Not Sampled		,	Concentration exc	und at a concentration eeds instrument callb	ration range: value es	imit, value estimated timated.		NA: Not Analyzed	: Parameter exceeds	Standard/Guidance	Value
Indation criteria			D: Result taken from	analysis at a second	ary dilution.			NS: Not Sampled			
		. –	Por IIB. Recult and	Ilfled as non-datert h	asad on validation crit	- in		14. Poent analifled	or peed haterdood	validation criteria	

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

				2000	2000	are man	A Comment	Cho char	AND DAD	000000
Date of Collection		02/23/07	11/3/2008	8/12/2009	2/4/2010	5/26/2011	8/27/2012	11/13/2013	3/18/2015	GROUNDWATER
Votatile Organic Compounds	CAS#	(//۵۸)	((//۵/1)	((/bn)	(l/an)	(l/bn)	(l/bn)	(l/gn)	(l/gn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5.0	20	ns	5.0	5.0	50	2.0 U	2.0 U	5ST
1,1,1-Trichloroethane	000071-55-6	50	50	5.0	SU	50	50	2.0 U	2,0 U	5 ST
1,1,2,2-Tetrachloroethane	0000079-34-5	SU	ຣບ	8.0	5.0	50	50	2.0 U	2.0 U	5ST
1,1,2-Trichloroethane	000079-00-5	20	50	SU	50	50	50	2.0 U	2.0 U	5ST
1,1-Dichloroethane	000075-34-3	50	50	50	50	90	20	2.0 U	2.0 U	5ST
1,1-Dichloroethene	000075-35-4	20	90	90	20	20	20	2.0 0	200	5ST
1,1-Dichloropropene	000563-58-6	NA.	Y.	N.	N I	V.	N.	X C	2	1000
1,2,3-Trichloropropane	000096-18-4	200	200	000	200	200	0	2.0.0	2007	0.04 51
1,2-Dibromo-3-chloropropane	000086-12-8	000	000	000	000	0	000	2,00	2007	10,040 TO 70
1,z-Uibromoethane	000000	0	0	000	000	0	000	1100	2007	1000
1,2-Dichlorobenzene	000000-20-1	0 =	000	000	000	113	200	00.2	2011	185
1,z-Dichlorosinane	000107-08-2	O O O	200	NA N	O C	NA CO	AM	NA	NA	18.50.0
1,2-Dichlosperiene (lotal)	0-86-03-0	CN.	144	124	N	2		201	2011	- L
1 4 Distinctions	2-10-01000	200	000	200	2 4	- u	200	2011	2011	38.
2. Britanono	000010040-1	0 11	200	2 2	211	200	511	5.0 0	500	50 GV
2 Hevenson	000501-78-B	0 =	114	200	2 2	511	250	200	5.0 U	50.67
4.Mathul.2.contanone	000108-10-1	25	25.1	200	511	200	50	5.0 U	5.0 U	
Aratona	000100-10-1	200	411	200	200	-115	200	5,00	4.8 UB	50 GV
Andoninia	000107-13-1	250	200	200	211	200	200	2.0 U	2.0 U	5ST
Benzene	000071-43-2	200	25	115	200	250	ns	2.0 0	2.0 U	181
Bromochloromethane	000074-97-5	50	50	200	50	20	50	2.0 U	2.0 U	5ST
Bromodichloromethane	000075-27-4	50	50	200	200	50	5.0	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	20	50	50	50	50	50	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	50	50	50	50	50.7	50	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	50	90	50	50	50	50	2.0 U	2.0 U	VS 08
Carbon tetrachloride	000056-23-5	50	5.0	5.0	5.0	50	5.0	2,0 U	2.0 U	5ST
Chlorobenzene	000108-90-7	5.0	20	5.0	50	5.0	5.0	2.0 U	2.0 U	5.ST
Chloroethane	000075-00-3	5.0	1 5 0	50	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Chloroform	000067-66-3	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2:0 U	7ST
Chloromethane	000074-87-3	5.0	50	5.0	5.0	5.0	50	2.0 U	2.0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	5.0	50	50	5.0	50	20	2.0 U	2.0 U	5ST
ais-1,3-Dichloropropene	010061-01-5	5.0	50	50	20	50	50	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	20	50	5.0	50	20	20	2:0 0	2,0 U	50 GV
Dibromomethane	000074-95-3	20	50	20	20	20	20	2.0 0	2000	581
Ethylbenzene	000100-41-4	50	50	20	200	90	200	2.0 0	2.0.0	000
Iodomethane	000074-88-4	20	20	20	20	20	200	00.1	AN C	200
Methylene chloride	2-80-92-000	0 :	0 :	2000	000	000	0	4.7 00	1100	100
Siyrene	000100-42-5	000	0 1	0	0	0	0 :	2002	2002	100
Tetrachloroethene	000127-18-4	200	000	000	200	000	0 = 0	200	2002	100
Torus 4.2 Outliers those	000100-00-3	000	000	000	300	0 4	200	201	200	2000
trans-1 3-Dichloropropage	010061-02-8	19	50	50	200	200	50	2.0 U	2.0 U	0.4.87
Irans-1.4-Dichloro-2-butene	000110-57-6	0.00	50	50	20	90	90	1.0 U	2.0 U	5ST
Trichloroethene	000079-01-6	50	50	50	5.0	50	50	2.0 U	2.0 U	5ST
Trichlorofluoromethane	000075-69-4	9.0	50	5.0	5.0	5.0	20	2.0 U	2.0 U	5ST
Vinyl Acetate	000108-05-4	2.0	50	5.0	50	50	5.0	2.0 U	2.0 U	•
Vinyl chloride	000075-01-4	5.0	50	50	5.0	90	50	2.0 U	2.0 U	2.87
m.p-Xyiene	001330-20-7	A.	AN	NA	¥.	AN :	YZ:	4.00	4.00	TSS.
o-Xylene	000095-47-6	NA.	NA.	V N	Y S	NA.	ď.	2.0 0	2002	000
Xylene (total)	001330-20-7	000	2	00	0	200	0	¥ c	Š	000
I O I AL VOCS		0	2	0	000	00	00	0		
		COMPOUND Was for	all bother method by	QUALIFIERS B. Compaind was failed in the method blank as well as the sample	alu		GV. Guldance Value	4		
		U: Compound was a	nalyzed for but not de	fected at the detection	U: Compound was analyzed for but not detected at the detection limit shown.		ST: Standard			
		J. Compound was found at a concern	ound at a concentration	ration below the detection limit, val	fimit, value estimated		NA: Not Analyzed	boorse reference .	· Deremeter expende Ctendent/Culticher	Volue
		D. Besulf taken from		conderv dilution	on large of		NS: Not Sampled	The second control of		
		Us needle taken Horn analysis at a set	l alianysis at a second	condary emerger.	faria		1* Besult analitied a	as petimated hased or	n validation criteria	
		מ מו מבי ייימייו אל	מווווסט מש זוטוו איניייי	מספת כוו אשוומבווכו כיי	2010		-: No standard or gu	-: No standard or quildance value	Venderion construction	

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

STANDARD/GUIDANCE VALUE NYSDEC Class GA GROUNDWATER 581 581 581 581 581 581 581 0.04 ST 0.04 ST 5 ST 50 GV 5 ST 18T 18T 38T 50 GV MW-04) 3/18/2015 3.4 UB 2.0 U (ug/l) 5.0 U 2.0 U 2.0 U 2.0 U 200 200 200 200 200 200 200 MW-04I 11/13/2013 (ug/l) MW-041 8/27/2012 MW-04I 5/26/2011 MW-041 2/4/2010 MW-04I 8/12/2009 MW-041 02/23/07 1 000074-87-5 000074-87-5 000074-87-5 000074-83-9 000075-15-0 000075-15-0 000075-15-0 00008-90-7 000008-90-7 000156-59-2 010061-01-5 000124-48-1 000074-95-3 000074-88-4 000075-09-2 000100-42-5 000127-18-4 000108-88-3 000156-60-5 000100-41-4 CAS# /olatile Organic Compounds ,2,2-Tetrachloroethane Sample ID Date of Collection

NOTES

GV: Guidance Value ST: Standard NA: Not Analyzed

Parameter exceeds Standard/Guidance Value

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.
E: Roacett faken from analysis at a secondary dilution.
U* or UB: Result qualified as non-detect based on validation criteria

QUALIFIERS

NS: Not Sampled

J⁴: Result qualified as estimated based on validation criteria ∴ No standard or guildance value

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

VOLATILE ORGANIC COMPOUNDS

STANDARD/GUIDANCE VALUE NYSDEC Class GA GROUNDWATER 5 ST 0.04 ST 5 ST 5 ST 3 ST 0.6 ST 50 GV 5 ST 1 ST 3 ST 50 GV 50 GV 18T 5 ST 50 GV 50 GV 60 GV 5 ST 5 ST 5 ST 5 ST MW-04S 3/18/2015 2.00 U 4.1 UB 200 U 2.0 U VA NA 0.72 MW-04S 11/13/2013 1.0 U 4.6 UB 2.0 U Z 0.5 MW-04S 8/27/2012 MW-04S 5/31/2011 MW-04S 2/4/2010 (Van) MW-04S 8/12/2009 (1/5/1) MW-04S 11/3/2008 (I/gn) AAE (ua/)) 000124-48-1 000074-95-3 000100-41-4 000074-88-4 000075-09-2 000100-42-5 000156-60-5 010061-02-6 000110-57-8 000079-01-6 000098-12-8 000106-93-4 000095-50-1 000107-06-2 000540-59-0 000078-87-5 000106-46-7 000591-78-6 000108-10-1 000067-64-1 000107-13-1 000074-97-5 000075-27-4 000075-25-2 000074-83-9 000075-15-0 000056-23-5 000075-00-3 000067-66-3 000074-87-3 000630-20-6 000071-55-6 000079-34-5 000079-00-5 000075-34-3 000075-35-4 000563-58-6 000096-18-4 CAS# Volatile Organic Compounds chioroethene (total) trans-1,2-Dichloroethene Sample ID Date of Collection lene chloride

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.
C: Concentration exceeds instrument calibration range.
U's could in the concentration and the concentration of the concentration

: Parameter exceeds Standard/Guidance Value GV: Guldance Value ST: Standard NA: Not Analyzed 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

		4								0
Sample ID		MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D 3/10/2015	NYSDEC Class GA
Votatile Organic Compounds	#WCAC	(110/1)	(110/1)	(/////	((//ш/)	(11041)	(1,117/1)	(l/an)	(na/l)	STANDARD/GIJDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5.0	50	50	5.0	200	20	2.0 U	2.0 U	SST
1.1.1-Trichloroethane	000071-55-8	20	50	20	20	200	50	2.0 U	200	5ST
1.1.2.2-Tetrachloroethane	000079-34-5	50	50	50	50	200	50	2.0 U	2,0 U	(c)
1,1,2-Trichloroethane	000079-00-5	50	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.S.T
1,1-Dichloroethane	000075-34-3	50	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1,1-Dichloroethene	000075-35-4	5.0	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5.ST
1,2,3-Trichloropropane	000096-18-4	9 n	90	9.0	5.0	50	5.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	9.0	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	2.0	5.0	5.0	5.0	20	20	2.0 U	2.0 U	5.5T
1,2-Dichlorobenzene	000095-50-1	ns .	20	8.0	20	20	5.0	2.0 U	2.0 U	3.87
1,2-Dichloroethane	000107-06-2	0.5	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	0.6.87
(1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5.ST
1,2-Dichloropropane	000078-87-5	20	- 50	5.0	50	5.0	5.0	2.0 U	2.0 U	1ST
1,4-Dichlorobenzene	000106-46-7	0.9	50	50	50	50	20	2.0 U	2,0 U	3.ST
2-Butanone	000078-93-3	5.0	50	5.0	90	50	SU	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	20	50	50	5.0	50	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	50	50	50	50	50	50	5.0 U	5.0 U	
Acetone	000067-64-1	50	50	5.0	50	5 U*	50	5.0 U	2.8 UB	50 GV
Acrylonitrile	000107-13-1	50	50	5.0	90	50	50	2.0 U	2.0 U	5ST
Benzene	000071-43-2	90	9.0	50	50	50	50	2.0 U	2.0 U	1ST
Bromochloromethane	000074-97-5	20	50	50	50	50	20	2.0 U	2.0 U	5ST
Bromodichloromethane	000075-27-4	20	5.0	5.0	20	5.0	20	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	20	50	5.0	9.0	50	20	2,0 U	2,0 U	50 GV
Bromomethane	000074-83-9	90	5.0	5.0	\$ NJ*	5 0.1.	50	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	0.9	20	50	20	5.0	5.0	2.0 U	2.0 U	VD 09
Carbon tetrachloride	000056-23-5	2.0	5.0	5.0	8.0	5.0	5.0	2.0 U	2.0 U	5.ST
Chlorobenzene	000108-90-7	5.0	5.0	5.0	50	50	5.0	2.0 U	2.0 U	5ST
Chloroethane	000075-00-3	5.0	50	5.0	5.0	50	5.0	2.0 U	2.0 U	5ST
Chloroform	000067-66-3	20	5.0	50	5.0	50.	5.0	2.0 U	2.0 U	7.ST
Chloromethane	000074-87-3	20	50	50	5 0.3*	50	20	2.0 U	2.0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	20	5 U	50	50	50	20	2.0 U	2.5	5ST
cis-1,3-Dichloropropene	010061-01-5	50	20	SU	30	50	SU	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5.0	5U	50	50	50	50	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	50	50	5.0	50	90	20	2.0 U	2.0 U	5ST
Ethylbenzene	000100-41-4	20	50	50	5.0	90	50	2.0 U	2.0 U	5ST
Iodomethane	000074-88-4	20	20	20	50	20	50	1.0 U	AN.	5ST
Methylene chloride	000075-09-2	20	20	sur.	20	20	SU	4.7 UB	8.3 UB	SST
Styrene	000100-42-5	50	50	20	20	20	20	2.0 U	2.0 U	5ST
Tetrachloroethene	000127-18-4	20	-	20	20	20	20	2.0 U	0.56 J	5ST
Toluene	000108-88-3	20		50	20	50	20	2.0 U	2.0 U	-581
trans-1,2-Dichloroethene	000156-60-5	200	90	200	200	200	200	2.00	0.743	551
trans-1,3-Dichloropropene	010061-02-6	200	20	20	200	20	20	2.0.0	2.0 0	0.451
trans-1,4-Uichloro-2-butene	000110-57-6	200	20	20	200	20	20	0.0.1	2,00	581
Trichloroethene	000079-01-6	20	20	200	20	20	20	2.0 0	2.0 U	581
Trichlorofluoromethane	000075-69-4	200	200	200	200	200	200	2,0 0	2.0 U	581
Vinyl Acetate	000108-05-4	20	20	20	5 UJ*	20	20	2.0 U	2.0 U	•
Vinyl chloride	000075-01-4	20	50	5.0	5 UJ.	50	50	2.0 U	2.0 U	2.ST
m.p-Xylene	001330-20-7	AN A	NA NA	NA NA	AN.	MA	WA	4.0 0	4.0 U	581
o-Xylene	0000095-47-6	NA	NA	NA	NA	NA	NA	200	200	5ST
Xylene (total)	001330-20-7	20	20	20	2	20	20	NA .	AN C	5ST
TOTAL VOCs		n	2	ח	20	20		0	3,8	***
		OUALIFIERS					NOTES			

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 difution.
U" or UB: Result qualified as non-detect based on validation criteria

: Parameter exceeds Standard/Guidance Value NOTES GV: Guldence Value ST: Standard NA: Not Analyzed

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

Date of College		ICO-MIM	ICO-AAIAI	100	100	100	TAIN COL			
Votatile Occasion Communication	# 0 0	02/21/07	11/5/2008	8/17/2009	2/8/2010	5/31/2011	8/28/2012	(/ma/)	3/19/2015	STANDARD/GUIDANCE VALUE
1 1 12-Tetrachiomethans	000630-20-6	135	100	5.0	50	5.0	50	2.00	2.0 U	587
1.1.Trichlomethane	000071-55-6	200	200	200	50	50	50	2.0 U	2.0 U	587
1.1.2.2-Tetrachloroethane	000078-34-5	50	50	5.0	50	50	5.0	2.0 U	2.0 U	5ST
1,1,2-Trichloroethane	000079-00-5	50	50	50	50	50	5.0	2.0 U	2.0 U	5ST
1,1-Dichloroethane	000075-34-3	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1,1-Dichloroethene	000075-35-4	5.0	50	5.0	9.0	9.0	9.0	2.0 U	2.0 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	¥	NA	NA	NA	NA A	5.ST
1,2,3-Trichloropropane	000096-18-4	90	50	50	50	20	SU	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	20	20	20	50	.F.0.9	20	2.0 0	2.0 0	0.04 ST
1,2-Dibromoethane	000106-93-4	200	200	200	0	000	000	200	200	100
1,2-Dichlorobenzene	0000407 05 2	0		000	000	000	000	2002	2007	1990
1.2-Dichloroethene (letel)	000107-08-2	O S N	AM	AM	MA	NA NA	O AN	NA NA	NA	1555
1.2-Dichloropropose	0000340-03-0	11.5	114	211	113	119	211	200	201	181
1.4-Dichlorobenzene	000106-46-7	200	200	50	0.5	200	200	2.0 U	200	382
2-Butanone	000078-93-3	250	200	50	200	50	20	5.0 U	5.0 0	50 GV
2-Hexanone	000591-78-6	50	50	5.0	50	50.0	50	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5.0	50	5.0	5.0	5 U-J•	5.0	5.0 U	5.0 U	
Acetone	000067-64-1	50	5.0	5.0	2 BJ	50.	5.0	5.0 U	4.6 UB	50 GV
Acrylonitrile	000107-13-1	5.0	5.0	5.0	5.0	5.0	50	2.0 U	2.0 U	5.ST
Benzene	000071-43-2	5.0	5.0	5.0	5.0	50	5.0	2.0 U	2.0 U	1ST
Bromochloromethane	000074-97-5	50	20	5.0	20	5.0	50	2:0 U	2,0 U	5ST
Bromodichloromethane	000075-27-4	50	20	50	2 0	50	50	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	50	20	20	20	20	20	2.0 U	2.0 0	50 GV
Bromomethane	000074-83-9	20	200	20	503	50.3	20	2.0.0	4.0 U	581
Carbon disultide	0000/5-15-0	0	200	200	0 :	200	000	2.00	2.00	VO 00
Carbon tetrachionde	000038-23-3	000	000	000	0	0 4	000	2000	2011	For
Chloroethane	000075-00-3	200	200	200	0.80	50	20	2.0 U	2.0 U	5821
Chloroform	000007-66-3	5.0	50	50	50	50	50	2.0 U	2.0 U	7ST
Chloromethane	000074-87-3	5.0	5.0	1.1	5 UJ*	50	5.0	2.0 U	2.0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	5.0	5.0	5.0	90	5.0	5.0	2.0 U	1.4.3	5ST
cis-1,3-Dichloropropene	010061-01-5	50	50	20	90	20.7	20	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	50	50	50	50	50	SU	2002	200	50 GV
Unbromomethane	000074-95-3	200	000	000	000	000	000	2.00	2000	100
Enylogenzene	000100-41-4	000	000	000	000	000	200	10.5	000	100
Methylene chloride	000075-09-2	000	20	50.1	0 15	200	0.5	4,1 UB	10 UB	1000
Styrene	000100-42-5	20	50	5.0	50	50	50	2.0 U	200	5ST
Tetrachloroethene	000127-18-4	5.0	50	5.0	50	2.0	5.0	2.0 U	2.0 U	5ST
Toluene	000108-88-3	5.0	5.0	5.0	5.0	50	50	2.0 U	2.0 U	5ST
trans-1,2-Dichloroethene	000156-60-5	5.0	5.0	50	50	50	20	2.0 U	0.58 J	5ST
trans-1,3-Dichloropropene	010061-02-6	20	200	OS O	200	200	200	7,00	20.0	0.4 S.1
Trichland to the control of the cont	8-16-011000	0 1	000	113	200	200	0 4	1000	2011	Tor
Trichlorofluoromethane	0000075-69-4	200	200	20	20	200	200	2.0 U	2.0 U	5ST
Vinyl Acetate	000108-05-4	5.0	50	5.0	\$U3*	50	5.0	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	50	SU	5 UJ*	50	SU	2.0 U	2.0 U	2.ST
m,p-Xylene	001330-20-7	NA	NA	NA	Α¥	AN	NA	4.0 U	4.0 U	5ST
o-Xylene	000095-47-6	AN I	AN	NA	NA.	NA.	AN	2.0 U	200	SST
Xylene (total)	001330-20-7	50	20	20	200	200	200	S. C	NA.	199
TOTAL VOCS		O IN INITIO	0	2	20	0.0	De SON		08:-	
		QUALLIERS B. Compound was found in the methor U: Compound was analyzed for but in U: Compound was so analyzed for but in E: Concentration exceeds instrument D: Result taken from analysis at a se U' or UB: Result qualified as non-det	QUALIFIERS Compound was found in the method blank as well as the sample U. Compound was analyzed for but not delected at the detection limit shown. J. Compound was found at a concentration below the detection limit, value estimated E. Concentration exceeds institument calibration range: value estimated. D. Result taken from analysis at a secondary diution. U' or US; Result qualified as non-detect based on validation criteria	od blank as well as the sample of defected at the detection limitration below the detection limit reation below the detection limit calibration range; value estimator day dilution.	nple n Ilmit shown. Ilmit, value estimated silmated.		NOTES GV: Guidance Value ST: Standard NA: Not Analyzed NS: Not Sampled J*: Result qualified a	e : Parameter exceed as estimated based or	Parameter exceeds Standard/Guidance Value estimated based on validation criteria	s Value
							-: No standard or gu	-: No standard or guildance value		

D&B ENGINEERS
AND
ARCHITECTS, P.C.

