ISLIP RESOURCE RECOVERY AGENCY 401 MAIN STREET, ISLIP, NEW YORK 11751 (631) 224-5644

October 21, 2005

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, 12th Floor
625 Broadway
Albany, New York 12233-7013

Attn: Jeffrey E. Trad, P.E.
Environmental Engineer 2

Re: **Sonia Road Landfill**
NYSDEC Site Number 152013
Post Closure Groundwater Monitoring Program
3rd Quarter 2005 Sampling Results

Dear Mr. Trad:

Transmitted herewith for your review and consideration is one copy of the following Post Closure Groundwater Monitoring Program Quarterly Sampling Results for the Sonia Road Landfill:

1. 3rd Quarter 2005 (Routine Sampling Event)

As always, please do not hesitate to contact my office with any questions regarding the aforementioned.

Sincerely,

Francis D. Ribaudo, P.E.
Associate Engineer

encl.

cc: E. Hofmeister, IRRA President
A. Sanchez, IRRA Vice President Operations **w/encl.**
P. DiMaria, P.E., Chief Engineer
K. Wentz, Jr. CPG - D & B
File

OCT 26 2005

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ISLIP
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ISLIP, NEW YORK

Sonia Road Landfill
Town of Islip, New York

Post Closure Groundwater Monitoring Program Quarterly Sampling Results Third Quarter 2005 (Routine Sampling Event)

October 2005

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

RLA/JOBS/IRRA2023(10/17/05)

POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
THIRD QUARTER 2005

(ROUTINE SAMPLING EVENT)

SONIA ROAD LANDFILL
WEST BRENTWOOD, NEW YORK

PREPARED FOR

ISLIP RESOURCE RECOVERY AGENCY
TOWN OF ISLIP, NEW YORK

BY

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK

2 6 20

OCTOBER 2005

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
THIRD QUARTER 2005
(ROUTINE SAMPLING EVENT)

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Section 1

1.0 INTRODUCTION

This report presents the results of the Post Closure Groundwater Monitoring Program conducted during the third quarter of 2005 for the Sonia Road Landfill. The sampling program was conducted for the Town of Islip and administered by the Islip Resource Recovery Agency (IRRA) in conformance with the Sampling and Analysis Plan (SAP) prepared by Dvirka and Bartilucci Consulting Engineers (D&B), dated December 2001. The Sampling and Analysis Plan is part of the Sonia Road Post Closure Monitoring and Maintenance Plan (Volume 3 of 4).

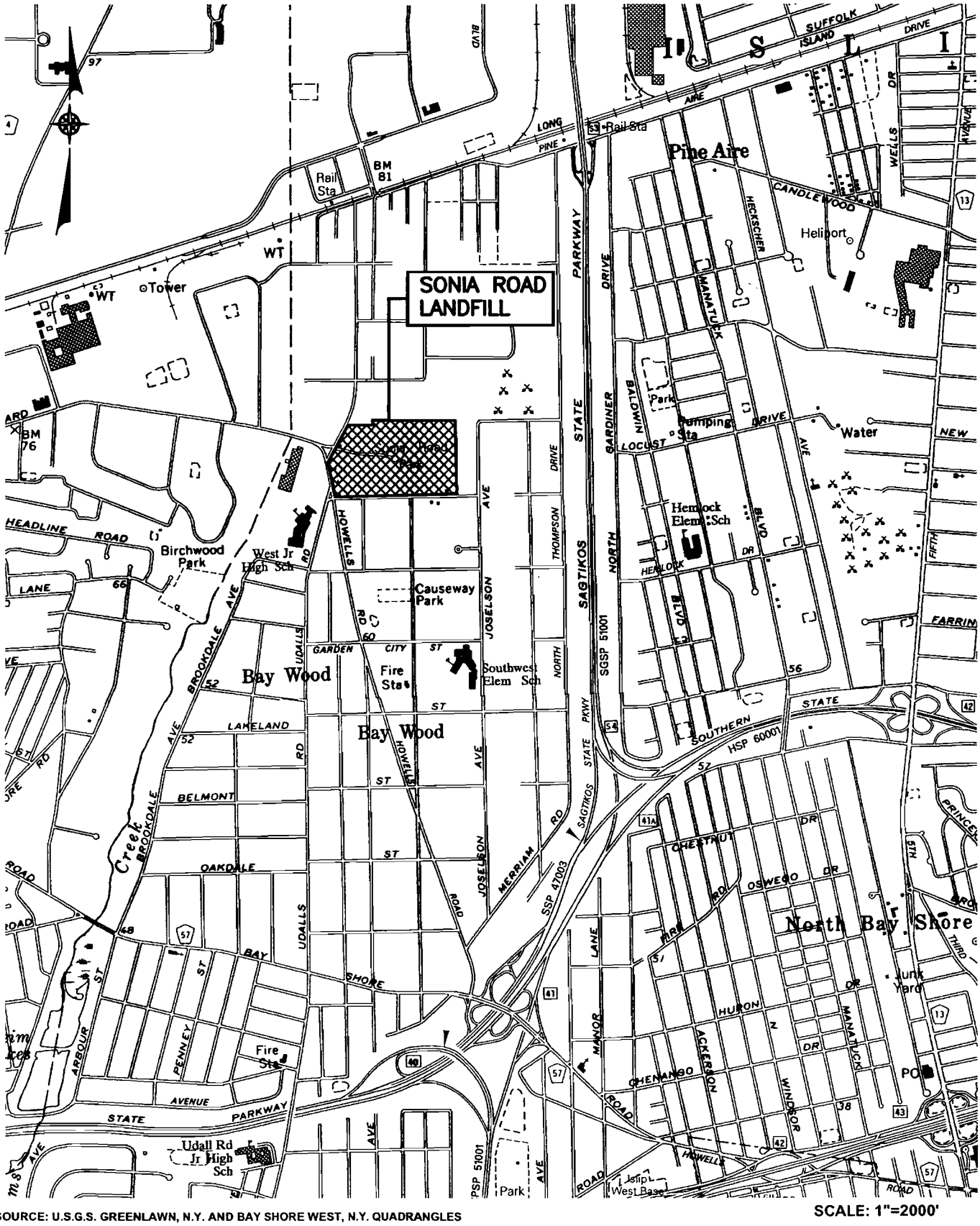
1.1 Purpose

The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater quality and flow direction following 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 flow direction. In addition, this report includes a comparison of the analytical results of this sampling event (August 2005) to applicable New York State groundwater quality standards and guidance values, and groundwater sample results obtained during the previous sampling event (second quarter 2005).