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

Sample ID Date of Collection		MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	NYSDEC Class GA
Volatile Organic Compounds	CAS#	(/na/)	(1/00)	(na/l)	(//a//)	(na/l)	(//an/)	(l/bn)	(l/pu)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachioroethane	000630-20-6	90	90	5.0	50	50	50	2.0 U	2.0 U	5.ST
1,1,1-Trichloroethane	000071-55-6	5.0	20	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5ST
1,1,2,2-Tetrachloroethane	0000079-34-5	180	50	5.0	18	20	5.0	2.0 U	2.0 U	5ST
1,1,2-Trichloroethane	9-00-620000	2.0	50	5.0	8.0	5.0	5.0	2.0 U	2.0 U	5.ST
1,1-Dichloroethane	000075-34-3	50	50	50	5.0	5.0	5.0	2.0 U	2.0 U	5ST
1,1-Dichloroethene	000075-35-4	รถ	20	20	5.0	50	50	2.0 U	2:0 U	5ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	NA	NA	NA	NA	NA	5ST
1,2,3-Trichforopropane	000096-18-4	5 U	50	50	50	50	5.0	2.0 U	Z.0 Ü	0.04 ST
1,2-Dibromo-3-chloropropane	0000086-12-8	20	50	50	20	5.0	5.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	2.0	50	50	50	50	5.0	2.0 U	2.0 U	5.ST
1,2-Dichlorobenzene	000085-50-1	20	20	50	20	50	50	2.0 U	2,0 U	3ST
1,2-Dichloroethane	000107-06-2	50	50	50	50	5.0	5.0	2,0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	Ϋ́	NA	NA	NA	NA	NA	ΝΑ	ΝA	5.ST
1,2-Dichloropropane	000078-87-5	20	50	50	2∩	50	50	2.0 U	2.0 U	1ST
1,4-Dichlorobenzene	000106-46-7	50	50	SU	50	50	50	2.0 U	2,0 U	3.ST
2-Butanone	000078-93-3	5.0	5.0	SU	5.0	50	5.0	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5.0	5.0	5.0	5.0	5.0	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	9.0	5.0	8.0	5.0	5.0	5.0	5.0 U	5.0 U	
Acetone	000067-64-1	20	50	20	283	5 O*	50	5.0 U	2.9 UB	50 GV
Acrylonitrile	000107-13-1	50	5.0	50	50	50	5.0	2.0 U	2.0 U	5.ST
Senzene	000071-43-2	5.0	50	90	19	50	50	2.0 U	2.0 U	15T
Bromochloromethane	000074-97-5	50	50	5.0	50	5.0	5.0	2.0 U	2.0 U	5 ST
Bromodichloromethane	0000075-27-4	5.0	5.0	5.0	20	5.0	5.0	2.0 U	2.0 U	50 GV
Bromoform	0000075-25-2	5.0	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5.0	5.0	50	5 UJ*	50.7.	9.0	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	5.0	20	50	5.0	50	50	2.0 U	2.0 U	1 60 GV
Carbon tetrachloride	000056-23-5	SU	SU	5.0	5.0	20	5.0	2.0 U	2.0 U	5.5.1
Chlorobenzene	000108-90-7	20	3,0	50	2.3	2.3	2.3	2.0 U	0.613	5.ST
Chloroethane	000075-00-3	5U	50	50	5 U	50	5.0	2.0 U	2.0 U	5ST
Chloroform	000067-66-3	20	20	50	50	50	50	2.0 U	2.0 U	7.ST
Chloromethane	000074-87-3	50	50	20	5 UJ.	50	50	2.0 U	2.0 U	5.ST
cis-1,2-Dichloroethene	000156-59-2	50	50	50	5.0	50	50	2.0 U	2.0 U	5.ST
cis-1,3-Dichloropropene	010061-01-5	50	50	50	50	5.0	50	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	20	5 U	50	50	50	50	2:0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	50	50	50	20	50	5.0	2.0 U	2,0 U	5.ST
Ethylbenzene	000100-41-4	20	20	50	20	50	50	2,0 U	2.0 U	5ST
fodomethane	000074-88-4	20	20	50	5.0	50	50	100	NA A	5.ST
Methylene chloride	000075-09-2	20	20	5 U.)*	SU	50	20	4.4 UB	8,1 UB	SST
Styrene	000100-42-5	000	200	200	000	200	200	2.0 0	200	581
Tellione	000127-18-4	000	000	000	000	0.0	000	2.00	2002	100
trans 1.2 Dickloroothone	000100-00-3	000	0	000	000	0.00	000	2.00	20.0	100
trans-1 3-Dichlorongoana	010061-02-6	2 4	200	2	2 2	0 1	2 2	2011	2011	150
trans-1.4-Dichloro-2-butene	000110-57-8	213	200	200	200	2 2	2 4	100	2011	TOTA
Trichloroethene	000079-01-6	200	200	251	250	510	200	2.0.0	200	Tork
Trichlorofluoromethane	000075-69-4	50	20	50	50	200	50	2.0 U	200	TS C
Vinyl Acetate	000108-05-4	20	50	50	5 UJ*	90	50	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	2 N	20	5 UJ*	90	90	2,0 U	2.0 U	2ST
m,p-Xylene	001330-20-7	NA	NA	NA	NA	AN	AN	4.0 U	4.0 U	5ST
o-Xylene	0000085-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5.ST
Xylene (total)	001330-20-7	50	50	50	50	50	50	NA	NA	5ST
TOTAL VOCs		D	9	D	50	2	2	0	0.61	
		QUALIFIERS					NOTES			

OUALIFIERS

S. 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. Conconstration 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

Parameter exceeds Standard/Guidance Value NOTES

GV: Guidance Value
ST: Standard
NA: Not Analyzad
: Parameter exceeds Standard/Guidance V:
NS: Not Sampled
J: Result qualified as estimated based on validation criteria
-: No slandard or guildance value

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

Sample ID Date of Collection		MW-06D	MW-06D	MW-06D	MW-06D 2/4/2010	MW-06D 5/26/2011	MW-06D 8/27/2012	MW-06D 11/12/2013	MW-06D 3/18/2015	NYSDEC Class GA GROUNDWATER
Volatile Organic Compounds	CAS#	(l/6n)	(l/5n)	(l/5n)	(1/5/1)	(hgu)	(na/l)	(l/gn)	(l/gn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5 U	50	20	20	50	20	2.0 U	2:0 U	5ST
1,1,1-Trichloroethane	000071-55-6	20	90	20	20	20	50	2.0 U	2.0 U	5ST
1,1,2,2-Tetrachloroethane	000079-34-5	20	20	50	20	50	50	2.0 U	2.0 U	5ST
1,1,2-Trichloroethane	000079-00-5	200	200	200	200	200	200	2.0.0	200	1881
1,1-Uchloroethane	000075-34-3	0 4	000	000	000	000	000	2000	2.00	Too
1 1-Dichlomorphene	000563-58-6	NA	O AN	NA NA	AN	NA AN	AN	NA	NA	1000
1.2.3-Trichloropropane	000096-18-4	12	100	200	510	0.5	20	2.0 U	2.0 U	0 04 ST
1.2-Dibromo-3-chloropropane	000098-12-8	200	50	50	200	50	50	2.0 U	200	0.04 ST
1.2-Dibromoethane	000106-93-4	20	50	50	50	50	50	2.0 U	2.0 U	SST
1.2-Dichlorobenzene	000095-50-1	50	90	SU	50	50	50	2.0 U	2.0 U	38
1,2-Dichloroethane	000107-06-2	5.0	50	5.0	50	50	5.0	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA.	AN	NA	NA	N.A.	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	5.0	5.0	5.0	5 U	50	5.0	2.0 U	2.0 U	151
1,4-Dichlorobenzene	000106-46-7	5.0	50	50	5.0	50	5.0	2.0 U	2.0 U	3.ST
2-Butanone	000078-93-3	0.5	5.0	5.0	5.0	5.0	5.0	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5.0	50	5.0	5.0	5.0	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	2.0	5.0	5.0	5.0	5.0	5.0	5.0 U	5.0 U	•
Acetone	000067-64-1	5.0	50	5.0	5 U	20.	5.0	5.0 U	3.7 UB	50 GV
Acrylonitrite	000107-13-1	5 U	50	3C	50	5 U	5.0	2.0 U	2.0 U	5.ST
Benzene	000071-43-2	5 0	90	20	5.0	5.0	5.0	2.0 U	2.0 U	181
Bromochloromethane	000074-97-5	5.0	50	20	5.0	50	5.0	2.0 U	2.0 U	5.ST
Bromodichloromethane	000075-27-4	20	20	20	50	50	SU	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	5.0	50	50	5.0	5.0	5.0	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5.0	50	50	5.0	50.7	5.0	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	50	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	50	50	50	50	50	5.0	2.0 U	2.0 U	5ST
Chlorobenzene	000108-90-7	20	90	50	50	20	20	2,0 U	2.0 U	5ST
Chloroethane	000075-00-3	20	20	20	20	20	20	2.0 U	2,0 U	5.8T
Chloroform	000067-66-3	25	50	50	7	20	20	2.0 U	2.0 U	7.ST
Chloromethane	0000/4-8/-3	200	20	200	200	20	50	200	200	58
cis-1,2-Dichloroethene	000156-59-2	200	200	200	200	200	20	2.0.0	2,00	223
cis-1,3-Dichloropropene	010061-01-5	200	200	200	200	200	200	2.0.0	2.0 0	0.4 ST
Dipromochioromethane	000124-48-1	200	0.0	200	200	200	200	2.0.0	2.0.0	2000
Dibromomethane	000074-85-3	200	000	000	200	000	200	200	200	100
Emyloenzene	000007414	0	000	0	0	0	0	0.07	2.0.0	000
Mathudan chicado	000075 00 2	000	000	*****	000	000	000	000 V	20107	100
Styrens	000100-03-5	0 0	0 0	200	0 4	00	0 4	2011	2011	000
Tetrachloroethene	000127-18-4	20	-7-1	50	50		200	0.54 J	2.0 U	i lo
Toluene	000108-88-3	50	50	50	50	200	200	2.0 U	2.0 U	581
trans-1,2-Dichloroethene	000156-60-5	5.0	50	5.0	9.0	5.0	ns sn	2.0 U	2.0 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	5.0	50	20	5.0	5.0	SU	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	20	50	20	50	20	50	1.0 U	2.0 U	5ST
Trichloroethene	000079-01-6	20	20	20	200	20	200	2.0 U	2.0 U	T SS
View Acatate	000108-05-4	0 0	000	000	000	0 4	0 4	2002	2010	1000
Vinyl chloride	000075-01-4	25	219	25	200	200	2 2	200	200	2.ST
m.p-Xvlene	001330-20-7	¥.	NA	NA	NA	NA	NA	4.0 U	4.0 U	25.5
o-Xylene	0000095-47-6	¥	NA A	NA.	NA	NA.	YZ.	2.0 U	2.0 U	5.87
Xylene (total)	001330-20-7	5.0	90	5.0	5.0	9.0	50	NA	AN	5ST
TOTAL VOCs		o	•	ם	5.0	+		0.54	0	3.12
		QUALIFIERS B: Compound was f	QUALIFIERS S. Compound was found in the method blank as well as the sample	ank as well as the sam	nple		NOTES GV: Guidance Value			
		J. Compound was for	Compute was analyzed to but not below the detection limit, value estimated Compound was found at a concentration below the detection limit, value estimated	n below the detection	limit, value estimated		NA: Not Analyzed			
		D: Result taken from	E. Concentration exceeds instrument canonation rang D: Result taken from analysis at a secondary dilution.	nation range; value es ary dilution.	sumbled.		NS: Not Sampled	: rarameter exceeds standard/Guidance value	s standard/cuidance	and
		U* or UB: Result qu	U* or UB: Result qualified as non-detect based on validation criteria	ased on validation cri	feria		J*: Result qualified a	J*: Result qualified as estimated based on validation criteria	validation criteria	
							-: No standard or gui	Idance vatue		

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

Sample ID		MW-061	MW-061	MW-061	MW-06I	MW-061	MW-061	MW-06I	MW-061 3/18/2015	NYSDEC Class GA
Volatile Organic Compounds	CAS#	(l/bn)	(l/bn)	(l/a/l)	(pan)	(na/l)	(l/bn)	(l/gu)	(l/gn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroelhane	000630-20-6	5.0	50	sur.	5.0	5.0	50	2,0 U	2.0 U	5.ST
1,1,1-Trichloroethane	000071-55-6	5.0	50	503*	50	50	5.0	2,0 U	2.0 U	5.ST
1,1,2,2-Tetrachloroethane	000079-34-5	5.0	90	5 UJ*	5U	50	5.0	2.0 U	2.0 0	5.ST
1,1,2-Trichloroethane	000079-00-5	20	20	-605	20	20	20	2.00	2.0 0	581
1,1-Dichloroemane	00007534-3	0.0	200	200	000	000	0 0	2.00	2.00	100
1 1-Dichloropropene	000563-58-6	O N	D V	ZO E	AM	NA NA	O N	AN AN	NA NA	- N
1.2.3-Trichlorononana	000008-18-4	200	211	51.17	213	211	213	2.0 U	2.0 U	0.0487
1 2-Dibromo-3-chloropopane	000096-12-8	200	200	\$117	200	50	200	2.0 U	2.0 U	0.04.87
1.2-Dibromoethane	000106-93-4	50	50	503*	50	50	20	200	2.0 U	15.5
1.2-Dichlorobenzene	000095-50-1	50	50	50,3*	20	50	20	2.0 U	2.0 U	387
1.2-Dichloroethane	000107-06-2	50	SU	500*	50	50	5.0	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5ST
1,2-Dichloropropane	000078-87-5	9.0	5.0	503	50	50	5.0	2.0 U	2.0 U	1ST
1,4-Dichlorobenzene	000106-46-7	5.0	5.0	5 U.*	90	50	20	2.0 U	2.0 U	3.S.T
2-Butanone	000078-93-3	5.0	90	5 UJ*	50	5.0	5.0	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5.0	50	5 U.J*	50	50	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5.0	50	503	50	50	50	5.0 U	5.0 U	•
Acetone	000067-64-1	50	50	503*	5.0	5 U*	20	5.0 U	3.3 UB	50 GV
Acrytonitrile	000107-13-1	20	50	5 UJ*	5.0	90	20	2.0 U	2.0 U	5.ST
Benzene	000071-43-2	20	200	5 UJ*	50	90	5.0	2.0 U	2,00	1ST
Bromochloromethane	000074-97-5	5.0	5.0	5 0.3*	5.0	5.0	5.0	2.0 U	2,0 U	5ST
Bromodichloromethane	000075-27-4	50	50	5 UJ*	5.0	5.0	5.0	2.0 U	2.0 U	\$0 GV
Bromoform	000075-25-2	5.0	20	503	90	50	5.0	2.0 U	2,0 U	50 GV
Bromomethane	000074-83-9	5.0	5.0	5UJ*	5.0	50.1	5.0	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	2.0	90	1 5UJ*	5.0	9.0	5.0	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	50	50	\$UJ*	9.0	20	5.0	2.0 U	2.0 U	5ST
Chlorobenzene	000108-90-7	20	2 N	50,0*	5.0	5.0	5.0	2.0 U	2.0 U	5ST
Chloroethane	000075-00-3	5.0	50	5 UJ*	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Chloroform	000067-66-3	20	50	503"	5.0	5.0	5.0	2.0 Ú	2.0 U	7.ST
Chloromethane	000074-87-3	5.0	5.0	507	50	5.0	5.0	2.0 U	2,0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	5.0	5.0	503.	50	5.0	5.0	0.51 J	2.0 U	5.ST
cis-1,3-Dichlaropropene	010061-01-5	50	50	5UJ*	5.0	5.0	50	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	50	50	5 UJ.	5.0	20	50	2:0 0	2.0 U	50 GV
Dibromomethane	000074-95-3	20	20	201€	50	20	50	2.0 U	2.0 U	5.87
Ethylbenzene	000100414	50	20	200	20	20	50	2.00	2.0 0	5.ST
lodomethane	000074-88-4	20	20	203	20	200	20	0.0.1	AN P	581
Methylene chloride	2-60-2-00-2	20	200	.m.	0 1	200	200	5.7 UB	80 7.7 20 3.1	581
Totalogical	000100-42-5	200	000	TO C		0.0	000	2.00	2000	100
Telegonorgenene	000127-10-4	000	000	1000	000	000	000	2000	2000	Fou
trans-1 2.Dichloroathone	000100000000000000000000000000000000000	0.00	0 4	000	200	200	2 2	20.2	2010	100
trans. 1 3-Dichlopoppoepe	010061-02-8	0 10	200	200	200	112	25	2011	2011	0.00
trans-1,4-Dichloro-2-butene	000110-57-6	200	50	50	50	200	50	1.0 U	2.0 U	581
Trichloroethene	000079-01-6	5.0	9.0	50	20	90	50	2:0 0	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	5.0	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5ST
Vinyl Acetate	000108-05-4	5 U	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	50	50	50	5.0	5.0	5.0	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.S.T
o-Xylene	000005-47-6	NA	NA.	¥	¥	Y.	NA	2.0 ∪	2.0 U	5ST
Xylene (total)	001330-20-7	20	20	20	20	20	20	NA	NA	581
TOTAL VOCs		ם	n	'n	90	20		0.51	0	•
		QUALIFIERS B: Compound was 1	ound in the method b	ank as well as the sar	nofe		NOTES GV: Guidance Value			
		U: Compound was	analyzed for but not d	U: Compound was analyzed for but not detected at the detection limit shown.	in Ilmit shown.		ST: Standard			
		J: Compound was f	ound at a concentration	on below the detection	J. Compound was found at a concentration below the detection limit, value estimated		NA: Not Analyzed		(
		D. Donnik faltan fra	reeds mail dineil call	oration tarige, value e desi dibilitàs	sumareu.		MIC. Mot Compled	Laramete exceeds	- rarameter exceeds standard/outdance value	a value
		U: Kesult taken froi	n analysis at a second	any dilution.	11-12		no. not campled		and the second second	
		U or UB; Result qu	Jaillied as non-detect	oaseo on validation cr	Terra		J : Kesuit qualified a	Kesuit qualified as estimated based on validation criteria	validation criteria	
							-: No standard or gu	ildance value		