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 Howell's Road in the hamlet of Brentwood in the western portion of the Town and is in close proximity to the western town boundary between the Towns of Islip and Babylon. The location of the Sonia Road Landfill is shown on Figure 1-1.



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

SCALE: 1"=2000'

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

SITE LOCATION MAP

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

FIGURE No.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 site 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 headwaters of Sampawams Creek. Sampawams Creek is fed by groundwater discharge as well as storm water drainage systems for the surrounding areas. Sampawams Creek runs from north to south and discharges 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 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 all of the 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 (40% to 50%) of the site. It is reported that dredging may have removed materials to a depth of 50 feet below the water table. Soil borings

constructed as part of the remedial investigation 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 of the site occurred between 1965 and 1977. The most active period of landfilling occurred between 1965 and 1974. It has been estimated that between 1.5 and 2.0 million cubic yards of waste was disposed of at the site. There are no weigh records to substantiate this estimate.

The landfill reportedly accepted all municipal solid waste delivered to the site. This waste is reported to have included 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, surfaced with 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 associated with the northeast 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.

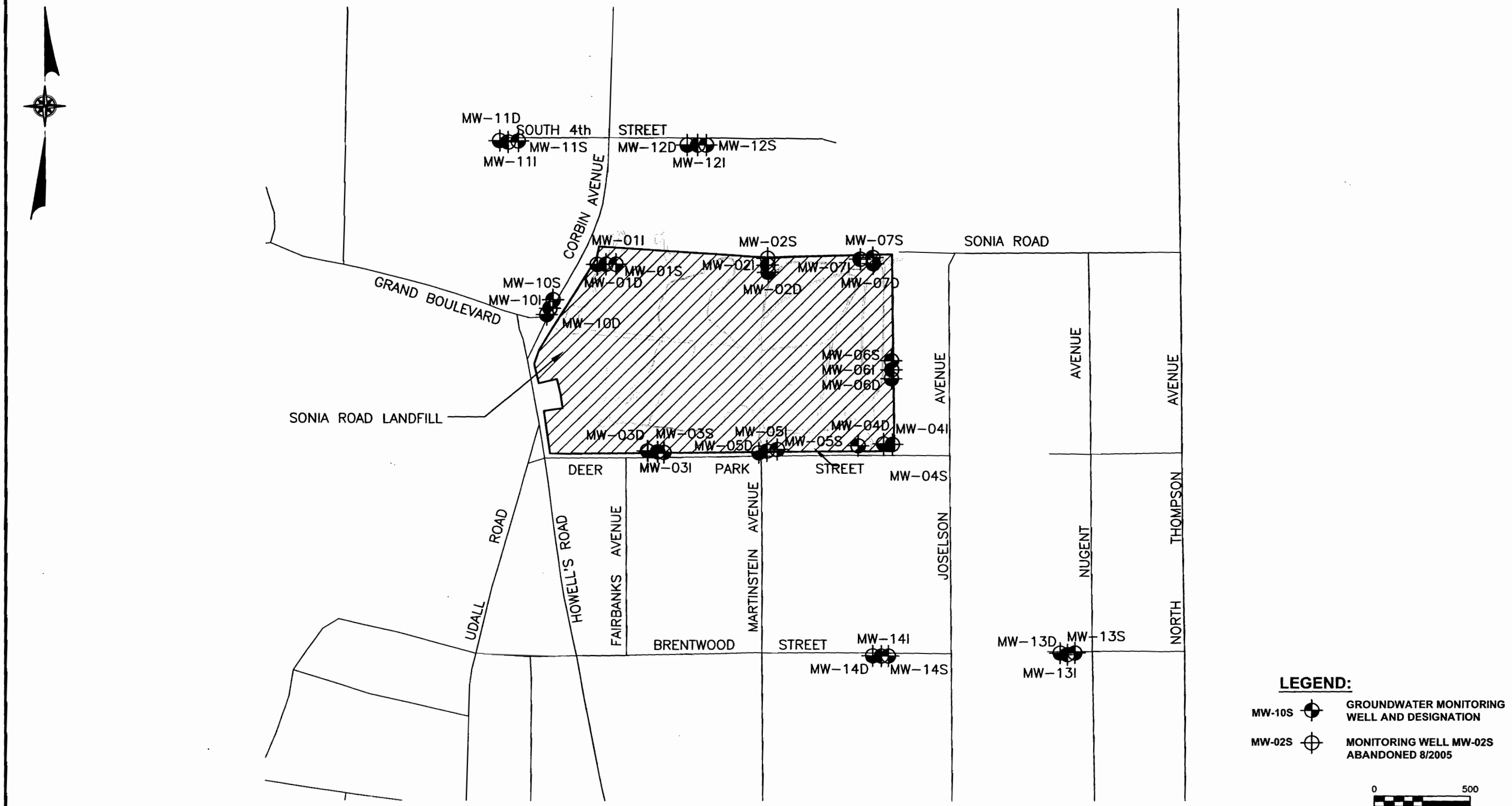
Section 2

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 shown on Figure 2-1. The monitoring wells were constructed in 12 well clusters, with each cluster comprising 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 of 2005, and will no longer be included in the Post Closure Monitoring Program. All 35 wells are 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 listed in Table 2-2.

All twenty-two (22) monitoring wells were sampled as part of the third quarter 2005 Post Closure Groundwater Sampling event.



SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

GROUNDWATER MONITORING WELL LOCATIONS

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

FIGURE 2-1

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Table 2-1

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

MONITORING WELLS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below ground surface)	Screen Setting: Elevation Below Measurement Point (feet)	Screen Setting: Elevation Relative to Mean Sea Level (feet)	Measuring Point Elevation (feet above mean sea level)
MW-01D[1]	10/14/97	4	SS	106	96-106	(-32) - (-42)	64.53
MW-01I[1]	10/6/97	4	SS	78	68 – 78	(-2) - (-12)	65.36
MW-01S[1]	1/5/95	4	PVC	29	19-29	47 – 37	66.01
MW-02D[1]	10/13/97	4	SS	116	106 - 116	(-27) - (-37)	79.01
MW-02I[1]	10/1/97	4	SS	72	62 - 72	16 - 7	78.75
MW-02S[1]	1/4/95			*Abandoned in August 2005*			
MW-03D[1]	9/30/97	4	SS	107	97 - 107	(-26) - (-36)	70.50
MW-03I[1]	1/9/95	4	PVC	84	79 - 84	(-8) - (-13)	70.77
MW-03S[1]	1/6/95	4	PVC	32	22 - 32	49 - 39	70.76
MW-04D[1]	10/6/97	4	SS	114	104 - 114	(-35) - (-45)	69.03
MW-04I[1]	9/29/97	4	SS	71	61 - 71	8 - (-2)	69.31
MW-04S[1]	1/6/95	4	PVC	34	24 - 34	48 - 38	71.10
MW-05D[1]	10/10/97	4	SS	116	106 - 116	(-35) - (-45)	70.96
MW-05I[1]	10/2/97	4	SS	70	60 - 70	11 - 1	70.26
MW-05S[1]	10/4/97	4	SS	34	19 - 34	52 - 37	70.28

Table 2-1 (continued)

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

MONITORING WELLS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below ground surface)	Screen Setting: Elevation Below Measurement Point (feet)	Screen Setting: Elevation Relative to Mean Sea Level (feet)	Measuring Point Elevation (feet above mean sea level)
MW-06D[1]	10/1/97	4	SS	117	107 - 117	(-32) - (-42)	**
MW-06I[1]	9/25/97	4	SS	76	66 - 76	9 - (-1)	**
MW-06S[1]	9/24/97	4	SS	37	22 - 37	53 - 38	**
MW-07D[1]	10/8/97	4	SS	122	112 - 122	(-37) - (-47)	75.04
MW-07I[1]	9/26/97	4	SS	74	64 - 74	9 - (-1)	73.45
MW-07S[1]	9/28/97	4	SS	34	19 - 34	54 - 39	72.83
MW-10D[2]	10/15/97	4	SS	96	86 - 96	(-29) - (-39)	56.34
MW-10I[2]	10/7/97	4	SS	69	59 - 69	(-3) - (-13)	56.16
MW-10S[2]	10/8/97	4	SS	19	4 - 19	53 - 38	56.65
MW-11D[1]	10/16/97	4	SS	94	84 - 94	(-24) - (-34)	60.19
MW-11I[1]	10/11/97	4	SS	71	61 - 71	(-1) - (-11)	60.38
MW-11S[1]	10/13/97	4	SS	19	4 - 19	56 - 41	59.87
MW-12D[1]	10/15/97	4	SS	98	88 - 98	(-29) - (-39)	58.61
MW-12I[1]	10/10/97	4	SS	70	60 - 70	(-1) - (-11)	58.92
MW-12S[1]	10/13/97	4	SS	19	4 - 19	55 - 40	58.79

Table 2-1 (continued)

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

MONITORING WELLS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below ground surface)	Screen Setting: Elevation Below Measurement Point (feet)	Screen Setting: Elevation Relative to Mean Sea Level (feet)	Measuring Point Elevation (feet above mean sea level)
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:
PVC Polyvinyl chloride
SS Stainless steel
[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.
** Monitoring wells MW-06S, MW-06D, MW-06I undergoing rehabilitations; measuring point elevations unavailable.

Wells identified in bold type were modified during the construction of the landfill capping system to adjust the top of the well (reference point) to accommodate the thickness of the capping system. Wells MW-11S, MW-11I and MW-11D were modified to address grade changes at the well locations.

SOURCE: Dvirka and Bartilucci Remedial Investigation/Feasibility Study (RI/FS) dated April 1998 and surveys noted above.

Table 2-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
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	

Section 3

3.0 SAMPLING AND ANALYTICAL PROCEDURES

Sampling procedures for the Sonia Road Landfill site are described in the Sampling and Analysis Plan (SAP). Dedicated and disposable sampling equipment was used whenever possible in accordance with the SAP. All nondisposable equipment was decontaminated before first use on-site and between uses in accordance with the procedures described in the SAP. The following sections provide brief discussions of the procedures used during groundwater level measurements, organic vapor and combustible gas monitoring, groundwater sampling and sample analysis.

3.1 Groundwater Level Measurement

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 survey measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. A discussion of the groundwater level measurement results and groundwater flow direction is provided in Section 6.0.

3.2 Groundwater Sampling

Prior to collection of each groundwater sample, 3 to 5 well volumes were purged from 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 each well.

During the purging process, field parameters (pH, specific conductance, temperature, oxidation-reduction potential (ORP), dissolved oxygen and turbidity) were monitored and recorded. When the values of the field parameters, except turbidity, equilibrated within 10% based on the last two readings, the turbidity of the groundwater was less than 50 Nephelometric

Turbidity Units (NTUs) and at least three well volumes had been removed, well purging was considered complete.

Groundwater samples were collected using new, dedicated, disposable polyethylene bailers and polypropylene rope. Samples were collected immediately after purging. Filled sample bottles were stored in ice-filled coolers with the chain-of-custody forms and delivered on the day of collection to H2M Laboratories, Inc. for analysis. H2M Laboratories, Inc. is approved by the New York State Department of Health under the Environmental Laboratory Approval Program (ELAP) for the analyses performed.

Appropriate quality assurance/quality control (QA/QC) samples, which included field blanks, matrix spike and matrix spike duplicate (MS/MSD) sets and blind duplicates, were collected 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 a tank truck, transported to the landfill and discharged into the landfill's on-site Recharge Basin 1 in accordance with the SAP.

Analytical results are summarized in Appendix A and are discussed in Section 4.2. Field forms for the third quarter 2005 sampling event, including field observation logs and daily equipment calibration logs, are contained in Appendices B-1 and B-2, respectively, and the chain-of-custody forms are provided in Appendix C.

3.3 Organic Vapor and Combustible Gas Monitoring

Total organic vapor and combustible gas measurements were collected in all 35 monitoring wells. Organic vapors were measured using a photoionization detector (PID). Combustible gas was measured using a portable multi-gas meter. Gas monitoring results represent headspace measurements collected during the synoptic groundwater level

measurements. The results of the organic vapor and combustible gas monitoring are provided in Section 4.3.

3.4 Analytical Parameters

Groundwater samples collected during the third quarter 2005 sampling event were analyzed for 6 NYCRR Part 360 Routine Parameters, including leachate indicators and inorganic parameters. Samples were analyzed in accordance with SW-846 methods as specified in the NYCRR Part 360 regulations. The analytical results for the groundwater samples are discussed in Section 4.2.

Section 4

4.0 ANALYTICAL RESULTS

4.1 Field Parameters

Table 4-1 provides a summary of the final field parameter values and field data measured for the third quarter 2005 sampling event.

4.2 Groundwater Samples

The third quarter 2005 analytical results for the groundwater samples, compared to NYSDEC Class GA groundwater standards and guidance values and to previous sample results, are provided in Appendices A-1 (leachate indicator parameters) and A-2 (inorganic parameters). Appendix A-3 contains historic volatile organic compound (VOC) sample results. Appendix A-4 contains historic trend graphs for alkalinity, iron plus manganese, total dissolved solids, and specific conductivity from selected upgradient and downgradient monitoring wells.

4.2.1 Leachate Indicators

The results of the leachate indicators for the groundwater samples are presented in Appendix A-1. As shown in the results table in Appendix A-1, three leachate indicator parameters, ammonia, bromide and chloride, were detected at concentrations exceeding Class GA groundwater standards and guidance values in 11 of the 22 wells sampled during the third quarter 2005 sampling event. The remaining 11 wells did not contain any leachate indicator parameters at concentrations exceeding Class GA groundwater standards or guidance values. The leachate indicators that exceeded the Class GA groundwater standards or guidance values are discussed below.

Table 4-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA – THIRD QUARTER 2005

Monitoring Well	pH	Temperature (°C)	Specific Conductance (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)	Organic Vapor Screening and Combustible Gas Reading	
							PID (ppm)	% LEL
MW-01D	6.18	15.07	3.52	36.1	4.46	264	0	0
MW-01I	5.88	14.55	0.100	18.5	4.21	252	0	0
MW-01S	6.17	16.49	0.533	33.2	7.23	122	0	0
MW-02D	5.75	14.21	0.088	29.5	8.00	356	0	0
MW-02I	5.16	15.30	0.097	24.8	5.75	354	0	0
MW-02S	NS	NS	NS	NS	NS	NS	0	0
MW-03D	NS	NS	NS	NS	NS	NS	0	0
MW-03I	NS	NS	NS	NS	NS	NS	0	0
MW-03S	6.70	19.46	0.471	37.1	6.66	-49	0	0
MW-04D	6.67	15.03	0.491	33.1	3.18	-77	0.5	0
MW-04I	6.43	15.77	0.506	25.8	4.40	-28	0.1	0
MW-04S	6.37	16.68	0.950	23.9	3.79	-21	0.7	0
MW-05D	6.49	19.32	0.176	0.0	8.75	291	0	0
MW-05I	6.74	15.85	0.408	35.4	6.06	-36	0	0
MW-05S	6.58	18.87	0.772	28.0	4.57	-25	0	0
MW-06D	5.99	15.80	0.090	4.4	5.02	129	0	0
MW-06I	6.36	16.92	0.160	17.0	3.41	67	0	0
MW-06S	6.48	20.44	0.500	0.0	4.20	-40	0	0
MW-07D	NS	NS	NS	NS	NS	NS	0	0
MW-07I	5.90	14.75	0.154	21.4	4.31	324	0	0
MW-07S	NS	NS	NS	NS	NS	NS	0	0
MW-10D	NS	NS	NS	NS	NS	NS	0	0
MW-10I	NS	NS	NS	NS	NS	NS	0	0
MW-10S	NS	NS	NS	NS	NS	NS	0	0
MW-11D	5.17	14.70	0.114	9.6	9.16	429	0	0
MW-11I	5.95	14.60	0.108	8.5	3.10	356	0	0
MW-11S	6.54	18.83	0.436	35.2	3.75	343	0	0
MW-12D	5.67	15.79	0.042	6.5	8.46	450	0	0
MW-12I	4.89	15.19	0.083	10.1	4.47	376	0	0
MW-12S	5.78	18.00	0.315	42.1	5.81	280	0	0
MW-13D	NS	NS	NS	NS	NS	NS	0.2	0
MW-13I	NS	NS	NS	NS	NS	NS	1.5	0
MW-13S	NS	NS	NS	NS	NS	NS	0	0
MW-14D	NS	NS	NS	NS	NS	NS	0	0
MW-14I	NS	NS	NS	NS	NS	NS	0	0
MW-14S	NS	NS	NS	NS	NS	NS	0	0

Notes:

ppm:	parts per million	°C:	Degrees Celsius
PID:	Photo Ionization Detector	mS/cm:	Millisiemens per centimeter
LEL:	Lower Explosive Limit	NTU:	Nephelometric Turbidity Units
mV:	Millivolt	DO:	Dissolved oxygen
ORP:	Oxidation-reduction potential	mg/l	Milligrams per liter
		NS:	Not sampled

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

Ammonia

The groundwater standard for ammonia (2 milligrams per liter [mg/l]) was exceeded in eight (8) wells (MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S and MW-11S). Ammonia concentrations in these wells ranged from 2.35 mg/l in well MW-11S to 7.37 mg/l in well MW-06S.