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

Part	Sample ID Date of Collection		MW-06S 02/22/07	MW-06S	MW-06S 8/11/2009	MW-06S 2/4/2010	MW-06S 5/26/2011	MW-06S 8/27/2012	MW-06S 11/13/2013	3/18/2015	GROUNDWATER
The control of the	Volatile Organic Compounds	CAS#	(I/Dn)	(na/l)	(l/a/l)	(ng/l)	((/5/1))	(hgu)	(l/6n)	(l/bn)	STANDARD/GUIDANCE VALUE
Mathematical Control of the contro	1,1,1,2-Tetrachloroethane	000630-20-6	50	50	50	5 UJ*	50	5.0	2.0 U	2.0 U	5ST
Manual	1,1,1-Trichloroethane	000071-55-6	5.0	50	9.0	5 UJ*	5.0	50	2.0 U	2.0 U	5.5.1
March Marc	1,1,2,2-Tetrachloroethane	000079-34-5	9.0	9.0	5.0	5 U.3*	5.0	50	2:0 U	2,0 U	SST
March Marc	1,1,2-Trichloroethane	000079-00-5	50	50	5.0	5 UJ•	20	50	2.0 U	2.0 U	5.ST
0000074534 St. M. N. M. N. St. M. N. M. M	1,1-Dichloroethane	000075-34-3	2.0	90	5.0	503*	50	50	2.0 U	2.0 U	5.5.1
March Marc	1,1-Dichloroethene	000075-35-4	5.0	20	20	sus.	20	20	2.0 U	2.0 U	5.ST
March Marc	1,1-Dichloropropene	000563-58-6	NA.	NA	NA	500*	AN	AA	NA	AN.	531
CONTINUES STATE	1,2,3-Trichloropropane	000006-18-4	50	50	20	5 UJ-	20	50	2.0 U	2.0 U	0.04 ST
March Marc	1,2-Dibramo-3-chloropropane	000096-12-8	50	20	20	5 UJ*	90	20	2.0 U	2.0 U	0.04 ST
March Marc	1,2-Dibromoethane	000106-93-4	20	20	20	503*	50	50	2.0 U	2.0 U	5ST
March Marc	1,2-Dichlorobenzene	000095-50-1	50	50	20	٠,01	20	50	2.0 U	2.0 U	3.ST
	1,2-Dichloroethane	000107-06-2	5.0	5.0	5.0	5 UJ*	50	50	2.0 U	2.0 U	0.6 ST
0000758775 5.0 4.7 5.0 5.0 5.0 2.0 0000758775 5.0 4.7 5.0	1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	NA	5ST
0000064477 5 U	1,2-Dichloropropane	000078-87-5	5.0	5.0	50	5 UJ*	5.0	5.0	2.0 U	2.0 U	181
0000778-83 5.0	1,4-Dichlorobenzene	000106-46-7	2.0	4.J*	0.5	5 UJ*	2 J	3.3	0,67 J	2.0 U	3ST
000095718-1 SU	2-Butanone	000078-93-3	20	20	5.0	5 0.3*	5.0	5.0	5.0 U	5,0 U	50 GV
0000074-8-1 5.0 5.	2-Hexanone	000591-78-6	2.0	5.0	5.0	5 UJ*	50	5.0	5.0 U	5.0 U	50 GV
00000747424 5U 5U 6U 5U 5U 38 UB 0000077434 5U 5U 6U 5U 5U 5U 20U 38 UB 0000074432 5U 5U 5U 5U 5U 20U 20U 000075434 5U 5U 5U 5U 5U 2U 20U 20U 000075434 5U 5U 5U 5U 5U 2U 2U 2U 000075434 5U 5U 5U 5U 5U 5U 2U	4-Methyl-2-pentanone	000108-10-1	5.0	5.0	5.0	5 UJ*	50	5.0	5.0 U	5.0 U	
methane 000077-43-7 5 U	Acetone	000067-64-1	5.0	5.0	5.0	1BJ*	5 U*	20	5.0 U	3.8 UB	50 GV
December Control-42-2 5 to 5	Acrylonitrile	000107-13-1	5.0	50	50	5 UJ*	50	20	2:0 U	2.0 U	5ST
Decided Section	Benzene	000071-43-2	50	1 50	9.0	-£03-	5.0	5.0	2,0 U	2.0 U	1ST
Mathematical Control	Bromochloromethane	000074-97-5	50.	5.0	50	503*	50	50	2.0 U	2:0 U	5.S.T
ending 600074263-2 5.U	Bromodichloromethane	000075-27-4	50	5.0	50	5 NJ-	50	5.0	2.0 U	2:0 0	50 GV
enemative 60007443-9 5 U	Bromoform	000075-25-2	5.0	50	5.0	503	50	50	2.0 U	2.0 U	50 GV
eneme 000075-61-65 5 U	Bromomethane	000074-83-9	50	50	50	5 UJ*	50.7	5.0	2.0 U	4.0 U	5ST
Marche Control Contr	Carbon disulfide	000075-15-0	50	50	20	503*	50	50	2.0 U	2.0 U	VD 09
000106-90-7 1 J 4 J- 5 U 5 J- 3 J- 3 J- 2.0 U conditional-graded 5 U 5 U 5 U 5 U 5 U 2.0 U 2.0 U bettere 000076-58-3 5 U 5 U 5 U 5 U 5 U 2.0 U 2.0 U perplane 000076-68-3 5 U 5 U 5 U 5 U 5 U 2.0 U 2.0 U perplane 000076-68-3 5 U 5 U 5 U 5 U 5 U 2.0 U 2.0 U methane 000076-48-3 5 U 5 U 5 U 5 U 5 U 2.0 U 2.0 U reference 000074-48-4 5 U	Carbon tetrachloride	000056-23-5	50	5.0	20	5 UJ*	50	20	2.0 U	2.0 U	5.ST
4 Control Contr	Chlorobenzene	000108-90-7	1.7	4.7	50	2.7*	33	3.5	0.90	2.0 0	5ST
the control of contro	Chloroethane	000075-00-3	20	50	50	5 UJ*	50	50	2.0 U	2.0 U	5ST
Element of the control of th	Chloroform	000067-66-3	SU	50	50	5 UJ*	20	20	2.0 U	2.0 U	7.57
Substitute Control Substitute Substi	Chloromethane	000074-87-3	50	50	20	5UJ*	20	5 U	2.0 U	2.0 U	5ST
pictopene 01000124-48-3 5U 5U <td>cis-1,2-Dichloroethene</td> <td>000156-59-2</td> <td>50</td> <td>50</td> <td>20</td> <td>£03.</td> <td>90</td> <td>20</td> <td>2.0.0</td> <td>18</td> <td>5ST</td>	cis-1,2-Dichloroethene	000156-59-2	50	50	20	£03.	90	20	2.0.0	18	5ST
methane 00012444-1 5 U 5 U 5 U 5 U 2.0 U	cis-1,3-Dichloropropene	010061-01-5	20	20	20	5UJ*	50	20	2.0 U	2.0 U	0.4 ST
ne 000074495-3 5 U	Dibromochioromethane	000124-48-1	50	20	20	5 m.	20	20	2.0 U	2.0 U	50 GV
mide 5007040-414 5U	Dibromomethane	000074-95-3	20	20	20	5UJ*	20	20	200	2.0 U	5.ST
ene 0000754-88-4 5 U <t< td=""><td>Ethylbenzene</td><td>000100-41-4</td><td>50</td><td>20</td><td>20</td><td>5 DJ.</td><td>20</td><td>20</td><td>2.0 U</td><td>2.0 U</td><td>581</td></t<>	Ethylbenzene	000100-41-4	50	20	20	5 DJ.	20	20	2.0 U	2.0 U	581
ride 000075-09-2 5U	lodomethane	000074-88-4	20	20	90	5 U.T.	20	20	1.0 U	¥Z,	5ST
ente 0001027-08-25 5 U	Methylene chloride	000075-09-2	20	20	sur.	5 UJ.	20	20	4.5 UB	7.7 UB	SST
enter 000108-88-3 5 U 5 U 5 U 5 U 2.0 U 2	Styrene	000100-42-5	200	0.00	000	no.	000	200	2.00	2.00	186
morethene 000156-56-5 5 U 5 U 5 U 5 U 2 U 2 U orogropene 010061-02-6 5 U 5 U 5 U 5 U 2	Terrachioroemene	000127-18-4	200	0.00	000	200	000	0	2000	2002	100
organization 100 10061-02-6 5 U 5 U 5 U 5 U 5 U 2 U	Tollene	000108-88-3	200	0 4	000	5113	000	0 2	2002	2010	100
ron-2-buttere 000110-57-6 5 U 6 U 7 U 8 U 7 U	trans-13-Dichloropropage	010061-02-8	200	0.50	115	200	200	250	2.0 U	200	0.4.87
endthane 000079-01-6 5 U	trans-1,4-Dichloro-2-buttene	000110-57-6	20	200	50	\$ U.J*	50	20	1.0 U	2.0 U	5 ST
methane 000075-684 5.U 5.U 5.U* 5.U* 5.U 2.0 U	Trichloroethene	000079-01-6	50	50	50	5UJ*	50	50	2.0 U	0.77.5	5.ST
600108-05-4 5 U 5 U 5 U 5 U 2.0 U 3.8 8 8 8 8 8 9 8 9	Trichlorofluoromethane	000075-69-4	5.0	50	50	\$00°	20	8.0	2.0 U	Z:0 U	5ST
000075-01-4 5 U 5 U 5 U 5 U 5 U 3.8 001330-20-7 NA NA NA NA NA A.0 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 2.0 U 8.0 U 4.0 U 4.0 U 2.0 U 8.0 U 4.0 U 8.0 U 4.0 U 8.0 U 8.0 U 8.0 U 1.57 22.57 1.57 22.57 1.57 22.57 1.57 22.57 1.50 1.57 22.57 1.50 1.57 1.5	Vinyl Acetate	000108-05-4	90	90	20	5UJ*	5.0	5.0	2.0 U	2.0 U	
001330-20-7 NA NA NA NA NA 4.0 U 4.0 U 0003547-6 NA NA NA NA NA 2.0 U	Vinyl chloride	000075-01-4	SU	50	5.0	503*	50	5.0	2.0 U	3.8	2.ST
000095-47-6 NA NA NA NA NA NA NA NA NA 2.0 2.0 2.0 0 001330-20-7 5.0 5.0 5.0 5.0 NA	m,p-Xylene	001330-20-7	NA	NA	NA	NA	AA	AN	4.0 U	4:0 N	5.ST
001330-20-7 5U 5U 5U" 5U 5U NA NA NA 1 NA 1 NA 1 NA 1 NA 1 NA 1 NA	o-Xylene	000005-47-6	NA	NA	NA	NA	NA	NA	2,0 U	2.0 U	5.ST
1 8 U 5 5U" 5 6J 1.57	Xylene (total)	001330-20-7	50	50	50	50J*	5.0	20	NA	NA	5ST
	TOTAL VOCs		1	80	٥	503	2	6.3	1,57	22.57	*

QUALIFIERS

S. Compound was found in the method blank as well as the sample

S. 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

: Parameter exceeds Standard/Guidance Value

NOTES

V. Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Vi
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		MW-071	MW-071	MW-071	MW-071	MW-071	MW-071	MW-071	2/18/201E	OBOUNDMATER
Volatile Organic Compounds	# 845	(1)	(11/4/2000	(1,0/1)	(1104/1)	1102/07/0	2102/120	((/טוו)	(//تار)	STANDARD/GILIDANCE VALUE
1.1.1.2-Tetrachloroethane	000630-20-6	50	50	5.0	50	50	50	2.0 U	2.0 U	587
1,1,1-Trichloroethane	000071-55-6	5.0	5.0	5.0	50	50	20	2.0 U	2.0 U	5.ST
1,1,2,2-Tetrachloroethane	000079-34-5	5.0	50	5.0	50	50	50	2.0 U	2,0 U	581
1,1,2-Trichloroethane	000019-00-5	5.0	5.0	5.0	9.0	50	5.0	2.0 U	2.0 U	5ST
1,1-Dichloroethane	000075-34-3	5.0	50	50	5.0	50	50	2.0 U	2.0 U	5.57
1,1-Dichloroethene	000075-35-4	5.0	5.0	50	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1,1-Dichloropropene	000563-58-6	NA	NA	AN	NA	NA	NA	NA	NA NA	5ST
1,2,3-Trichloropropane	000096-18-4	20	20	5.0	50	50	5.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5 U	50	50	50	50	20	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	20	50	5.0	20	50	5.0	2.0 U	2.0 U	5ST
1,2-Dichlorobenzene	000095-50-1	20	20	20	50	20	5.0	2.0 U	2.0 U	3ST
1,2-Dichloroethane	000107-06-2	5.0	5.0	50	50	50	5.0	2.0 U	2.0 U	0.6 ST
1.2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	AN	AN	NA	5ST
1,2-Dichloropropane	000078-87-5	90	20	5.0	90	50	50	2.0 U	2.0 U	1ST
1,4-Dichlorobenzene	000106-46-7	20	200	20	20	200	20	200	2.0 U	3.ST
2-Butanone	000078-93-3	20	20	50	50	50	20	5.0 0	5.0 U	50 GV
Z-Hexanone	000591-78-6	5.0	200	50	20	200	20	5.0.0	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5.0	20	50	20	50	50	5.0 U	5.0 U	•
Acetone	000067-64-1	SU	50	5.0	50	50.	5.0	5.0 U	4.0 UB	50.GV
Acrylonitrile	000107-13-1	90	20	50	5.0	50	50	2.0 U	2.0 U	5 ST
Benzene	000071-43-2	9.0	200	20	20	50	20	200	2.0 U	1ST
Bromochloromethane	000074-97-5	200	20	50	50	20	5.0	2.0 U	2.0 U	5ST
Bromodichloromethane	0000075-27-4	20	20	5.0	50	50	5.0	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	20	50	5.0	50	50	50	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	20	20	90	sur.	50.7	20	2.0 U	4.0 U	5ST
Carbon disulide	000075-15-0	20	50	50	5.0	50	50	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5.0	5.0	50	50	50	50	2.0 U	2.0 U	5.ST
Chlorobenzene	000108-90-7	20	20	20	20	20	50	2.0 U	2.0 U	5ST
Chloroethane	000075-00-3	20	50	20	2.0	20	20	2.0 0	2.0 0	5ST
Chloroform	000067-86-3	200	200	20	20	20	50	2.0 U	200	781
Chlorometrane	000010-87-3	200	n c	0	rn c	000	000	2.00	200	199
CIS-1,Z-UlChloroemene	7-80-90-000	000	1	0	000	000	20	2.00	2.0.0	581
Cis-1,3-Uichlorapropene	010061-01-5	000	0.0	000	200	0 :	000	2.00	2.0 0	0.4 SI
Dioromocniorane	000074.05.0	0 :	0 0	000		0	000	2,00	2.0.0	20 GV
Upromomeshane	000004-85-3	000	000	0 1	200	0	200	2.0.0	2.0 0	551
Enylogical	0000100-41-4	000	0	000	0	000	000	2007	2.0.0	100
locomemane Marketing and an	000075000	0 :	0	0.0	0.0	0	000	0.0.7	NA NA	100
Strang	7-80-670000	000	000	200	000	0 0	000	4.2 UD	90.00	100
Total	0000100-42-0	200	0 :	000	200	000	000	2.0.0	2.0.0	100
Tolliane	000127-18-4	000	4.5	000	7.6	000	67	2011	200	100
trans 1.2 Dicklorooffons	000100-00-3	000	000	000	000	000	000	2000	2002	Too
trans.13.Dichloropropage	010061-02-8	215	200	200	200	200	000	1106	2011	TSYV
trans-1.4-Dichloro-2-butene	000110-57-6	200	250	200	200	200	25	1.0 U	200	587
Trichloroethene	000079-01-6	250	20	20) Lr	50	50	2.0 U	2.0 U	15.5
Trichlorofluoromethane	000075-69-4	50	50	50	25.0	50	50	2.0 U	2.0 U	581
Vinyl Acetate	000108-05-4	50	5.0	5.0	5 UJ*	50	90	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	50	5.0	503	5.0	50	2.0 U	2.0 U	2ST
m.p.Xylene	001330-20-7	NA	NA	AN	NA	NA	NA	4.0 U	4.0 U	5ST
o-Xylene	000095-47-6	NA	NA	NA	NA	NA	NA	2.0 U	2.0 U	5.ST
Xylene (total)	001330-20-7	5.0	5.0	50	2 U	50	50	NA	AN	5.ST
TOTAL VOCs		Þ	23	n	5.0	5.0	2	12	1.4	**
		QUALIFIERS		=	+		NOTES			
		B: Compound was to	5: Compound was round in the memod blank as well as the sample 	nk as well as the sam	pie fimit about		GV: Guidance Value	m		
		J. Compound was for	 Compound was analyzed to burner desected at the desection limits allown. Compound was found at a concentration below the detection limit, value estimated 	below the detection I	imit, value estimated		NA: Not Analyzed			
		E: Concentration exceeds instrument	eeds instrument callbr	calibration range; value estimated.	limated.		THE REAL PROPERTY.	: Parameter exceeds	: Parameter exceeds Standard/Guidance Value	Value
		D: Result taken from	D: Result taken from analysis at a secondary difution.	ry difution.			NS: Not Sampled			
		U* or UB: Result qua	U* or UB: Result qualified as non-detect based on validation criteria	ised on validation crit	eria		J*: Result qualified a	J*: Result qualified as estimated based on validation criteria	n validation criteria	
							-: No standard or gu.	ildance value		

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

Sample ID		MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	NYSDEC Class GA
Date of Collection		02/28/07	11/5/2008	8/13/2009	2/5/2010	5/27/2011	8/29/2012	11/14/2013	3/19/2015	GROUNDWATER
Volatile Organic Compounds	CAS#	(l/an)	(1/67)	(1/6/1)	(ng/l)	(navi)	(May)	(1/5/1)	1000	STANDARD/GOIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	200	000	0.00	200	000	200	2.00	1 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100
1,1,1-1 richioroethane	000071-55-6	0	200	000	000	000	000	1100	1100	200
1,1,2,2-1 etrachloroethane	000078-34-3	000	000	000	0 =	0.4	2 2	2011	2011	200
1,1,2-1 nchloroemane	000075 24 2	000		000	0 4	000	0	111	1.97.0	To B
4 + Dirklomethene	000075-35-4	10	***	2 4	2	2 4	211	L 79.0	200	TSS
1-Dichloropropeoa	000563-58-6	NA	NA	NA	NA	NA	NA	NA NA	ΝΑ	587
1 2 3-Trichloropropana	00008-18-4	115	20	20	20	5.0	SU	2.0 U	2.0 U	0.04.87
1.2-Dibromo-3-chloropropane	000096-12-8	200	50	20	20	50	50	2.0 U	2.0 U	0.04 ST
1.2-Dibromoethane	000106-93-4	20	50	50	5.0	5.0	50	2.0 U	2.0 U	5ST
1 2-Dichlorobenzene	000095-50-1	200	50	50	20	50	50	2.0 U	2.0 U	38T
1.2-Dichloroethane	000107-06-2	50	50	50	50	90	5.0	2.3	2.0 U	0.6 ST
(1.2-Dichloroethene (total)	000540-59-0	NA	AN	NA	NA	NA	NA	AN	NA	5 ST
1.2-Dichloropropane	000078-87-5	5.0	8.0	ne	5.0	90	50	2.0 U	2,0 U	1ST
1.4-Dichlorobenzene	000106-46-7	20	50	50	50	50	50	2.0 U	2.0 U	387
2-Butanone	000078-93-3	200	50	5.0	SU	50	5.0	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	20	200	50	50	50	50	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	215	118	125	115	200	200	5.0 U	5.0 U	
Acetone	000067-64-1	2 2	511	115	28.1	511	20	2.4 UB	2.6 UB	50 GV
Acadonitale	000107-13-1	115	919	119	15	115	13.5	2.0 U	2.0 U	587
Benzene	000071-43-2	251	50	200	200	90	50	2.0 U	2.0 U	181
Bromochloromethane	000074-97-5	510	200	200	200	250	50	2.0 U	2.0 U	581
Bromodichloromethane	000075-27-4	n s	200	50	50	50	50	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	20	5.0	50	5.0	อร	20	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	200	50	200	50	50.7.	5.0	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	5.0	5.0	5.0	50	50	50	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	SU	50	50	50	90	50	2.0 U	2.0 U	5ST
Chlorobenzene	000108-90-7	5.0	50	5.0	50	90	5.0	Z.ū Ú	2.0 U	5ST
Chlorcethane	000075-00-3	อร	50	5.0	20	0.5	20	2.0 U	2.0 U	5.ST
Chloroform	000067-66-3	5.0	5.0	5.0	SU	20	SU	2.0 U	2.0 U	7.87
Chloromethane	000074-87-3	2.0	20	50	20	5.0	50	2.0 U	2,0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	5.0	20	5.0	50	50	5.0	2:0 U	200	5ST
cis-1,3-Dichforopropene	010061-01-5	5.0	5.0	50	20	5.0	50	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	50	5.0	50	50	50	50	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	20	50	80	20	90	20	2.0 U	200	5ST
Ethylbenzene	000100-41-4	20	200	20	20	20	20	2.00	2,0 0	5.ST
Iodomethane	000074-88-4	20	20	20	20	20	20	0.0.0	NA.	5.51
Methylene chloride	000075-09-2	20	20	200.	20	200	20	3.9.08	8.4 08	180
Styrene	000100-42-5	20	20	20	20	20	20	2.00	2.00	180
Tetrachloroethene	000127-18-4	200	-	200	90	000	0.50	2.00	2.00	180
Toluene	000108-88-3	000	200	000	000	000	000	2000	2002	For
trans-1,2-Dichlorognene	0400130-00-3	0 5	0 4	000	000	000	000	0.02	201	100
trans-14-Dichlom-2-buttene	000110-57-6	215	513	200	200	200	200	1.0 U	2.0 U	5.5.C
Trichloroethene	000079-01-6	20	2.3*	200	200	200	50	2.0 U	2.0 U	5ST
Trichlorofluoromethane	000075-69-4	20	5.0	50	50	50	5.0	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	5.0	5.0	5.0	50	5.0	5.0	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	50	50	5.0	5.0	50	2.0 U	2.0 U	2ST
m.p-Xylene	001330-20-7	¥.	ĀN	ΑΝ	Α̈́N	ŠÄ	A.	4.0 U	4.0 U	5.ST
o-Xylene	0000095-47-6	NA.	NA.	Y N	AN I	NA.	NA.	2.0 0	2.0 0	200
Xylene (total)	001330-20-7	200	20	0.0	000	000	ng.	X CO	N. C.	000
I O I AL VOCS		21	71		000	000	NOTES	3.02	14.	
		Company was found in the method	_	hisnik se well se the sample	aju		GV. Guidance Value	a		
		U: Compound was	U: Compound was analyzed for but not de	detected at the detection limit shown.	n limit shown.		ST: Standard			
		J: Compound was f	J: Compound was found at a concentration below the detection limit, value estimated	n below the detection	limit, value estimated		NA: Not Analyzed			Vertice.
		E: Concentration ey	ceeds instrument call	oration range; value e	stimated.			: Parameter exceeds Standard/Guidance Value	s Standard/Guidand	a value
		D: Result taken from	D: Result taken from analysis at a secondary dilution	ary dilution.			No. Not sampled	:		
		U* or UB: Result qu	U* or UB: Result qualified as non-detect based on validation criteria	ased on validation cri	teria		J*: Result qualified	J*: Result qualified as estimated based on validation criteria	n validation criteria	
							-: No standard or gu	lidance value		

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

Sample ID		MW-111	MW-11I	MW-11I	MW-11I	MW-111	MW-111	MW-111	MW-111	NYSDEC Class GA
Valette Organic Communication	# 0 4 0	/0/28/0/ (//a/l)	11/4/2008	8/13/2009	ULUZ/8/7	0/2//2011	21.02/82/2	(110/1)	(104/1)	STANDARD/GIJDANCE VALUE
1.1.1.2-Tetrachloroethane	000630-20-6	50	50	50	5.0	50	50	2.0 U	2.0 U	581
1.1.1-Trichloroethane	000071-55-6	20	50	50	50	50	50	2.0 U	2.0 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	5.0	20	50	50	50	50	2.0 U	2.0 U	58⊥
1,1,2-Trichloroethane	9-00-620000	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	1ST
1,1-Dichloroethane	000075-34-3	5.0	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
1,1-Dichlaroethene	000075-35-4	50	5.0	5.0	5.0	50	50	2.0 ∪	2,0 U	5ST
1,1-Dichloropropene	000563-58-6	NA	AN	AN	NA	NA	NA	NA	NA	5.ST
1,2,3-Trichloropropane	0000096-18-4	50	5.0	5.0	5.0	5.0	50	2,0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	20	5.0	5.0	50	50	503	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	5.0	20	50	5.0	50	5.0	2.0 U	2.0 U	0.0006 ST
1,2-Dichlorobenzene	000095-50-1	5.0	50	5.0	5.0	50	5.0	2.0 U	2.0 U	357
1,2-Dichloroethane	000107-06-2	5.0	5.0	5.0	1 50	50	5.0	2.0 U	2.0 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	NA	NA	NA	NA	AN	5.ST
1,2-Dichloropropane	000078-87-5	50	5.0	5.0	5.0	50	5.0	2.0 U	2,0 U	1ST
1,4-Dichlorobenzene	000106-46-7	20	50	5.0	5.0	5.0	50	2.0 U	2.0 U	3ST
2-Butanone	000078-93-3	20	50	5.0	50	5.0	500	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5.0	50	5.0	5.0	50	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	50	5.0	5.0	5.0	5.0	5.0	5.0 U	5.0 U	
Acetone	000067-64-1	5.0	5.0	5.0	5.0	5 U•	5.0	2.4 UB	1.5 UB	50 GV
Acrylonitrile	000107-13-1	50	50	5.0	50	50	503	2.0 U	2.0 U	5ST
Benzene	000071-43-2	5.0	5 N	5.0	50	50	5.0	2,0 U	2.0 U	1ST
Bromochloromethane	000074-97-5	5.0	5.0	5.0	20	50	5.0	2.0 U	2.0 U	5ST
Bromodichloromethane	000075-27-4	20	2.0	5.0	50	20	20	2,0 U	200	50 GV
Bromoform	000075-25-2	20	50	50	5.0	20	50	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	2.0	9.0	50	SU	5 0.1	5.0	2,0 U	4.0 U	5.ST
Carbon disulfide	000075-15-0	5.0	5.0	SU	50	5.0	5.0	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	5.0	5.0	90	5.0	5.0	50	2,0 U	2.0 U	5.ST
Chlorobenzene	000108-90-7	5.0	20	5.0	5.0	5.0	5.0	2.0 U	2.0 U	5.ST
Chloroethane	000075-00-3	5.0	. 50	5.0	50	50	20	2.0 U	2.0 Ú	5.ST
Chloroform	000067-66-3	50	2.3*	50	2.3	50	2.3	0.63 J	0.74 J	7.ST
Chloromethane	000074-87-3	50	5.0	50	50	50	50	2.0 U	2.0 U	5ST
cis-1,2-Dichloroethene	000156-59-2	20	50	50	50	5.0	20	2.0 U	2.0 U	5.ST
cis-1,3-Dichloropropene	010061-01-5	20	50	50	5.0	90	50	2.0 U	2.0 U	0.4 ST
Dibromochloromethane	000124-48-1	5.0	50	50	20	5.0	50	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	20	20	20	2 n	20	20	2:0 U	2,0 U	5.ST
Ethylbenzene	000100-41-4	5.0	50	50	50	50	50	2.0 U	2.0 U	5.ST
lodomethane	000074-88-4	20	20	50	20	20	20	1.0 U	ΑN	5.ST
Methylene chloride	000075-09-2	20	50	207	5 U	90	50	3.6 UB	8.9 UB	5 ST
Styrene	000100-42-5	20	20	20	20	20	50	2.0 U	2.0 U	SST
Tetrachloroethene	000127-18-4	20	2.3*	20	20	20	20	2.0.0	2.0 0	581
loinene	000108-88-3	0.0	000	000	200	200	000	2.00	2.00	200
trans-1,Z-Dichloroethene	000156-60-5	20	200	200	2.0	200	90	2,00	200	221
trans-1,3-Dichloropropene	010061-02-6	20	20	200	20	20	20	2.0 0	2.0 0	0.4 \$
trans-1,4-Dichloro-2-butene	000110-57-6	20	20	20	20	20	207	1.0 U	2:0 U	5ST
Trichloroethene	000079-01-6	5 U	50	50	50	50	50	2.0 U	2.0 U	5ST
Trichlorofluoromethane	000075-69-4	20	20	50	200	50	50	2.0 U	2.0 U	SST
Vinyl Acetate	000108-05-4	50	20	5.0	20	20	507	2,0 U	2.0 U	•
Vinyl chloride	000075-01-4	50	20	50	5.0	50	50	2.0 Ü	2.0 U	2 ST
m,p-Xylene	001330-20-7	¥.	AN.	AN:	A N	Υ.	AN.	4.0 0	4.0 U	SST
o-Xylene	000005-47-6	NA	NA	NA	NA AN	NA	NA	2.0 U	2.0 U	5ST
Xylene (total)	001330-20-7	20	20	20	50	200	5.0	NA	AN	5ST
TOTAL VOCs		ם	4	ח	50	5.0	2	0.63	0.74	•
		QUALIFIERS					NOTES			

QUALIFIERS

S. Compound was found in the method blank as well as the sample

B. 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 rangs; value estimated.

B. Result taken from analysis at a secondary dilution.

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

Parameter exceeds Standard/Guidance Value NOTES
OV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Vi
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		MW-115	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	NYSDEC Class GA
Date of Collection		02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	8/29/2012	11/14/2013	3/19/2015	GROUNDWATER
Volatile Organic Compounds	CAS#	(ng/l)	(l/gn)	(l/gn)	(l/gn)	(l/Bn)	(l/bn)	(l/gu)	(l/gn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	5.0	5.0	5.0	5.0	5.0	ວດ	2.0 U	2.0 U	5ST
1,1,1-Trichloroethane	000071-55-6	อร	5.0	50	50	5.0	5.0	2:0 U	2.0 U	5ST
1,1,2,2-Tetrachloroethane	000079-34-5	5.0	50	5.0	5.0	50	50	2.0 U	2.0 U	5ST
1.1.2-Trichloroethane	000079-00-5	5.0	50	5.0	50	5.0	5.0	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	5.0	5.0	50	5.0	50	50	2.0 U	2.0 U	5ST
1,1-Dichloroethene	000075-35-4	5.0	50	50	50	5.0	5U	2,0 U	2.0 U	5ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	WA	NA	NA	NA	NA	5ST
1,2,3-Trichloropropane	000096-18-4	20	5.0	5.0	5.0	90	2.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	5.0	50	5.0	5.0	5.0	5.0	2.0 U	2.0 U	0.04 ST
1,2-Dibromoethane	000106-93-4	50	50	50	50	50	50	2.0 U	2.0 U	5.S.T
1.2-Dichlorobenzene	000095-50-1	50	5.0	50	5.0	5.0	5.0	2,0 U	2.0 U	3.ST
1.2-Dichloroethane	000107-06-2	9.0	5.0	50	5.0	50	5 0	2.0 U	2.0 U	0.6.5T
1.2-Dichloroethene (total)	000540-59-0	NA	NA	AN	NA	NA	NA	NA	NA	5.ST
1,2-Dichloropropane	000078-87-5	50	50	50	50	50	5.0	2.0 U	2.00	1ST
1.4-Dichtorobenzene	000106-46-7	50	50	5.0	5.0	50	50	2.0 U	2.0 U	3.57
2-Butanone	000078-93-3	50	200	50	50	50	5.0	5.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	5.0	50	50	5.0	5.0	20	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	5.0	50	5.0	5.0	50	5.0	5.0 U	5.0 U	
Acetone	000067-64-1	5.0	4.	5.0	5.0	5 U*	50	3,0 UB	2.8 UB	50 GV
Acrylonitrile	000107-13-1	5.0	20	50	5.0	50	5.0	2.0 U	2.0 U	5.ST
Benzene	000071-43-2	50	50	50	50	50	5.0	2.0 U	2,0 U	1ST
Bromochloromethane	000074-97-5	50	50	50	50	50	5.0	2.0 U	2.0 U	5ST
Bromodichloromethane	000075-27-4	50	50	50	5.0	50	50	2.0 U	2,0 U	50 GV
Bromoform	000075-25-2	5.0	50	50	50	50	9.0	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	5.0	50	5.0	5.0	50.7	5.0	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	5.0	5.0	6.0	5.0	6.0	9.0	2.0 U	2.0 U	00 GV
Carbon tetrachloride	000056-23-5	9.0	50	5.0	SU	9.0	20	2.0 U	2.0 U	SST
Chlorobenzene	000108-90-7	50	50	5 U	50	50	20	2.0 U	2.0 U	5ST
Chloroethane	000075-00-3	5.0	20	50	50	5.0	20	2.0 U	200	5ST
Chloroform	000067-66-3	20	50	50	50	50	50	2.0 U	2.0 U	7.S.T
Chloromethane	000074-87-3	50	5.0	50	5U	50	20	2.0 U	2.0 U	557
cis-1,2-Dichloroethene	000156-59-2	20	20	20	20	50	20	2.0 U	2.0 0	200
cis-1,3-Dichloropropene	010061-01-5	20	20	50	20	20	20	2.0 U	2.0 0	0.4.87
Dibromochloromethane	000124-48-1	20	20	200	200	ns.	200	2.0.0	200	20,60
Dibromomethane	000074-95-3	200	20	20	20	20	20	2.00	2.0.0	180
Ethylbenzene	000100-41-4	200	000	000	000	000	201	2.00	2,00	000
lodomeinane	000075-00-2	0	0.0	000	0 4	000	000	2.1.E	RA LIB	100
Shapa	2-00-0000	0 10	200	, F11	2 4	200	200	2011	2013	TST
Tairachlamathana	000100-5-2	200	2 2 2	511	200	200	2.1	2.0 U	2.0 U	582
Toluene	000108-88-3	50	50	50	50	200	200	2,0 U	2.0 U	587
trans-1.2-Dichloroethene	000156-80-5	SU	90	50	50	5.0	5.0	2.00	2.0 U	5.ST
trans-1,3-Dichloropropene	010061-02-6	20	9.0	50	50	5.0	50	2.0 U	2.0 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	5.0	50	50	5.0	50	50	1.0 U	2,0 U	5ST
Trichloroethene	000079-01-6	50	5.0	5.0	5.0	5.0	5.0	2.0 U	2.0 U	SST
Trichlorofluoromethane	000075-69-4	50	60	50	20	5.0	50	2.0 U	2.0 U	5ST
Vinyl Acetate	000108-05-4	50	5.0	1 50	5.0	5.0	5.0	2.0 U	2.0 U	
Vinyl chloride	000075-01-4	5.0	5.0	50	5.0	50	50	2.0 U	2.0 U	2.ST
m.p-Xylene	001330-20-7	NA	AN	NA	Ą	AN.	AN.	4.0 U	4.0 U	200
o-Xylene	000095-47-6	NA	AN	NA	NA	NA	NA	2.0 U	2.0 U	587
Xylene (total)	001330-20-7	20	20	50	20	20	50	AN C	AN C	581
TOTAL VOCs		ח	4	0	50	5.0	2	0	D	
		OHAHIERRS					NOTES			

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

: Parameter exceeds Standard/Guidance Value NOTES
GV. Guldance Value
ST: Standard
NA: Not Analyzed

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		MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	NYSDEC Class GA
Date of Collection	4	02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	8/29/2012	11/14/2013	3/20/2015	GROUNDWATER STANDARDACHIDANICE VALUE
Voletile Organic Compounds	000630-20-R	(100/1)	5,11	2	113	211	213	200	200	STANDARD CONTRACT VALUE
1 1 Trichlomethane	000071-55-6	200	25	-F113	115	115	200	2.0 U	2.0 U	1000
1 1 2 2-Tetrachloroethane	000079-34-5	50	50	5.0	50	50	50	2.0 U	2.0 U	5.ST
1.1.2-Trichloroethane	000079-00-5	50	50	5.0	50	50	50	2.0 U	2.0 U	5 ST
1,1-Dichloroethane	000075-34-3	50	50	5.0	5.0	5.0	5.0	2.0 U	2,0 U	5.ST
1,1-Dichloraethene	000075-35-4	50.	50	50	5.0	50	50	2.0 U	2,0 U	5.ST
1,1-Dichloropropene	000563-58-6	AN	NA	NA	NA	NA	NA	NA	ΝΑ	5ST
1,2,3-Trichloropropane	000096-18-4	50	50	50	5.0	20	50	2.0 U	2.0 U	0.04 ST
1,2-Dibromo-3-chloropropane	000006-12-8	50	50	50	5.0	50	50	2.0 U	2.0 U	0.04 ST
1.2-Dibromoethane	000106-93-4	20	20	20	20	20	20	2.0 U	2.0.0	581
1,2-Dichlorobenzene	000095-50-1	20	20	20	20	20	50	2.0.0	2.00	381
1,2-Dichloroethane	000107-06-2	50	20	50	20	20	20	2,0 0	200	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	NA	NA	NA	¥	NA	NA	NA	A.	5ST
1,2-Dichloropropane	000078-87-5	50	20	50	5.0	20	50	2.0 U	200	TS.
1,4-Dichlorobenzene	000106-46-7	50	5.0	50	5.0	50	5.0	2.0 U	2.0 U	3ST
2-Butanone	000078-93-3	50	5.0	50	5.0	50	50	9.0 U	5.0 U	50 GV
2-Hexanone	000591-78-6	20	20	503	5.0	5.0	5.0	5.0 U	5.0 U	50 GV
4-Methyl-2-pentanone	000108-10-1	50	50	5.0	50	20	5.0	5.0 U	5.0 U	
Acetone	000067-64-1	50	50	50	187	5U*	50	2.7 UB	2.2 UB	50 GV
Acrylonitrile	000107-13-1	50	5.0	5.0	5.0	50	5.0	2.0 U	2.0 U	5.ST
Benzene	000071-43-2	20	50	50	200	50	200	2.0 U	2.0 U	TST
Bromochloromethane	000074-97-5	5.0	5.0	5.0	20	50	20	2.0 U	20.0	5ST
Bromodichloromethane	000075-27-4	20	50	20	20	20	50	2.0 U	2.0 U	50 GV
Bromoform	000075-25-2	n is	200	0.5	115	15	200	2.0.0	2.0 U	50.6V
Bromomerhane	000074-83-9	510	50	50	20	50.7	50	2.0 U	4.0 U	188
Carbon distiffde	000075-15-0	511	511	125	119	5.0	200	2.0 U	2.0 U	60 GV
Carbon tetrachloride	000056-23-5	200	511	251	119	200	200	2.0 U	2.0 U	SST
Chlorobanzana	000108-90-7	25	511	25		25	200	2.0 U	2.010	TS S
Chlomothana	000025.00.3	1 4	u	2 2	2	124	211	2011	2011	To W
Citotoettalie	2-00-01-00-0	0 1	000	000	0 =	0 1	2 4	200	202	100
Chloropathan	0000074 07 3	00	0 1	000	000	000	0.00	20.7	20.7	107
The state of the s	00001-01-01		200			2	200	1100	2011	For
dis-1,2-Oldmorentene	040064 04 5	000	000	0.00	0 4	000	000	2000	2011	100
Oily on the second seco	010001-01-0		2 4		2 2	200	25	201	2011	75.05
Oil Constitution of the Co	000074 05 9	200			200	2 4	2	2011	2011	Fer
Chultoning	0000004-80-3	0 4	0 4	000	0 1	000	000	2000	2000	Ton
Langualization	1 000000	D =	2 4		2	0 4	2 4	100	NA	Fort
Cocomercane	000075 00 0	000	000	000	000	000	000	di ok	di l'Oh	Tou
Memylene chloride	0000075-03-2	700	000	000	000	000	000	100	1106	100
Siyrene	000100-42-0	000	000		000	0 0	0 1	2002	2007	1000
Tetrachloroethene	000127-18-4	200	200	000	000	200	000	2007	2000	180
10luene	000108-88-3	000	000	2	200	0	000	2000	20.0	-000
trans-1,2-Dichloroethene	000156-60-5	200	000	000	000	000	000	2,00	2,00	100
trans-1,3-Dichloropropene	010001-02-6	000	000	000	00	0	000	2,00	200	0.40
trans-1,4-Uichloro-Z-butene	9-75-0110-00	200	200	- CO e	000	200	000	0.00	200	100
Trichloroethene	9-10-6/0000	200	0.0	200	200	200	200	2.00	2.00	100
Inchipronupromemane	0000075-69-4	200	000	0	000	000	000	20.0	2007	221
Vinyl Acetals	000075 04 4	000	000	0 0	000	000	000	2003	2002	TSC
VIIIVI CRIDITOR	100000000	200	000		000		000	0.0.7	2007	107
m.p.vyiene	00000E 47 6	NA NA	NA.	5	NA NA	22	NA	0000	100	100
Siden with	000030-47-0	NA I	2	5	NA.	NA.	W.	NA NA	NA NA	Tou
TOTAL WOOD	001000-50-5	000	000	-	000	0 1	000	5	5 -	000
10.3E × 0.5E		O IN INIO	0	0	0	000	NOTES OF			
		Compared was found in the method		Company of loss on April	o la		CV. Guldanas Valus			
		 Compound was round in the illegible Compound was applied for but not 		detected at the detection limit shown	in limit shown		ST: Standard	n		
		J: Compound was for	und at a concentratio	n below the detection	J. Compound was found at a concentration below the detection limit, value estimated		NA: Not Analyzed			
		E: Concentration ex	ceeds Instrument calli	oration range; value e	stimated.			: Parameter exceeds Standard/Guidance Value	s Standard/Guidance	Value
		D: Result taken from	D: Result taken from analysis at a secondary dilution	ary dilution.			NS: Not Sampled			
		U* or UB: Result qui	U* or UB: Result qualified as non-detect based on validation criteria	ased on validation cr	terla		J*: Result qualified a	J*: Result qualified as estimated based on validation criteria	n validation criteria	
							-: No standard of gu	ildance value		