Bromide

The guidance value for bromide (2 mg/l) was exceeded in four (4) wells (MW-03S, MW-06S, MW-06D and MW-07I). Bromide concentrations in these wells ranged from 2.1 mg/l in well MW-03S to 5.6 mg/l in well MW-06S.

Chloride

The groundwater standard for chloride (250 mg/l) was exceeded in well MW-01D, which contained a concentration of 1,050 mg/l.

4.2.2 Historic Leachate Indicators

A comparison of the current leachate indicator results for the 22 sampled wells to the second quarter 2005 results is provided below. Concentration trends and exceedances for each well and parameter are summarized in Table 4-2. Historic data for leachate indicator parameters are summarized in Appendix A-1.

Table 4-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF CONCENTRATION TRENDS FOR LEACHATE INDICATOR PARAMETERS – THIRD QUARTER 2005

Well	Location	Alkalinity	Ammonia	Biochemical Oxygen Demand	Bromide	Chemical Oxygen Demand	Chloride	Hardness	Nitrate	Total Phenols	Sulfate	Total Organic Carbon	Total Dissolved Solids	Total Kjeldahl Nitrogen
MW-01S	Upgradient	C	D	C	D	C	D	C	C	C	C	I	C	I
MW-01I	Upgradient	D	D	C	I	D	D	D	I	C	I	C	I	D
MW-01D	Upgradient	I	D	C	C	I	C	D	I	C	D	C	C	C
MW-02I	Upgradient	C	D	C	C	C	I	C	C	C	C	C	I	C
MW-02D	Upgradient	C	C	C	I	C	C	C	C	C	I	C	I	C
MW-03S	Downgradient	C	C	I	D	D	C	D	D	C	D	C	I	C
MW-04S	Downgradient	C	C	I	C	D	C	I	I	C	I	C	I	C
MW-04I	Downgradient	C	D	D	C	D	C	C	C	C	C	C	I	C
MW-04D	Downgradient	C	D	C	I	D	C	C	C	C	C	C	I	C
MW-05S	Downgradient	I	C	I	D	D	C	C	D	C	C	I	I	I
MW-05I	Downgradient	C	D	D	I	D	I	C	D	C	I	C	I	C
MW-05D	Downgradient	C	D	D	C	D	C	C	C	C	I	I	I	D
MW-06S	Sidegradient	I	I	I	I	I	I	D	D	C	D	C	I	I
MW-06I	Sidegradient	C	I	D	I	D	C	C	C	C	D	D	I	I
MW-06D	Sidegradient	C	C	C	I	D	C	D	D	C	C	C	C	D
MW-07I	Upgradient	C	D	C	I	C	C	I	C	C	I	I	I	D
MW-11S	Upgradient	C	D	C	I	I	D	C	C	C	I	C	I	D
MW-11I	Upgradient	D	D	C	I	C	D	D	I	C	C	C	I	C
MW-11D	Upgradient	C	I	C	D	C	C	C	C	C	I	C	I	C
MW-12S	Upgradient	C	I	C	I	D	C	D	C	C	C	C	I	C
MW-12I	Upgradient	I	D	C	C	D	I	I	I	C	C	C	I	I
MW-12D	Upgradient	C	C	C	C	C	C	D	I	C	C	C	I	C

Key: I = Increasing greater than 20%
D = Decreasing greater than 20%
C = Consistent within 20%
Parameter exceeds standard/guidance value during the current sampling event.

Alkalinity

Four (4) of the 22 wells sampled showed increasing alkalinity concentrations (defined as a change of at least 20% compared to the previous results). The wells that showed an increase are MW-01D, MW-05S, MW-06S and MW-12I. Wells MW-01I and MW-11I showed decreasing alkalinity concentrations (defined as a change of at least 20% compared to the previous results). The remaining 16 wells were consistent (defined as within 20% of previous results).

Ammonia

Four (4) wells (MW-06S, MW-06I, MW-11D and MW-12S) showed increasing concentrations of ammonia. Twelve (12) wells (MW-01S, MW-01I, MW-01D, MW-02I, MW-04I, MW-04D, MW-05I, MW-05D, MW-07I, MW-11S, MW-11I and MW-12I) showed decreasing concentrations. The remaining 6 wells were consistent.

Biochemical Oxygen Demand

Four (4) wells (MW-03S, MW-04S, MW-05S and MW-06S) showed increasing concentrations of biochemical oxygen demand. Four (4) wells (MW-04I, MW-05I, MW-05D and MW-06I) showed decreasing concentrations. The remaining 14 wells were consistent.

Bromide

Eleven (11) wells (MW-01I, MW-02D, MW-04D, MW-05I, MW-06S, MW-06I, MW-06D, MW-07I, MW-11S, MW-11I and MW-12S) showed increasing concentrations of bromide. Four (4) wells (MW-01S, MW-03S, MW-05S and MW-11D) showed decreasing bromide concentrations. The remaining 7 wells were consistent.

Chemical Oxygen Demand

Three (3) wells (MW-01D, MW-06S and MW-11S) showed increasing concentrations of chemical oxygen demand. Twelve (12) wells (MW-01I, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-05D, MW-06I, MW-06D, MW-12S and MW-12I) showed decreasing concentrations. The remaining 7 wells were consistent.

Chloride

Four (4) well (MW-02I, MW-05I, MW-06S and MW-12I) showed increasing concentrations of chloride. Four (4) wells (MW-01S, MW-01I, MW-11S and MW-11I) showed decreasing concentrations. The remaining 14 wells were consistent.