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

Care of Control of the Control of th		70/20/00	11/4/2008	P000781/8	0/2/2010	5/27/2011	8/29/2012	11/14/2013	3/20/20 3	GROUNDWALER
Volatille Croanic Compounds	CAS#	(nav)	(//۵/1)	(//bn)	(na/)	(//۵/1)	(//50/)	(l/gn)	(l/gn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	9.0	50	50	50	50	50	2.0 U	2.0 U	5ST
1,1,1-Trichloroethane	000071-55-6	50	50	5.0	20	90	20	2.0 U	2.0 U	5.ST
1,1,2,2-Tetrachloroethane	0000079-34-5	5.0	5.0	5.0	50	50	50	2.0 U	2.0 U	5ST
1,1,2-Trichloroethane	000029-00-2	5.0	50	5.0	50	50	20	2.0 U	2.0 U	SST
1,1-Dichloroethane	000075-34-3	5 U	20	20	20	50	200	2.0 U	2,0 U	1000
1,1-Dichloroethene	0000075-35-4	20	200	20	20	000	00	2.0.0	2.0 0	100
1,1-Dichloropropene	000563-58-6	ž	NA	NA	¥.	AN .	NA.	NA C	YN.	1000
1,2,3-Trichloropropane	000096-18-4	200	200	20	200	000	000	200	2.00	0.04 81
1.2-Dibromo-3-chloropropane	000096-12-8	200	200	200	000	200	0 1	2.00	2.00	10 #0.0
1,2-Dibromoethane	000106-93-4	20	200	200	200	200	000	2.00	200	100
1,2-Dichlorobenzene	0000085-50-1	50	20	20	200	200	200	707	2.0.0	300
1,2-Dichloroethane	000107-06-2	5.0	50	20	20	20	20	2.0 0	2.0 0	0.651
1,2-Dichloroethene (total)	000540-59-0	NA	AN	NA	AN	NA	ž	AN.	AN C	200
1,2-Dichloropropane	000078-87-5	20	20	20	20	20	20	2.0.0	2.0.0	181
1,4-Dichlorobenzene	000106-46-7	50	50	20	20	90	20	2,0 U	2.0 U	381
2-Butanone	000078-93-3	5 U	50	5.0	50	90	20	9.0.0	5.0 0	50 GV
2-Hexanone	000591-78-6	50	50	50	5.0	50.1.	20	5.0 U	5.0 0	50 GV
4-Methyl-2-pentanone	000108-10-1	5.0	50	50	50	5 U-7•	20	5.0 U	5.0 0	
Acetone	000067-64-1	\$ n	50	50	- B	50.	2.30	2.1 UB	3.1 UB	50 GV
Acrylonitrile	000107-13-1	5.0	5U	50	5.0	50	50	2.0 U	2.0 U	581
Benzene	000071-43-2	50	20	20	50	50	20	2.0 U	2.0 U	181
Bramochloromethane	000074-97-5	50	20	20	20	50	2 n	2.0 U	2.0 U	5ST
Bromodichloromethane	000075-27-4	5 U	5 U	20	20	50	5.0	200	2.0 U	50 GV
Bromoform	000075-25-2	20	50	50	50	50	50	2.0 U	2.0 U	50 GV
Bromomethane	000074-83-9	20	50	5.0	50	5 U.J.	50	2.0 U	400	5.ST
Carbon disulfide	000075-15-0	5.0	20	5.0	5.0	50.0	5.0	2.0 U	2.0 U	VO 09
Carbon tetrachloride	000056-23-5	50	50	50	50	50	50	2.0 U	2:0 U	5ST
Chlorobenzene	000108-90-7	20	20	50	20	5.0	50	2.0 U	20 U	5ST
Chloroethane	000075-00-3	50	20	20	50	50	50	2.0 U	2.0 U	5ST
Chloroform	000067-66-3	50	50	5.0	20	50	20	2.0 U	2,0 U	7ST
Chloromethane	000074-87-3	50	50	50	50	50	20	2.0 U	2.0 U	SST
cis-1,2-Dichloroethene	000156-59-2	50	50	5.0	50	50	50	2.0 U	2.0 U	5.8
cis-1,3-Dichloropropene	010061-01-5	5.0	ຂດ	50	5.0	50.3	5.0	2.0 U	2.0 U	0.4 S
Dibromochloromethane	000124-48-1	5.0	20	50	20	5.0	5.0	2.0 U	2.0 U	50 GV
Dibromomethane	000074-95-3	5 U	20	50	20	200	20	2.0 U	200	581
Ethylbenzene	000100-41-4	20	50	50	50	20	20	2.0 U	2.0 U	SST
lodomethane	000074-88-4	20	90	50	20	50	20	1.0.0	AN	5.ST
Methylene chloride	000075-09-2	50	90	sun.	50	50	50	4.7 UB	10 UB	SST
Styrene	000100-42-5	5.0	50	50	SU	50	5.0	2.0 U	2.0 U	581
Tetrachloroethene	000127-18-4	20	20	50	20	20	SU	2.0 U	2,0 0	258
Toluene	000108-88-3	SU	200	20	20	20	20	2.00	2.00	281
Irans-1,2-Dichloroethene	000156-60-5	20	200	20	20	200	200	2.0.0	2.0 0	000
trans-1,3-Dichloropropene	010061-02-6	200	20	20	200	50.7	200	2.0 0	2.0.0	0.4 S
frans-1,4-Dichloro-2-butene	000110-57-6	20	20	20	200	50.7	200	0.00	2.0.0	100
Trichloroethene	000079-01-6	50	20	20	20	20	20	2.0 U	2.00	581
Trichlorofluoromethane	0000075-69-4	20	20	20	20	200	200	2.0.0	200	100
Vinyl Acetate	000108-05-4	20	20	20	20	200	200	2.00	2.0.0	
Vinyl chloride	0000075-01-4	20	20	20	9.0	20	20	2.0 U	2.0 0	251
m.p-Xylene	001330-20-7	NA.	NA	NA	AN	NA	NA.	0.00	00.4	2001
o-Xylene	0000085-47-6	NA	AN .	Y S	N S	NA	N. S.	2.0.0	2002	000
Xylene (total)	001330-20-7	0.5	200	000	n e	200	200	C.	5 0	000
TOTAL VOCs		5	כ	0	-	20	2	o		

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

: Parameter exceeds Standard/Guidance Value GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance V
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

Or market		EASTAT 120	175 ANA 175	MANALTOE	NATAL 12C	8AAY-12S	AMA_172	MW-125	MW-12S	NYSDEC Class GA
Date of Collection		02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	8/29/2012	11/14/2013	3/20/2015	GROUNDWATER
Volatile Organic Compounds	CAS#	(l/gn)	(l/5n)	(l/5n)	(hgu)	(ng/l)	(l/6n)	(l/gn)	(l/ōn)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	2.0	5.0	50	5.0	50	20	2,0 U	2.0 U	5.ST
1,1,1-Trichtoroethane	000071-55-6	20	50	s U	5.0	50	20	2,0 U	2.0 U	SST
1,1,2,2-Tetrachloroethane	000079-34-5	20	50	50	5.0	50	50	2.0 U	2:0 N	5ST
1,1,2-Trichloroethane	000079-00-5	20	20	5.0	5.0	90	20	2.0 U	2.0 U	252
1,1-Dichloroethane	000075-34-3	50	20	20	50	50	20	2.0 U	2.0 U	5.S.T.
1,1-Dichloroethene	000075-35-4	20	50	20	50	20	20	2,0 U	200	TS S
1.1-Dichloropropene	000563-58-6	Y S	X :	NA.	S. S.	AN .	NA.	- N	YN.	100
1,2,3-1 richloropropane	000096-18-4	000	0	0	000	0	0:0	2.0.0	2.00	0.0400
1,z-Uibromo-3-chloropropane	000036-12-8	0 :	0	0	0	0	2	20.0	2002	0.0401
1,2-Dibromoetnane	000106-93-4	0	0	0	0	0	0	2000	2000	180
1,2-Dichidrobenzene	000000-00-1	000	000	0	0	0.00	0.0	20.0	2,00	2000
1,2-Dichloroeinane	000107-08-2	0.0	ne.	000	0.0	000	000	2.0.0	200	0.6 51
1,2-Dichigroethene (total)	000540-59-0	NA.	NA ::	NA	N.	NA	Z.	NA.	XX .	1991
1,Z-Dichloropropane	000018-87-5	000	On I	000	0 1	0	0	2.00	7000	0
1,4-Utchlorobenzene	000106-46-7	n c	0	200	200	0.0	000	2.0 0	2.00	200
Z-Butanone	0000/8-93-3	000	0 1	000	000	0:0		000	000	2000
Z-Hexanone	000591-78-6	200	000	000	0	000	0	0.0.0	0000	25.00
4-Methyl-2-pentanone	000108-10-1	20	20	5.0	20	20	20	20.0	0.00	
Acetone	000067-64-1	50	200	20	20	5U-	370	2.2 UB	2.9 UB	50 GV
Acrylonitrile	000107-13-1	20	200	20	20	20	20	2.0 0	200	581
Benzene	000071-43-2	20	20	20	20	50	50	2.0 0	200	0
Bromochloromethane	000074-97-5	20	20	20	20	20	20	2.0 U	2.0 0	581
Bromodichloromethane	000075-27-4	20	20	50	50	20	50	2.0 U	Z:0 D	50 GV
Bromoform	000075-25-2	5 U	50	50	20	50	50	2.0 U	2:0 U	50 GV
Bromomethane	000074-83-9	20	50	SU	20	50.7	20	2.0 U	4.0 U	5ST
Carbon disulfide	000075-15-0	20	20	20	20	20	20	2.0 U	2.0 U	90 GV
Carbon tetrachloride	000056-23-5	50	50	50	50	20	20	2.00	2.00	TSS .
Chlorobenzene	2-06-90-000	200	200	200	000	000	000	2.0.0	2.00	2021
Chloroethane	000075-00-3	200	000	000	200	200	0	7.0.7	2.00	200
Chloroform	000067-66-3	000	00	000	0	200	0	700	700	0
Chloromethane	0000/4-8/-3	000	00	000		0	0	2.00	2000	100
cie-1 3-Dichloroginene	040064-04-5	0 4	000	200	0 4	000	200	2002	200	0000
Dibramochloromethase	01000104	200	114	115	000	0 4	200	201	2011	10 to
Distraction	000074.05.3	200	200	200	2	200	200	2011	2011	2000
Ethylographo	200000000000000000000000000000000000000	200	0 2	000	200	000	200	1106	2017	100
Indomethana	000074-88-4	200	200	25	25	200	200	100	AN	200
Methylene chloride	00005-00-5	12	213	51114	200	511	213	4.1 UB	80.96	SST
Styrene	000100-42-5	200	20	50	50	50	50	2.0 U	2.0 U	TS S
Tetrachloroethene	000127-18-4	50	50	50	50	50	50	2.0 U	2.0 U	2551
Toluene	000108-88-3	50	9.0	50	5.0	5.0	5.0	2.0 U	2.0 U	5ST
trans-1,2-Dichloroethene	000156-60-5	20	50	5.0	9.0	50	5.0	2.0 U	2.0 U	5ST
trans-1,3-Dichloropropene	010061-02-6	SU	5.0	5.0	5.0	50	5.0	2.0 U	2.0 U	0.4.ST
trans-1,4-Dichloro-2-butene	000110-57-8	20	5.0	5.0	5.0	5.0	5.0	1.0 U	2:0 U	587
Trichloroethene	000079-01-6	5 U	50	50	5.0	50	50	2.0 U	2.0 U	5 ST
Trichlorofluoromethane	000075-69-4	50	20	50	5.0	50	50	2.0 U	2.0 U	5 ST
Vinyl Acetate	000108-05-4	20	20	200	200	20	20	2.0 0	2.0 U	
Vinyi chloride	000075-01-4	20	20	20	20	20	20	2.00	2.0 0	281
m.p-Xylene	001330-20-7	Y.	AN:	Y .	¥.	Ψ.	NA.	0.60	0.00	182
o-Aylene	000095-47-6	AN I	NA.	Y.	NA S	NA.	NA.	2.0 0	2.0 U	200
Aylene (total)	001330-20-7	n c	00:	000	0	000	200	\$ 0	\$ 0	186
TO WE YOUR		O IN INITIO	0	0	000	0.0	* COTTON		5	
		B: Company was found in the meth	ound in the method bla	od blank as well as the semple	alor		GV: Guidance Value	a		
		U: Compound was	analyzed for but not de	U: Compound was analyzed for but not detected at the detection limit shown.	n limit shown.		ST: Standard	,		
		J: Compound was for	ound at a concentratio	J. Compound was found at a concentration below the detection limit, value estimated	limit, value estimated		NA: Not Analyzed		:	
		E: Concentration ex	Kceeds Instrument call	bration range; value e:	stimated.		0 700	: Parameter exceeds	Parameter exceeds Standard/Guidance Value	e Value
		D: Result taken from analysis at a se		condary dilution.			NS: Not sampled			
		U* or UB: Result qualified as non-de		tect based on validation criteria	terla		J*: Result qualified	J*: Result qualified as estimated based on validation criteria	n validation criteria	
							-: No standard or gu	uildance value		

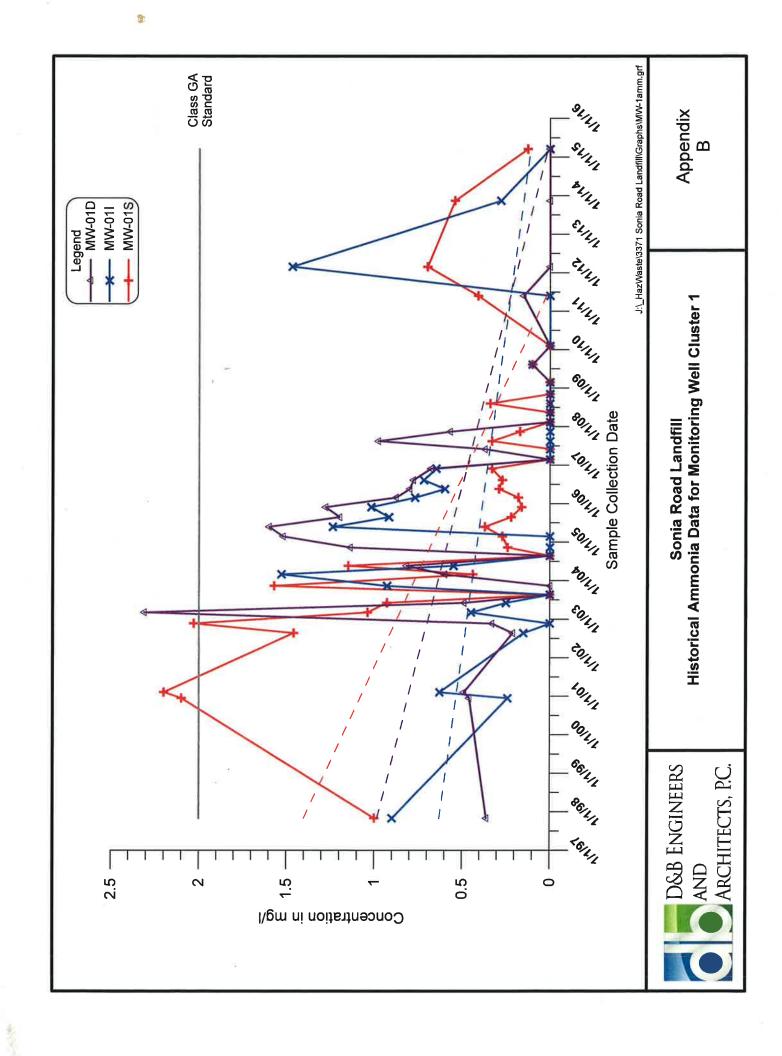
NS: Not Sampled

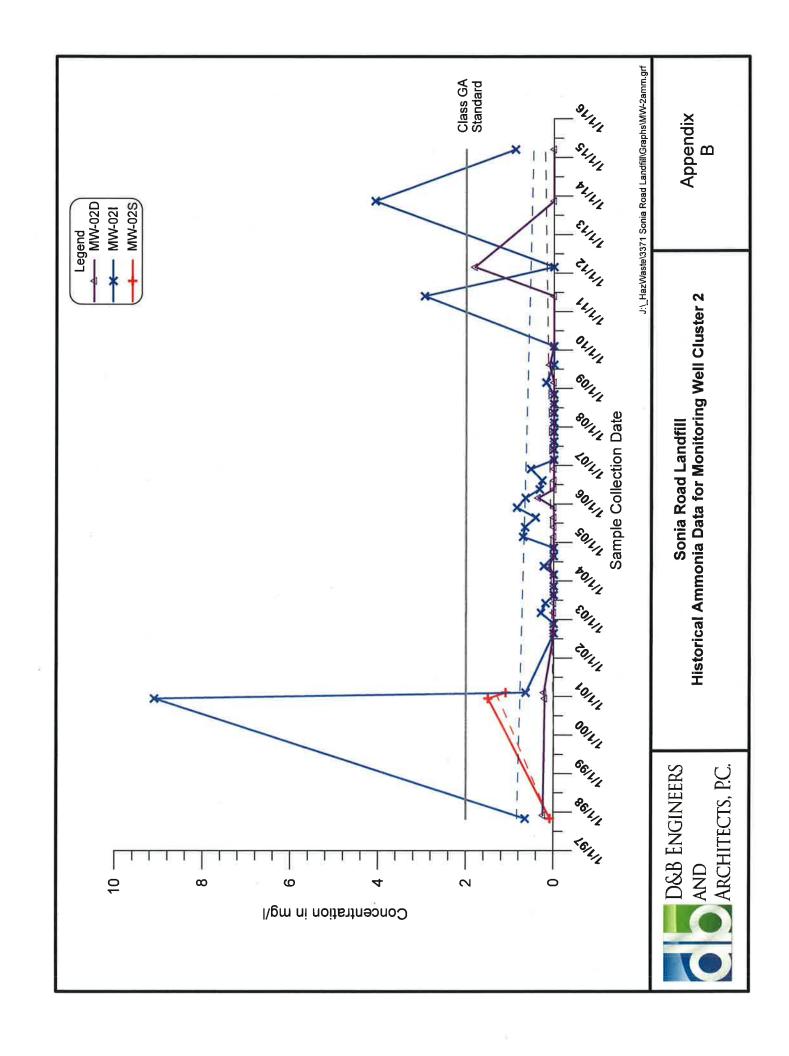
J': Result qualified as estimated based on validation criteria