Hardness

Three (3) wells (MW-04S, MW-07I and MW-12I) showed increasing concentrations of hardness. Eight (8) wells (MW-01I, MW-01D, MW-03S, MW-06S, MW-06D, MW-11I, MW-12S and MW-12D) showed decreasing concentrations. The remaining 11 wells were consistent.

Nitrate

Six (6) wells (MW-01I, MW-01D, MW-04S, MW-11I, MW-12I and MW-12D) showed increasing concentrations of nitrate. Five (5) wells (MW-03S, MW-05S, MW-05I, MW-06S and MW-06D) showed decreasing concentrations. The remaining 11 wells were consistent.

Total Phenols

All sampled wells were consistent.

Sulfate

Eight (8) wells (MW-01I, MW-02D, MW-04S, MW-05I, MW-05D, MW-07I, MW-11S and MW-11D) showed increasing concentrations of sulfate. Four (4) wells (MW-01D, MW-03S, MW-06S and MW-06I) showed decreasing concentrations. The remaining 10 wells were consistent.

Total Organic Carbon

Four (4) wells (MW-01S, MW-05S, MW-05D and MW-07I) showed increasing total organic carbon concentrations. Well MW-06I showed a decreasing total organic carbon concentration. The remaining 17 wells were consistent.

Total Dissolved Solids

Nineteen (19) wells (MW-01I, MW-02I, MW-02D, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-05D, MW-06S, MW-06I, MW-07I, MW-11S, MW-11I, MW-11D, MW-12S, MW-12I and MW-12D) showed increasing total dissolved solid concentrations. The remaining 3 wells were consistent.

Total Kjeldahl Nitrogen

Five (5) wells (MW-01S, MW-05S, MW-06S, MW-06I and MW-12I) showed increasing concentrations of total Kjeldahl nitrogen. Five (5) wells (MW-01I, MW-05D, MW-06D, MW-07I and MW-11S) showed decreasing concentrations. The remaining 12 wells were consistent.

4.2.3 Inorganic Parameters

The results of the inorganic parameters for the groundwater samples are presented in Appendix A-2. As shown by the third quarter 2005 analytical results, iron, manganese and

sodium were detected at concentrations above the Class GA groundwater standards. The following provides a discussion of these exceedances.

Iron

Eleven (11) wells (MW-01S, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S, MW-06I, MW-06D and MW-12S) exceeded the groundwater standard of 300 micrograms per liter (ug/l) for iron. Iron concentrations for the wells with exceedances ranged from 1,410 ug/l in well MW-12S to 58,000 ug/l in well MW-04D.

Manganese

Fourteen (14) wells (MW-01S, MW-02I, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-05D, MW-06S, MW-06D, MW-07I, MW-11S and MW-11I) exceeded the groundwater standard of 300 ug/l for manganese. Manganese concentrations for the wells with exceedances ranged from 310 ug/l in well MW-02I to 9,170 ug/l in well MW-06D.

Sodium

Ten (10) wells (MW-01S, MW-01D, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-06S and MW-12S) exceeded the groundwater standard of 20,000 ug/l for sodium. Sodium concentrations for the wells with exceedances ranged from 21,200 ug/l in well MW-04I to 635,000 ug/l in MW-01D.

4.2.4 Historic Inorganic Parameters

A comparison of the inorganic parameter results in the 22 wells sampled between the second quarter 2005 and the third quarter 2005 sampling events is provided below. Concentration trends and exceedances for each well are summarized in Table 4-3. Historic data for inorganic parameters are summarized in Appendix A-2.

Table 4-3

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF CONCENTRATION TRENDS FOR INORGANIC PARAMETERS – THIRD QUARTER 2005

Well	Location	Cadmium	Calcium	Iron	Lead	Magnesium	Manganese	Potassium	Sodium
MW-01S	Upgradient	C	C	C	I	I	D	C	C
MW-01I	Upgradient	C	D	C	C	D	I	D	C
MW-01D	Upgradient	C	D	I	C	D	I	C	C
MW-02I	Upgradient	C	C	I	D	C	C	C	C
MW-02D	Upgradient	C	C	I	C	C	C	C	I
MW-03S	Downgradient	I	C	I	I	D	D	C	D
MW-04S	Downgradient	D	C	C	I	C	C	D	C
MW-04I	Downgradient	D	C	C	I	D	C	D	D
MW-04D	Downgradient	D	C	C	I	C	C	D	C
MW-05S	Downgradient	D	I	C	I	C	C	C	C
MW-05I	Downgradient	I	C	C	I	C	I	C	C
MW-05D	Downgradient	I	C	I	I	C	C	D	C
MW-06S	Sidegradient	C	I	I	C	C	I	D	I
MW-06I	Sidegradient	I	C	C	I	D	D	C	C
MW-06D	Sidegradient	I	C	I	I	C	C	D	C
MW-07I	Upgradient	I	I	I	I	C	D	D	C
MW-11S	Upgradient	C	C	D	D	C	I	C	C
MW-11I	Upgradient	C	D	I	D	D	D	D	C
MW-11D	Upgradient	C	C	D	C	C	C	C	C
MW-12S	Upgradient	C	C	I	D	C	I	D	C
MW-12I	Upgradient	C	I	C	D	I	I	C	I
MW-12D	Upgradient	C	C	I	I	C	I	C	C

Key: I = Increasing greater than 20%
D = Decreasing greater than 20%
C = Consistent within 20%`
[ ] Parameter exceeds standard/guidance value during the current sampling event.

Cadmium

Six (6) wells (MW-03S, MW-05I, MW-05D, MW-06I, MW-06D and MW-07I) showed increasing concentrations of cadmium. Four (4) wells (MW-04S, MW-04I, MW-04D and MW-05S) showed decreasing concentrations. The remaining 12 wells were consistent.