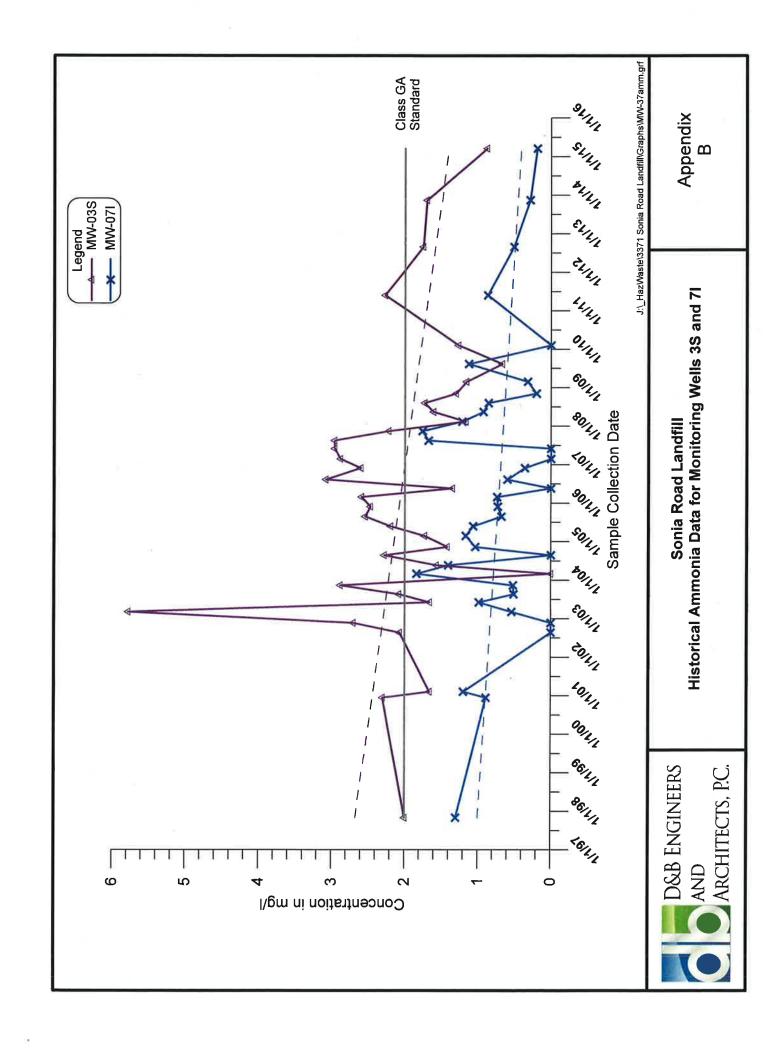
∴ No standard or guildance value

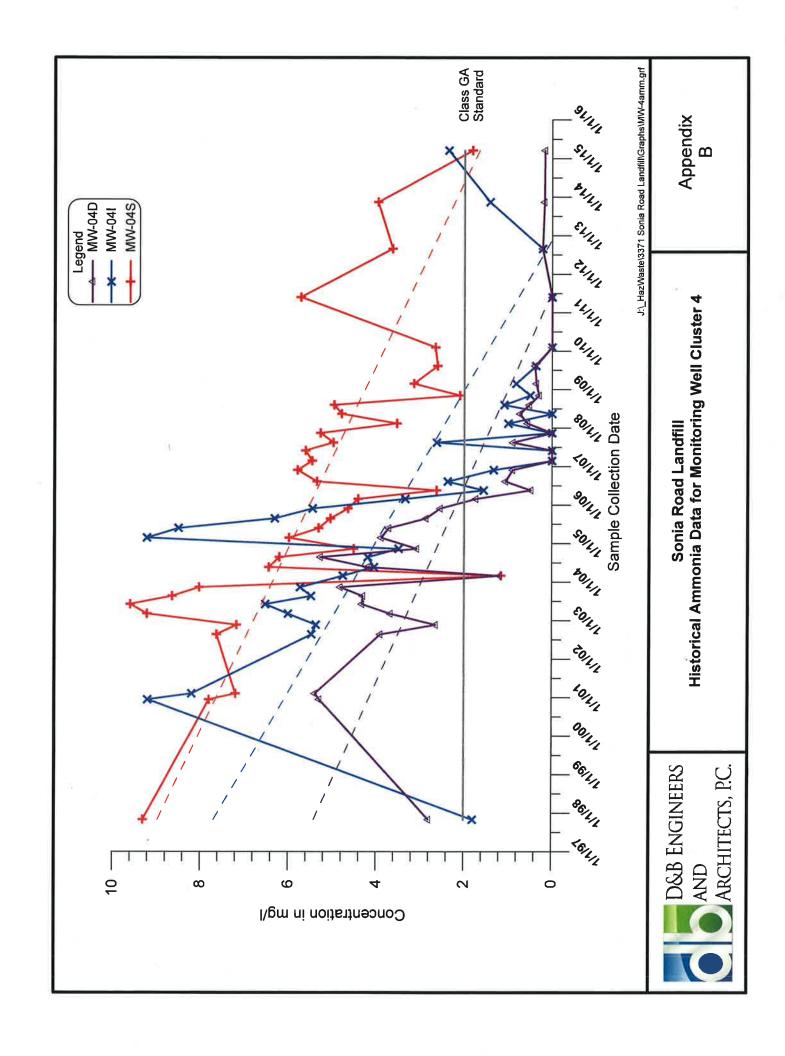
APPENDIX B

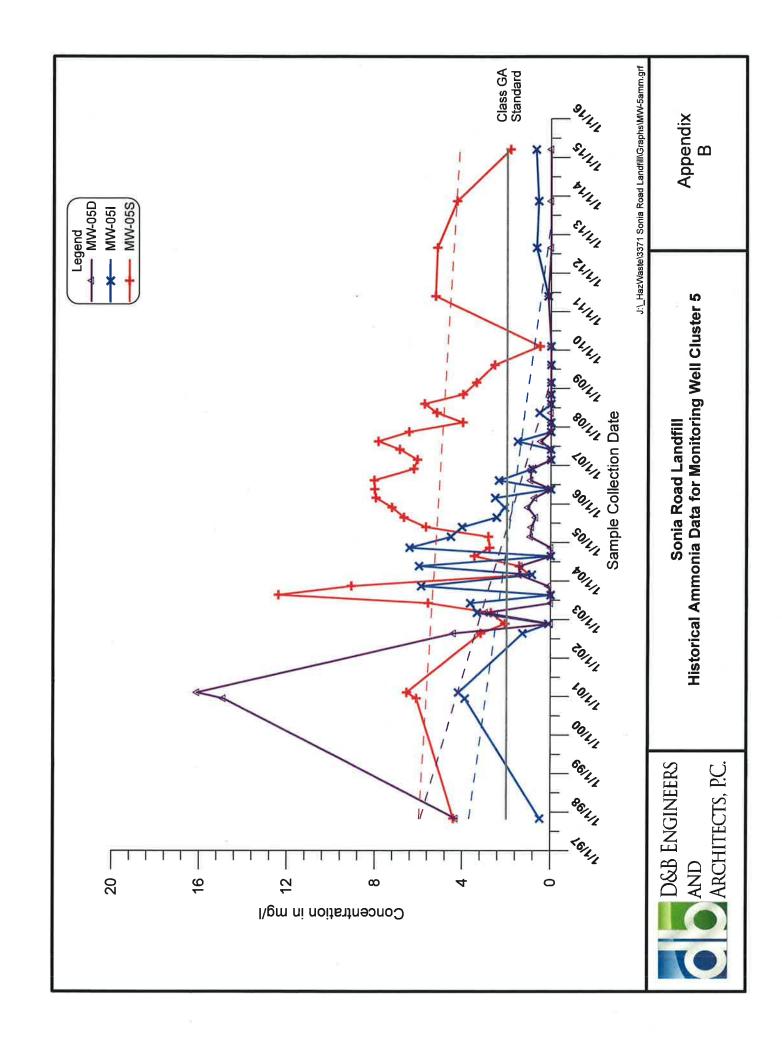
Water Quality Graphs

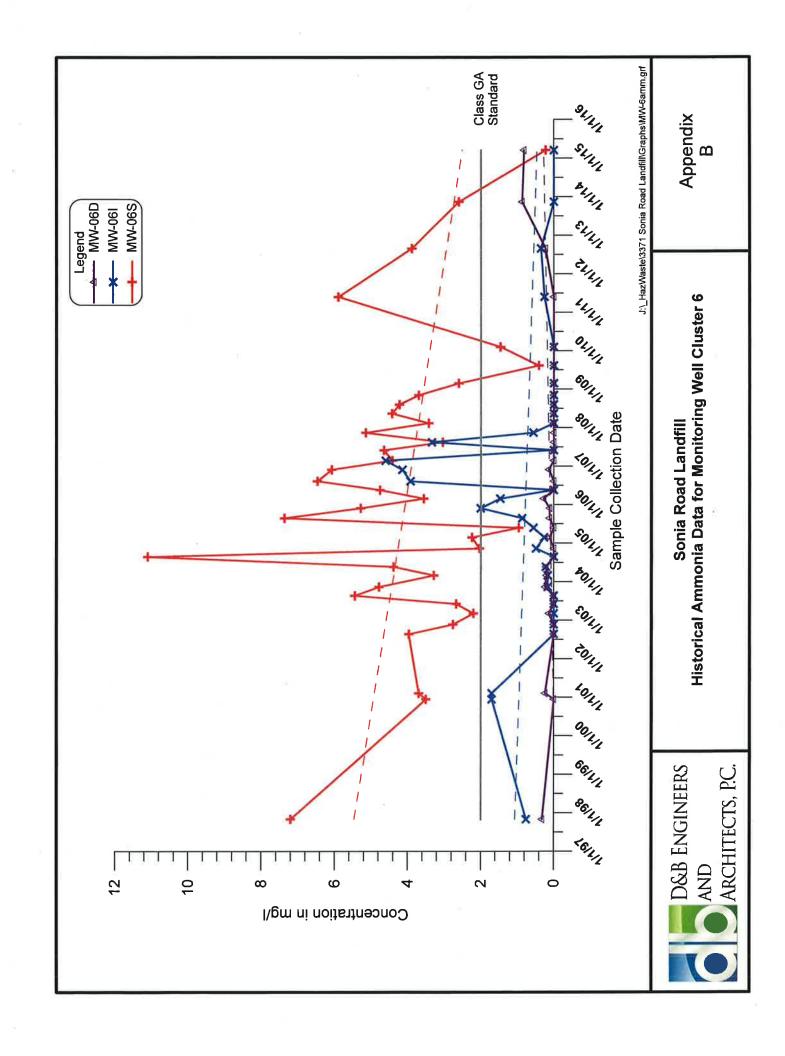


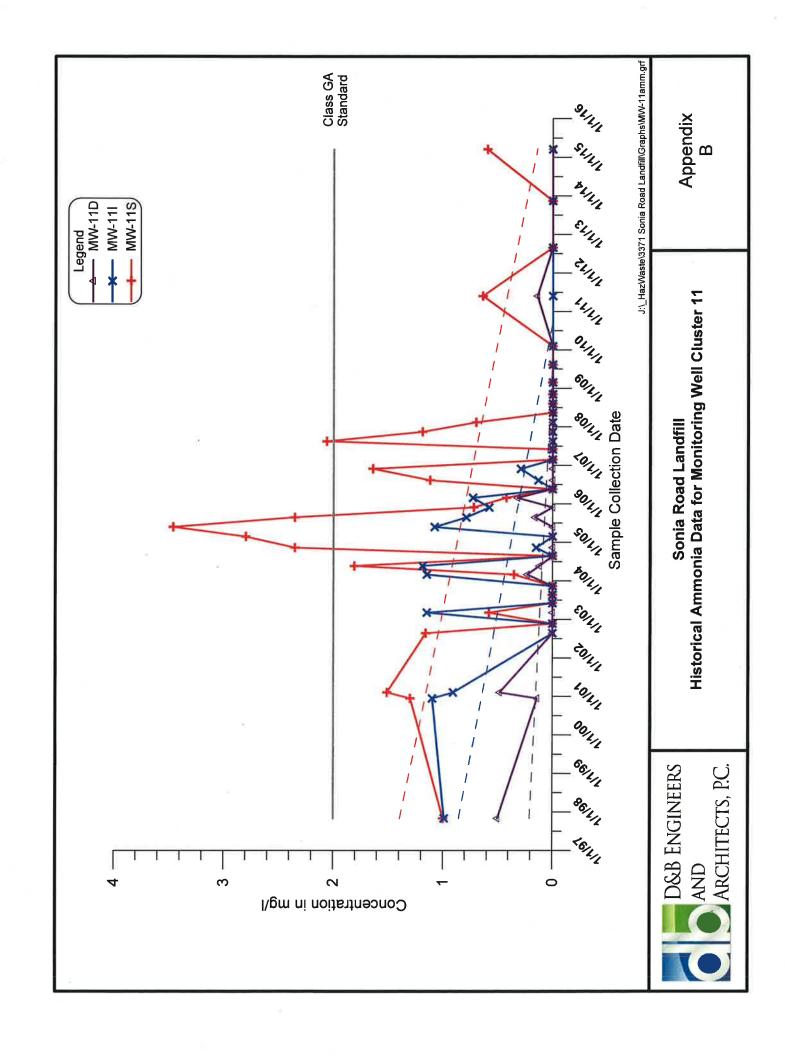


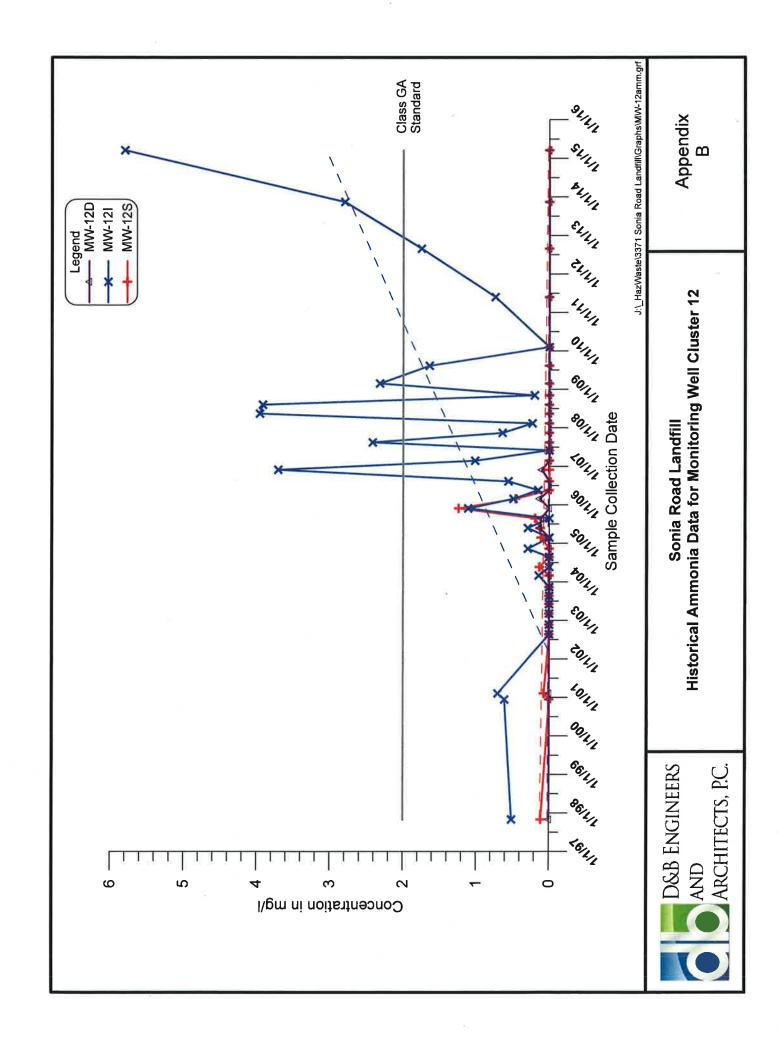


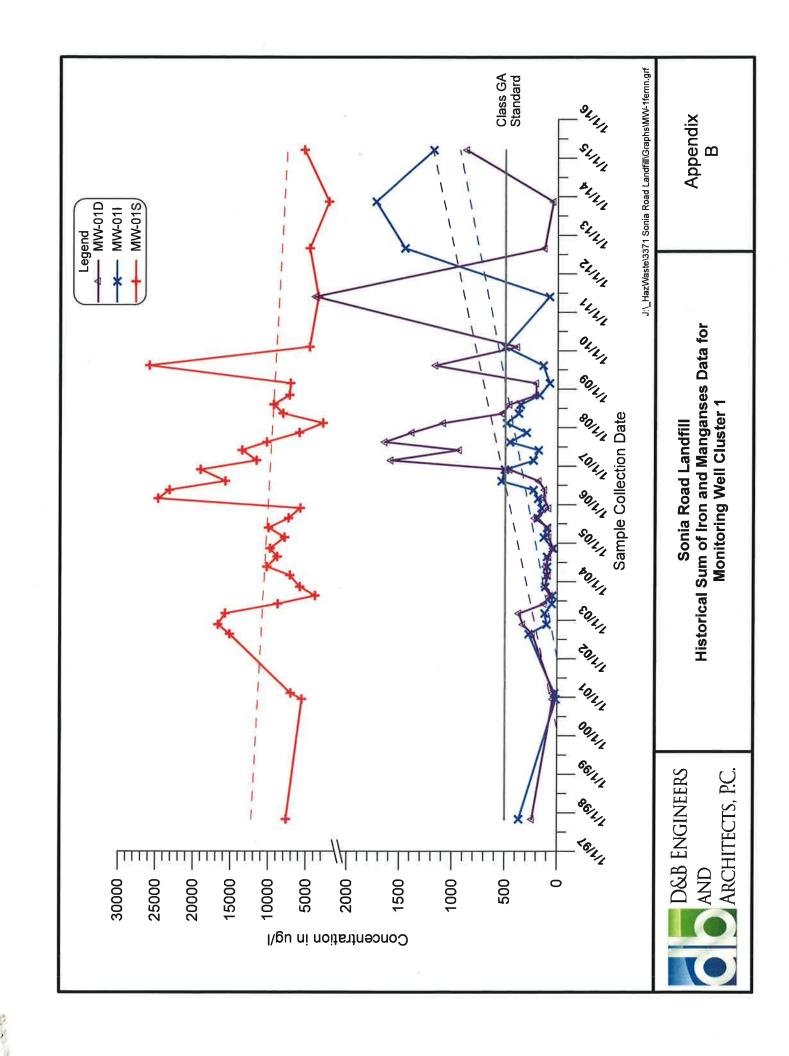


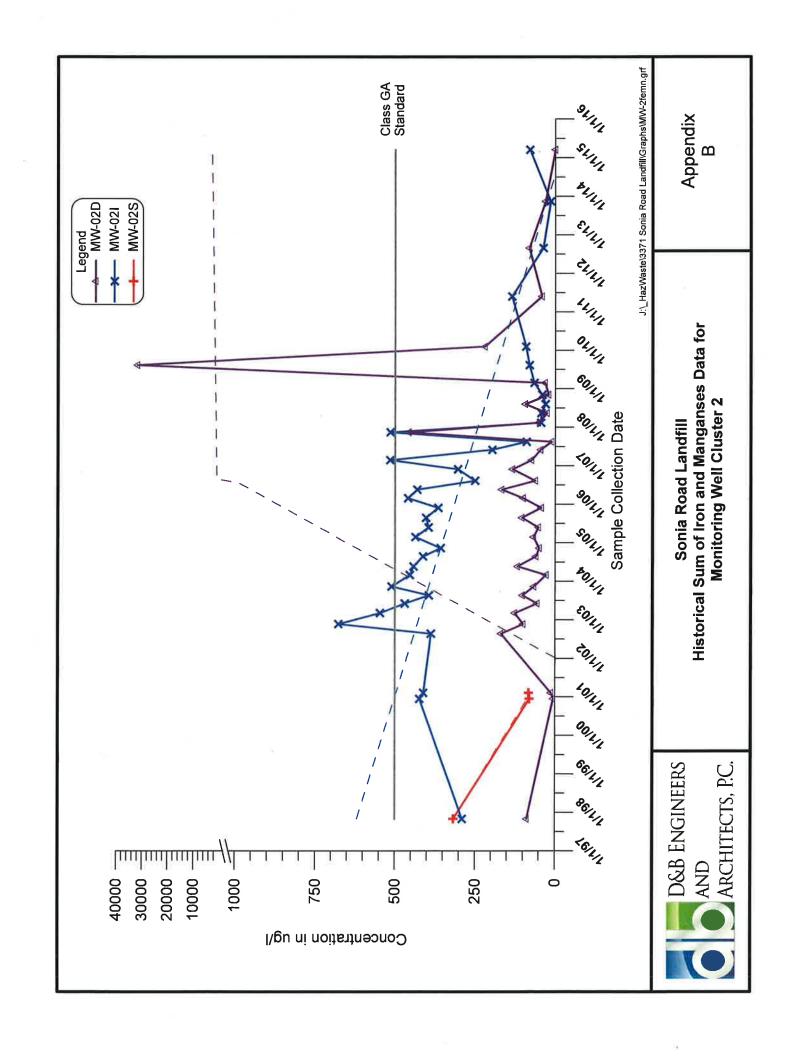


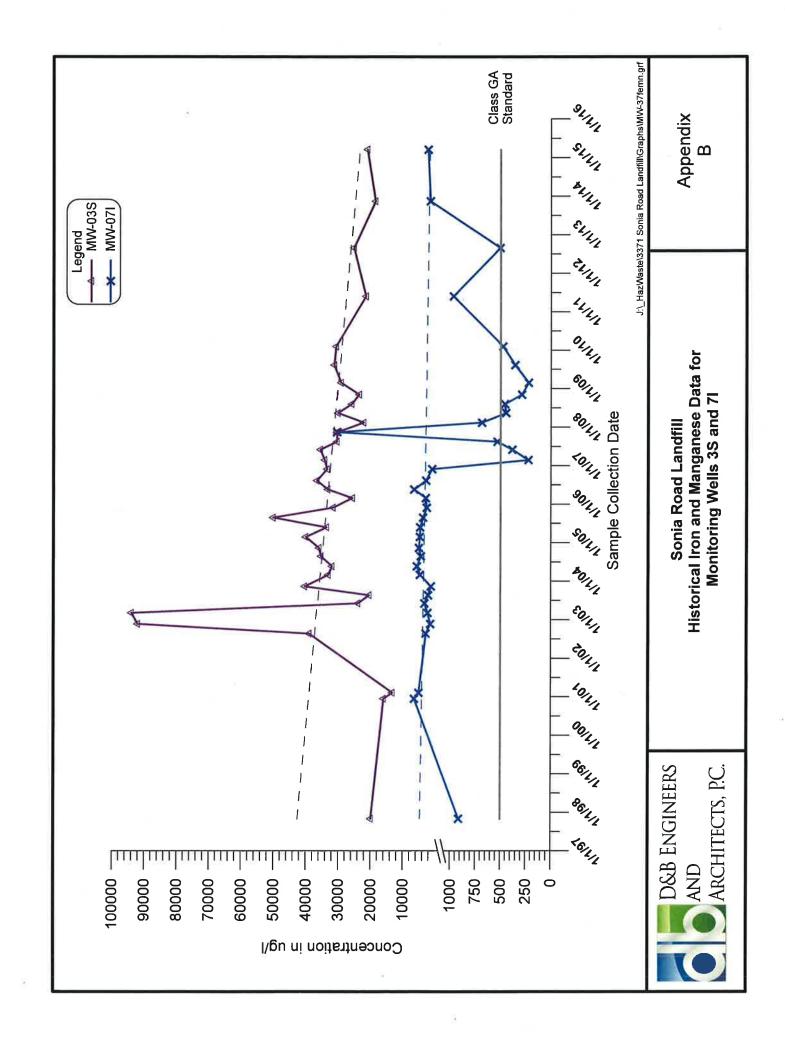


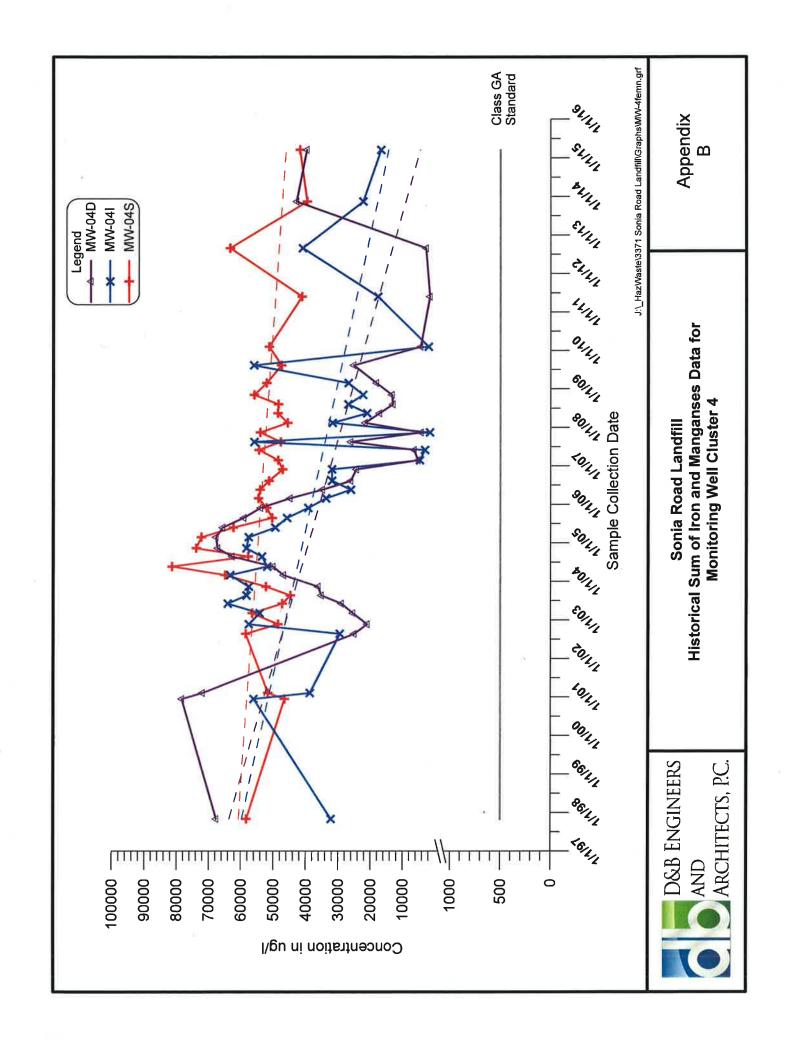


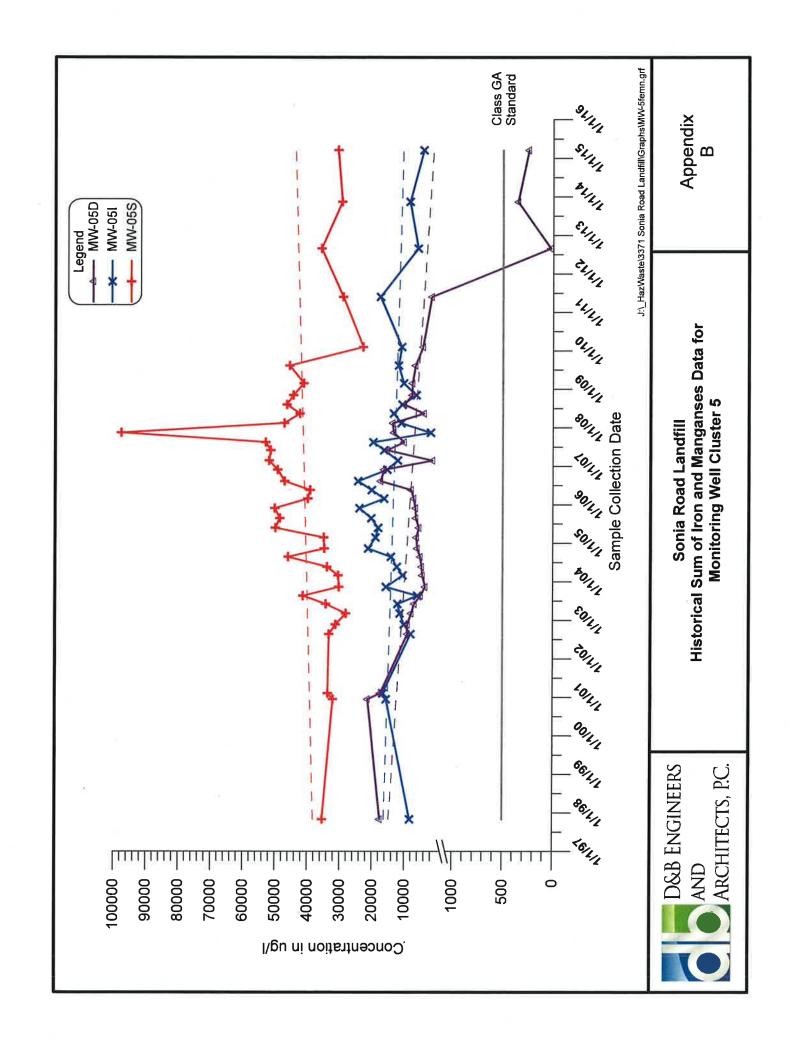


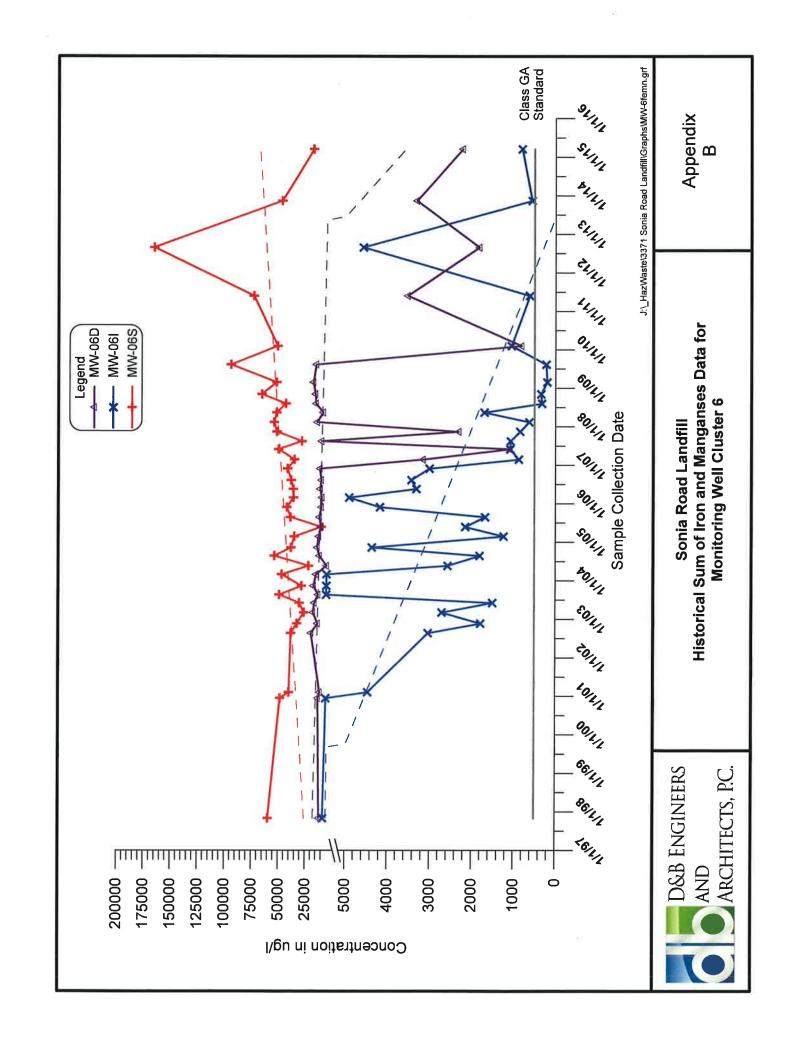


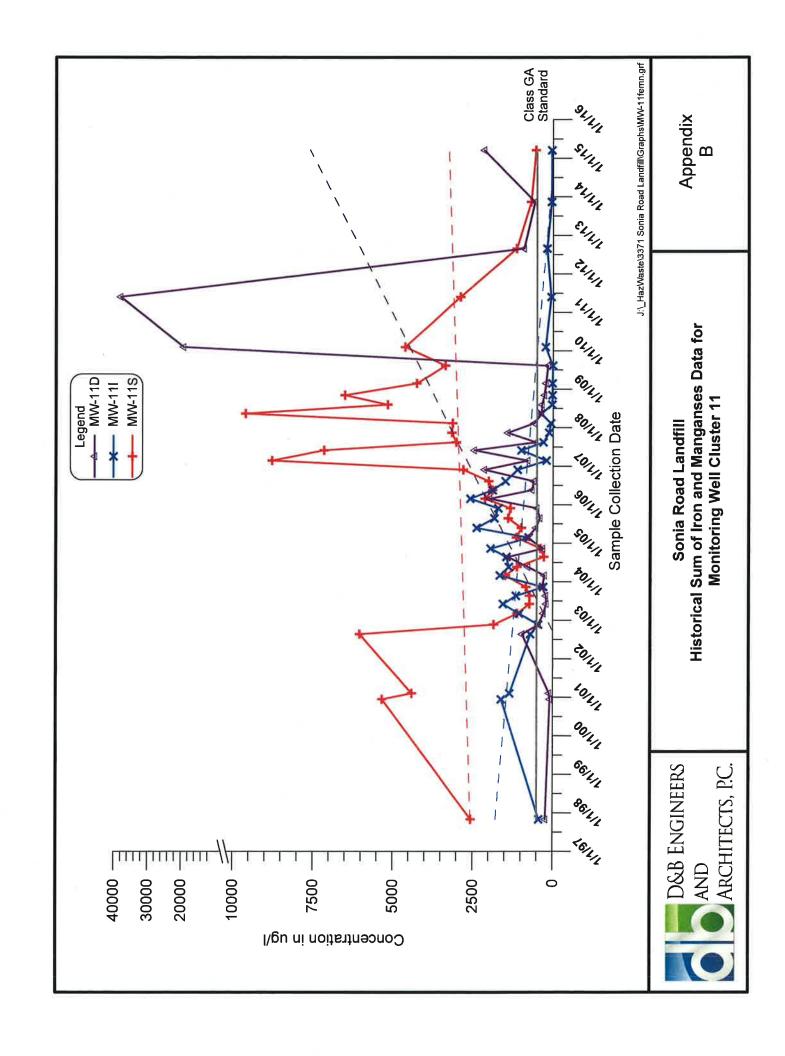


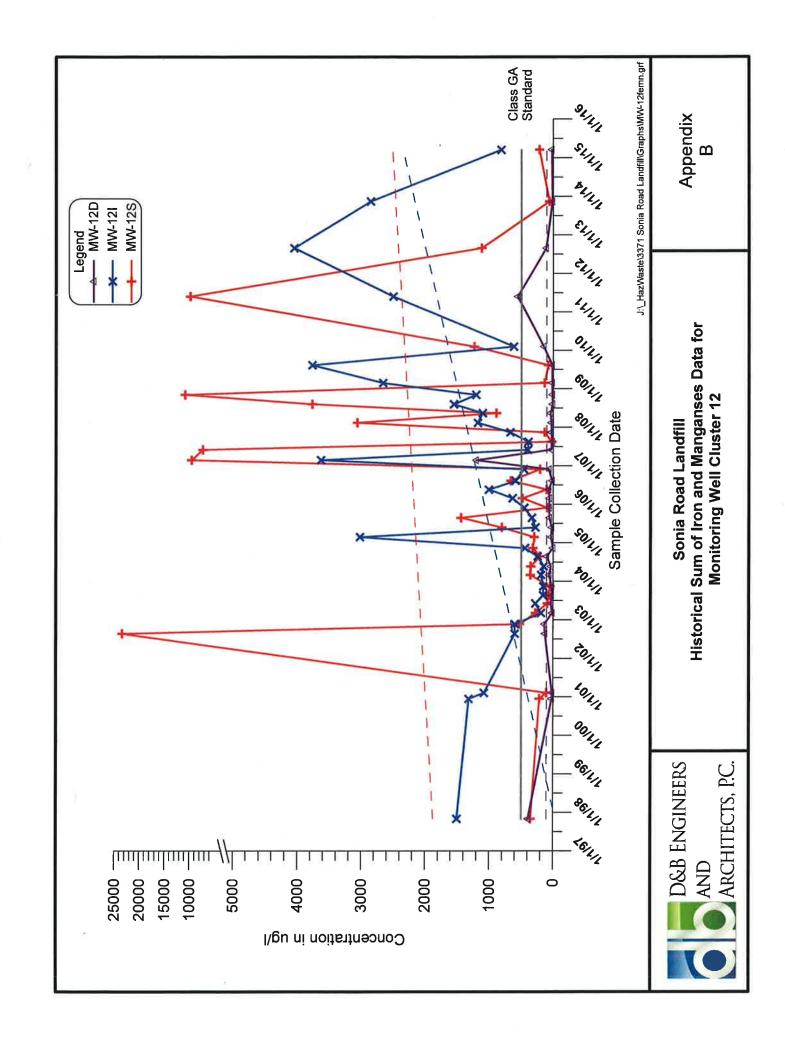


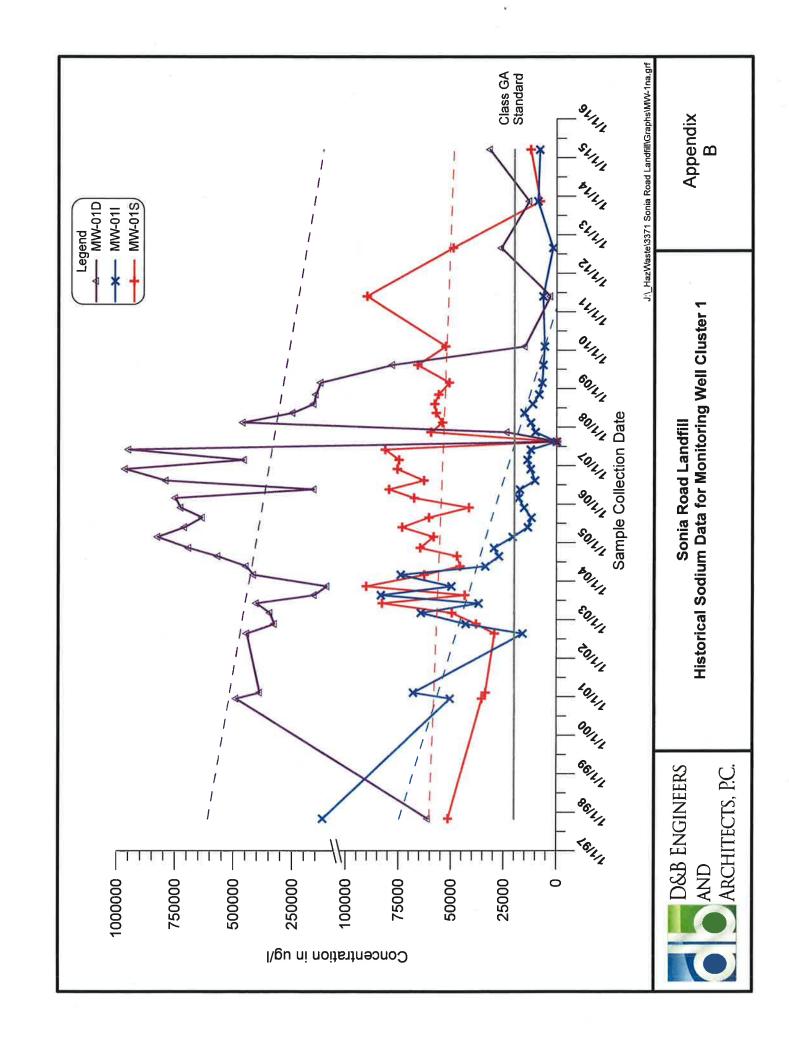


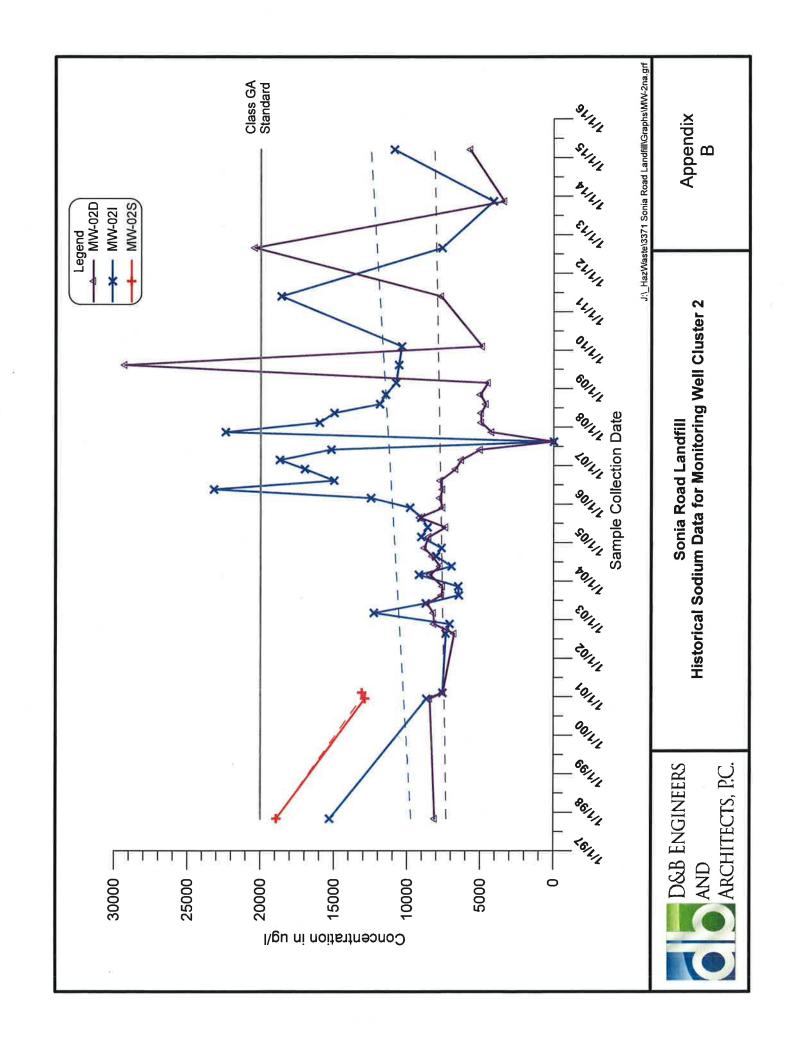


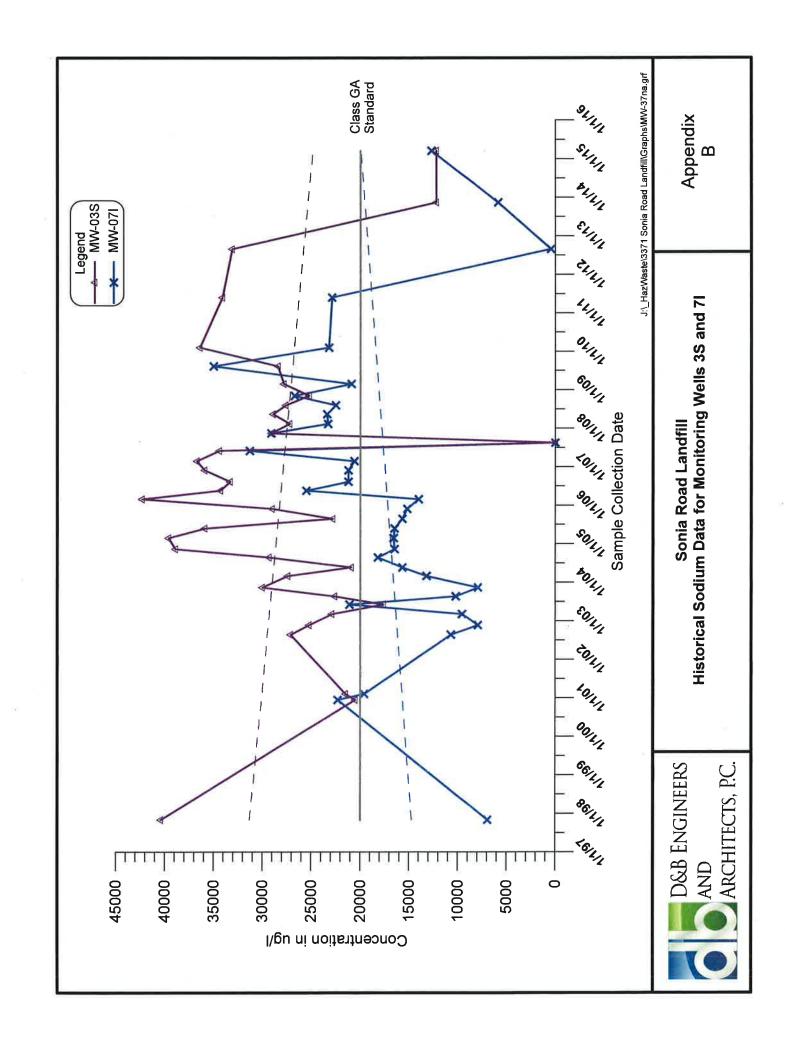


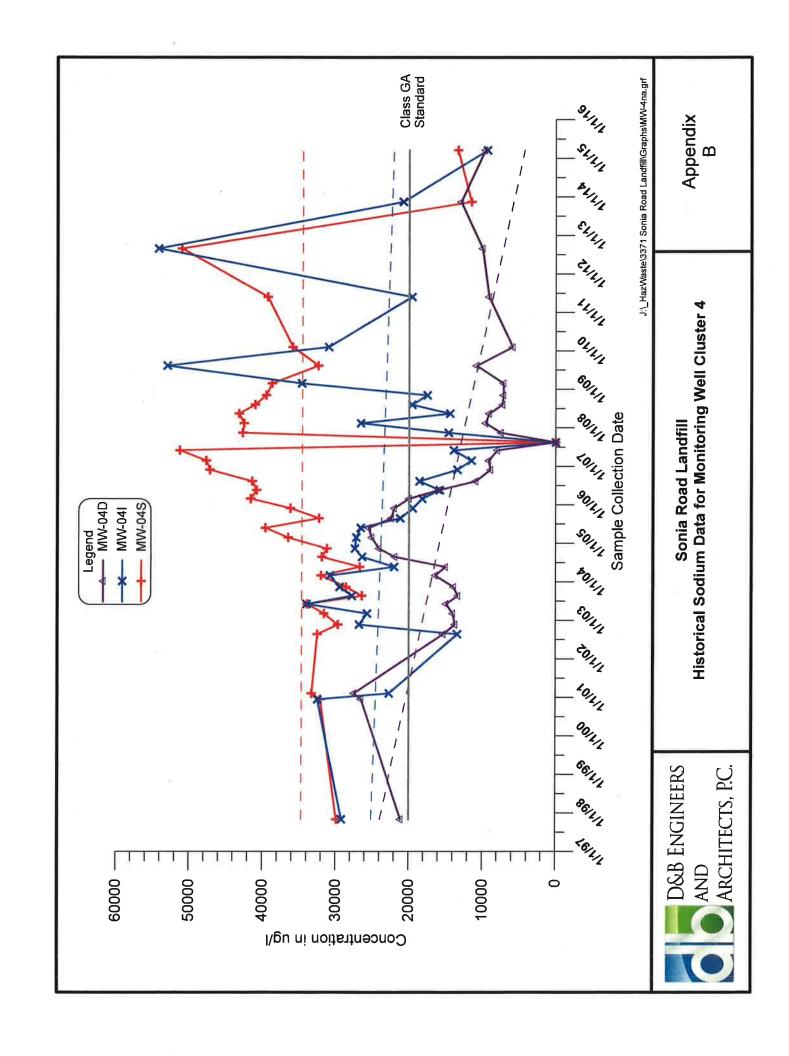


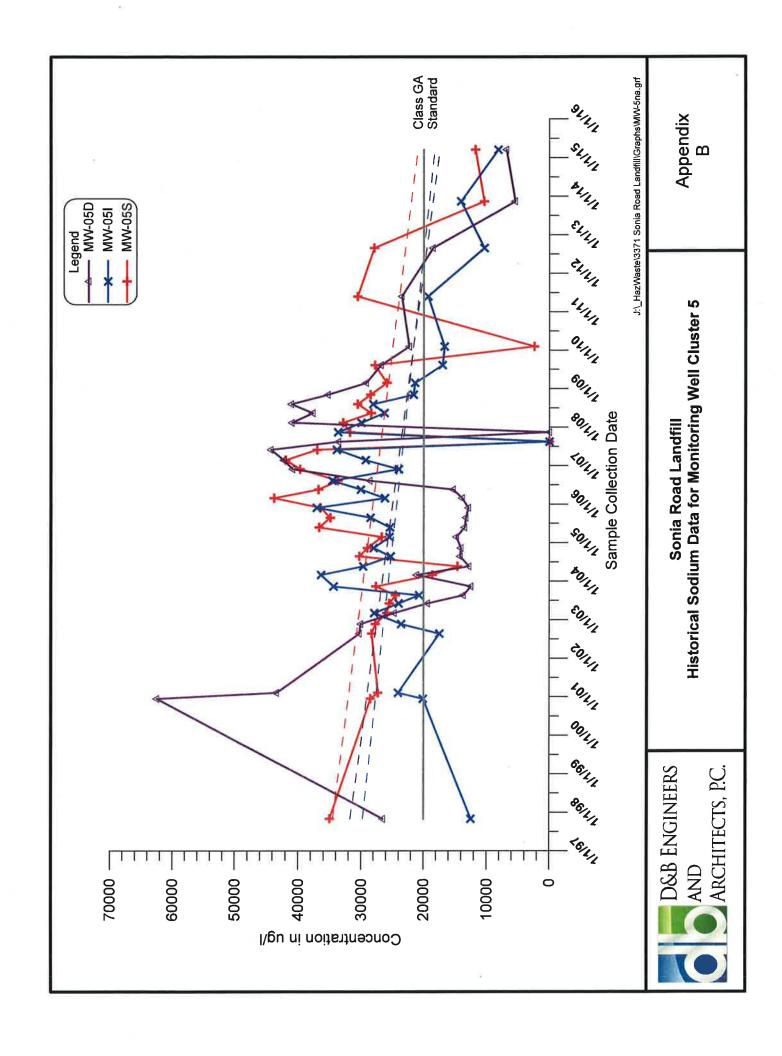


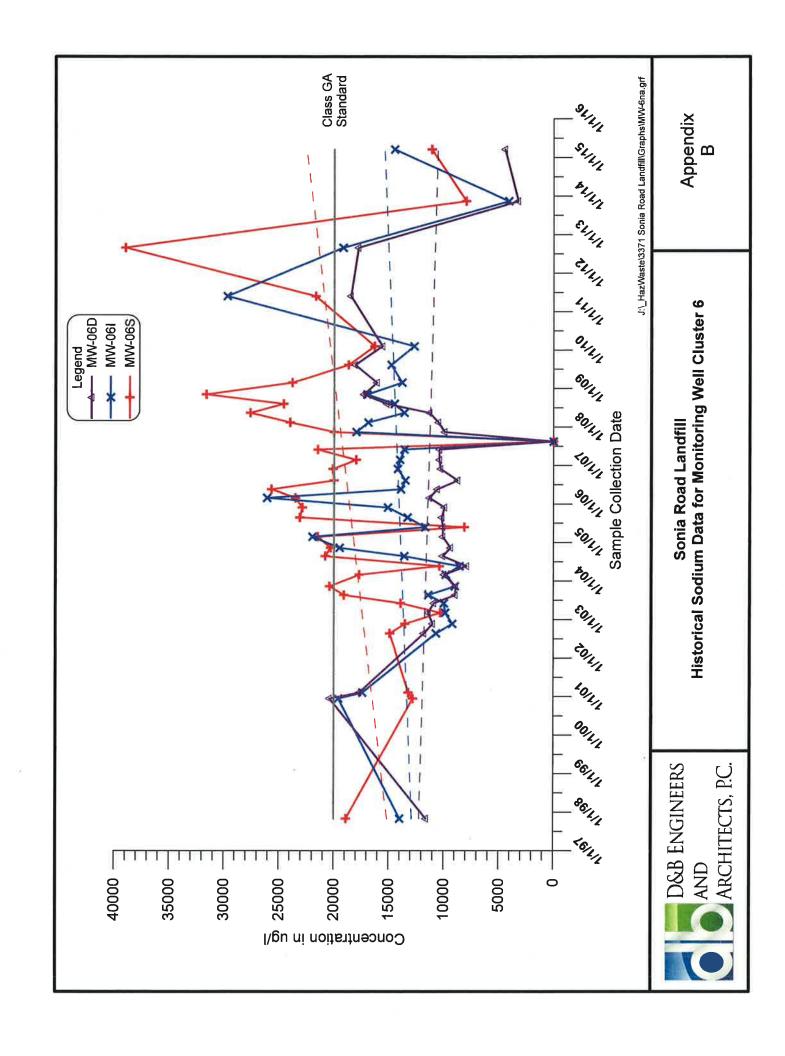


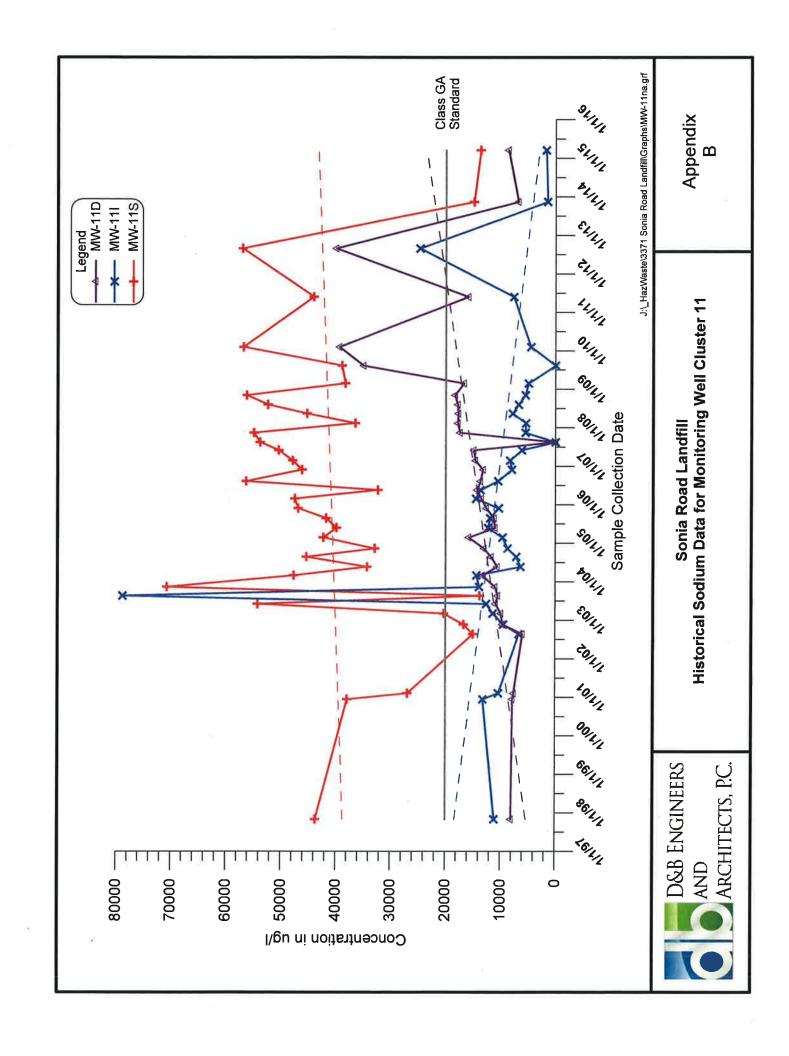


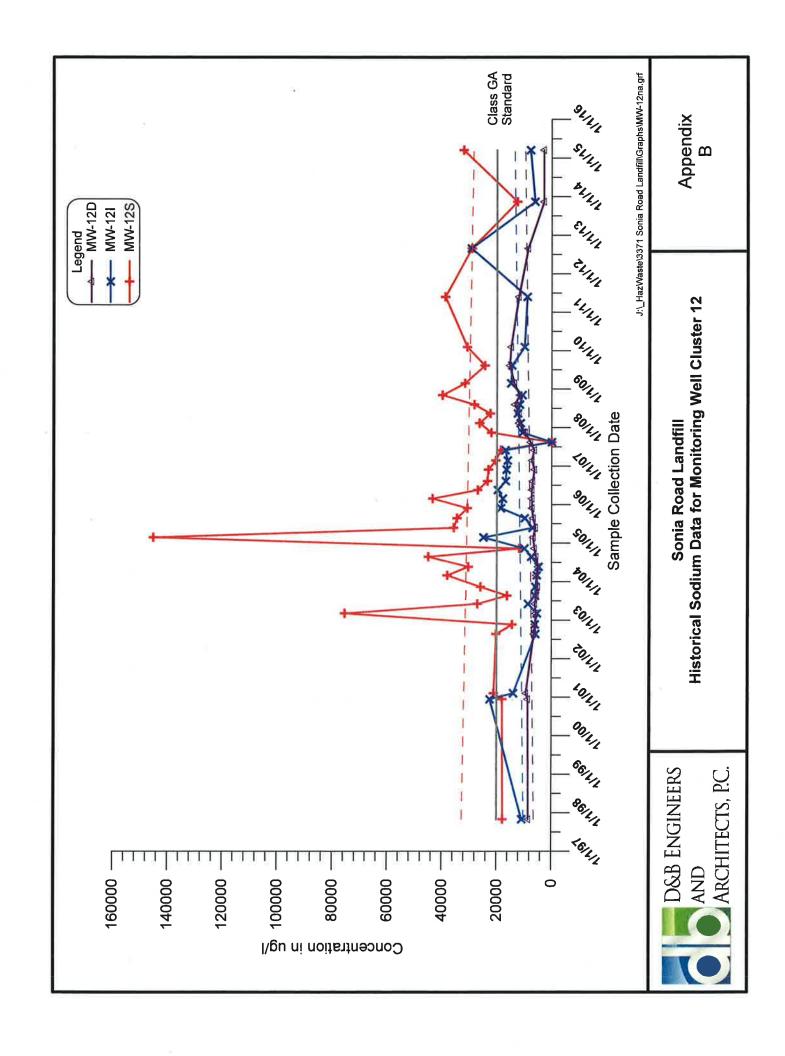












APPENDIX C

Data Validation Forms



DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 17, 2015
Sample Team:	Keith Robins
Matrix/Number	Water/ 5
of Samples:	Field Duplicates/ 1
-	Trip Blanks / 1
	Field Blanks/ 0
Analyzing	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color
Laboratory:	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

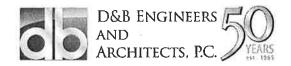
ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Repo	Reported		mance ptable	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	Parent	Analysis					
Sample ID	Lab ID	Collection Date	Sample	VOC	SVOC	РСВ	мет	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

	Rep	orted	1	rmance eptable	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	Yes	No	Yes	Required	
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

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.

[%]D - percent difference



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.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503090