Calcium

Four (4) wells (MW-05S, MW-06S, MW-07I and MW-12I) showed increasing concentrations of calcium. Three (3) wells (MW-01I, MW-01D and MW-11I) showed decreasing concentrations. The remaining 15 wells were consistent.

Iron

Eleven (11) wells (MW-01D, MW-02I, MW-02D, MW-03S, MW-05D, MW-06S, MW-06D, MW-07I, MW-11I, MW-12S and MW-12D) showed increasing concentrations of iron. Wells MW-11S and MW-11D showed decreasing concentrations. The remaining 9 wells were consistent.

Lead

Twelve (12) wells (MW-01S, MW-03S, MW-04S, MW-04I, MW-04D, MW-05S, MW-05I, MW-05D, MW-06I, MW-06D, MW-07I and MW-12D) showed increasing concentrations of lead. Five (5) wells (MW-02I, MW-11S, MW-11I, MW-12S and MW-12I) showed decreasing concentrations. The remaining 5 wells were consistent.

Magnesium

Wells MW-01S and MW-12I showed increasing concentrations of magnesium. Six (6) wells (MW-01I, MW-01D, MW-03S, MW-04I, MW-06I and MW-11I) showed decreasing concentrations. The remaining 14 wells were consistent.

Manganese

Eight (8) wells (MW-01I, MW-01D, MW-05I, MW-06S, MW-11S, MW-12S, MW-12I and MW-12D) showed increasing concentrations of manganese. Five (5) wells (MW-01S, MW-03S, MW-06I, MW-07I and MW-11I) showed decreasing concentrations. The remaining 9 wells were consistent.

Potassium

Ten (10) wells (MW-01I, MW-04S, MW-04I, MW-04D, MW-05D, MW-06S, MW-06D, MW-07I, MW-11I and MW-12S) showed decreasing concentrations of potassium. The remaining 12 wells were consistent.

Sodium

Three (3) wells (MW-02D, MW-06S and MW-12I) showed increasing concentrations of sodium. Wells MW-03S and MW-04I showed decreasing concentrations. The remaining 17 wells were consistent.

In order to evaluate changes in groundwater, historic results for alkalinity, iron plus manganese, total dissolved solids and specific conductivity were graphed for the shallow, intermediate and deep zones for upgradient well clusters 1 and 11, and downgradient well clusters 4 and 5. These parameters were selected as possible indicators of landfill impacts to groundwater. These graphs are included in Appendix A-4.

4.3 Organic Vapor and Combustible Gas Monitoring

The results of the organic vapor and combustible gas monitoring are presented in Table 4-1. The results measured by the photoionization detector (PID) show nondetectable readings in all wells except MW-04S, MW-04I, MW-04D, MW-13I and MW-13D. The results

of these wells are 0.7 parts per million (ppm), 0.1 ppm, 0.5 ppm, 1.5 ppm and 0.2 ppm, respectively. All 35 wells showed a combustible gas reading of 0% of the lower explosive limit (LEL). The LEL for methane is 5% by volume or 50,000 ppm.

Section 5

5.0 DATA VALIDATION

Twenty-two (22) groundwater samples, two blind duplicates, two matrix spike/matrix spike duplicate (MS/MSD) sets and two field blanks were collected as part of the August 2005 Post Closure Groundwater Monitoring Program sampling event at the Sonia Road Landfill. The samples were analyzed for Routine Parameters as listed in 6 NYCRR Part 360. Sample analysis was performed by H2M Laboratories, a contractor to the IRRA, in accordance with SW-846 methods as specified in the Part 360 regulations. H2M Laboratories is approved under the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for the analyses performed.

The data package submitted by H2M Laboratories was reviewed for completeness and compliance with the analytical methods. All of the quality assurance/quality control (QA/QC) samples (calibrations, spikes, duplicates and blanks), as well as 20% of the analytical results, were reviewed yielding a "20% validation" in conformance with the Sampling and Analysis Plan. The samples that were reviewed for calculation and transcription errors were MW-02I, MW-03S, MW-06I, MW-07I and MW-11D. The findings of the review process are summarized below.

All samples were analyzed within the method specified holding times. All QA/AC requirements (calibrations, MS/MSDs, duplicates and blanks) were met.

Blind duplicates were collected from MW-11I (Blind Duplicate No. 1) and MW-05D (Blind Duplicate No. 2), and the results were comparable between the samples and the duplicates. MS/MSD sets were collected from MW-05I and MW-12D. All spike recoveries were within QC limits.

No problems were found with the data package. All results are deemed valid and usable for environmental assessment purposes.

Completed data validation forms for the third quarter 2005 sampling event are provided in Appendix D.

Section 6

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

Groundwater level measurements were obtained on August 24, 2005, from the 19 monitoring wells included in the Post Closure Groundwater Monitoring Program and the 13 additional wells not sampled as part of this program. Since monitoring well MW-02S was abandoned prior to collection of the water level measurements, well MW-02S was not used in groundwater elevation contour maps. Monitoring wells MW-06S, MW-06I and MW-06D were undergoing rehabilitation during the third quarter 2005 sampling event. As a result, data collected from these wells were not used in construction of groundwater elevation contour maps. The depth to water measurements, measuring point elevations and calculated groundwater elevations for the 32 monitoring wells are presented in Table 6-1.

Water level data from August 24, 2005 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 within the zones screened by the shallow, intermediate and deep wells is toward the southeast in the vicinity of the landfill. These maps are consistent with the maps previously prepared for the site.