UB Detected in the method blank, Trip Blanks and Field Blank (in package 1503108)
Trip Blanks and Field Blank
1
UB Detected in the Field Blank(in package 1503108)
UB Detected in the Field Blank(in package 1503108)
τ

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/28/2015
VALIDATION PERFORMED BY SIGNATURE:	Dom'n Br



DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 18, 2015
Sample Team:	Keith Robins
Matrix/Number	Water/8
of Samples:	Field Duplicates/ 0
	Trip Blanks / 1
	Field Blanks/ 0
Analyzing	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color
Laboratory:	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

	Performance					
	Reported		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	25	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

	Col	Sample Collection Date Parent		Analysis					
Sample ID	Lab ID	Conection Date	Sample	voc	SVOC	РСВ	MET	MISC	
Trip Blank - 3/18/15	1503098-001	03/18/2015		Х					
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		Х			X	X	
MW-03S-3/18/15	1503098-009	03/18/2015		X			X	X	



ORGANIC ANALYSE VOCS

	Rep	orted		rmance eptable	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	0	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

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.

[%]D - percent difference



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)
<u>VOCs</u>			
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:	Down Br



DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 19, 2015
Sample Team:	Keith Robins
Matrix/Number	Water/ 6
of Samples:	Field Duplicates/ 0
	Trip Blanks / 1
	Field Blanks/ 0
Analyzing	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color
Laboratory:	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
6	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

	Repo	Reported		mance ptable	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	Parent	Analys			S		
Sample ID	Lab ID	Collection Date	Sample	voc	SVOC	PCB	мет	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

	Rep	orted	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	8	
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	M.
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	
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

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.

[%]D - percent difference



INORGANIC ANALYSES GENERAL CHEMISTRY

	Rep	orted	Performance Acceptable		Not	
	No	4		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.



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:	Dom of Br



DATA VALIDATION CHECKLIST

Project Name:	Sonia Road Landfill
Project Number:	3371-5B
Sample Date(s):	March 20, 2015
Sample Team:	Keith Robins
Matrix/Number	Water/ 3
of Samples:	Field Duplicates/ 0
	Trip Blanks / 1
	Field Blanks/ 1
Analyzing	American Analytical Laboratories, Farmingdale, NY; subcontracted BOD, color
Laboratory:	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

Performance					
Reported		Acce	ptable	Not	
No	Yes	No	Yes	Required	
	X		X		
	X		X		
	X		Χ		
	X		X		
	X		X		
	X		X		
	X		X		
	X		X		
		No Yes X X X X X X X X X X X	Reported Acce No Yes No X X X X X X X X X X X X X X X	No Yes No Yes X X X X X X X X X X X X X X X X X X X 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	Parent Sample	Analysis					
Sample ID	Lab ID	Collection Date		voc	SVOC	РСВ	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

003	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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

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.

[%]D - percent difference



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		Х		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.



DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:1503108

Sample ID	Analyte(s)	Qualifier	Reason(s)	
VOCs		100		
All samples	Methylene chloride and acetone	UB	Detected in the method blan 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:	Dom'n Br