Table 6-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION
MEASUREMENTS - THIRD QUARTER 2005
AUGUST 24, 2005

Monitoring Well No.	Measuring Point Elevation (feet amsl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet amsl)
MW-01D	64.53	14.13	50.40
MW-01I	65.36	14.88	50.48
MW-01S	66.01	15.55	50.46
MW-02D	79.01	29.27	49.74
MW-02I	78.75	29.15	49.60
MW-02S*	ABANDONED		--
MW-03D	70.50	22.10	48.40
MW-03I	70.77	22.13	48.64
MW-03S	70.76	22.13	48.63
MW-04D	69.03	21.55	47.48
MW-04I	69.31	21.89	47.42
MW-04S	71.10	23.65	47.45
MW-05D	70.96	22.90	48.06
MW-05I	70.26	22.43	47.83
MW-05S	70.28	22.46	47.82
MW-06D**	NA	NA	NA
MW-06I**	NA	NA	NA
MW-06S**	NA	NA	NA
MW-07D	75.04	26.05	48.99
MW-07I	73.45	24.50	48.95
MW-07S	72.83	23.79	49.04
MW-10D	56.34	5.95	50.39
MW-10I	56.16	5.76	50.40
MW-10S	56.65	5.92	50.73

Table 6-1 (continued)

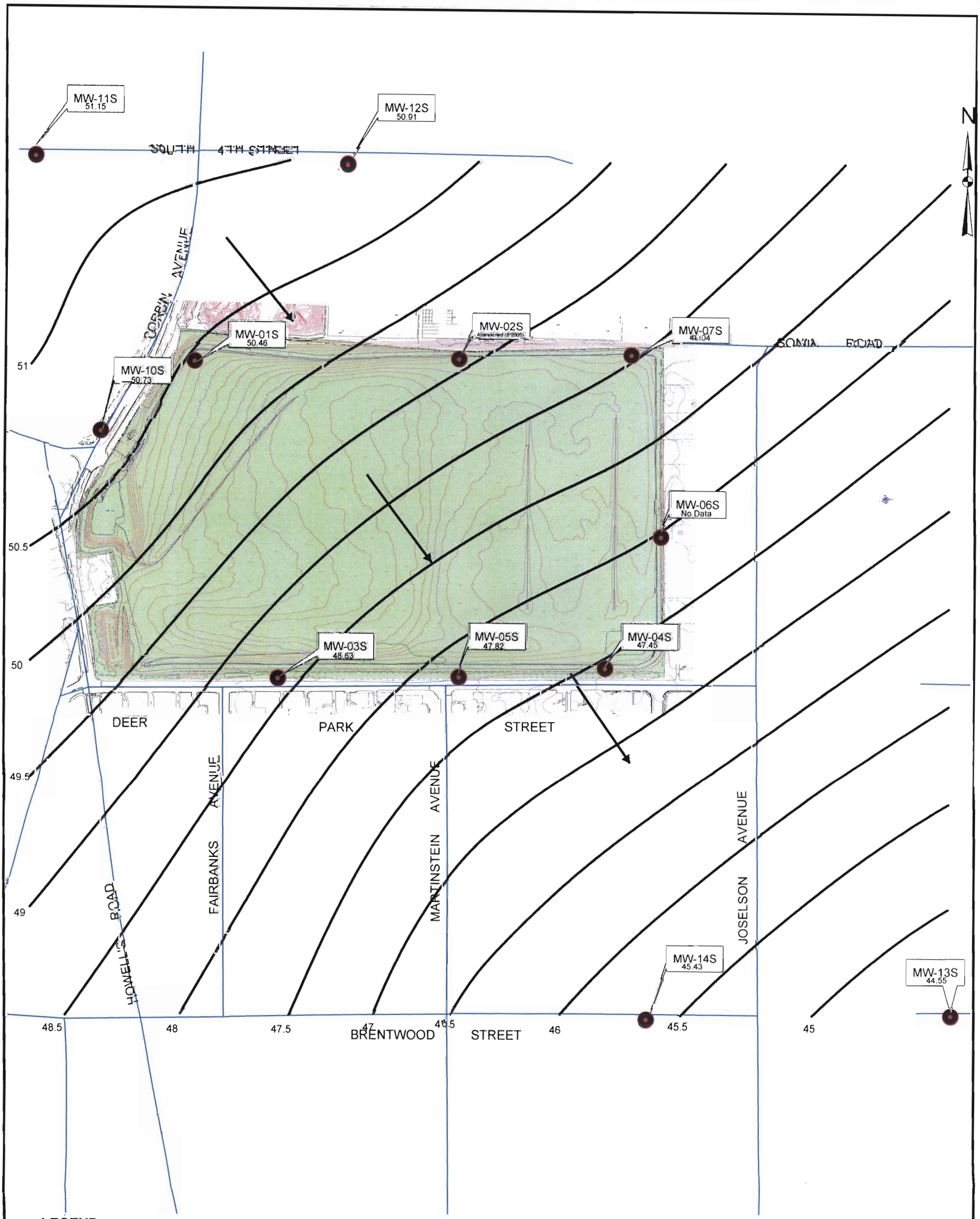
SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION
MEASUREMENTS - THIRD QUARTER 2005
AUGUST 24, 2005

Monitoring Well No.	Measuring Point Elevation (feet amsl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet amsl)
MW-11D	60.19	7.97	52.22
MW-11I	60.38	8.22	52.16
MW-11S	59.87	8.72	51.15
MW-12D	58.61	7.71	50.90
MW-12I	58.92	8.00	50.92
MW-12S	58.79	7.88	50.91
MW-13D	70.37	25.82	44.55
MW-13I	70.30	25.77	44.53
MW-13S	70.51	25.96	44.55
MW-14D	64.58	19.10	45.48
MW-14I	64.57	19.17	45.40
MW-14S	64.55	19.12	45.43

amsl: above mean sea level
NA: Not Available

*Well MW-02S Abandoned (8/2005). No depth to water measurement taken.

** Wells MW-06S, MW-06I and MW-06D undergoing rehabilitation during the third quarter 2005 sampling round. Measuring point elevations not available.



LEGEND

MW-01S
50.46

MONITORING WELL LOCATION, DESIGNATION AND GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTE: CONTOUR INTERVAL EQUALS 0.50 FT.

SOURCE: BASE MAP PROVIDED BY ISLIP RESOURCE RECOVERY AGENCY

1 inch equals 300 feet

0 150 300 450 600 Feet

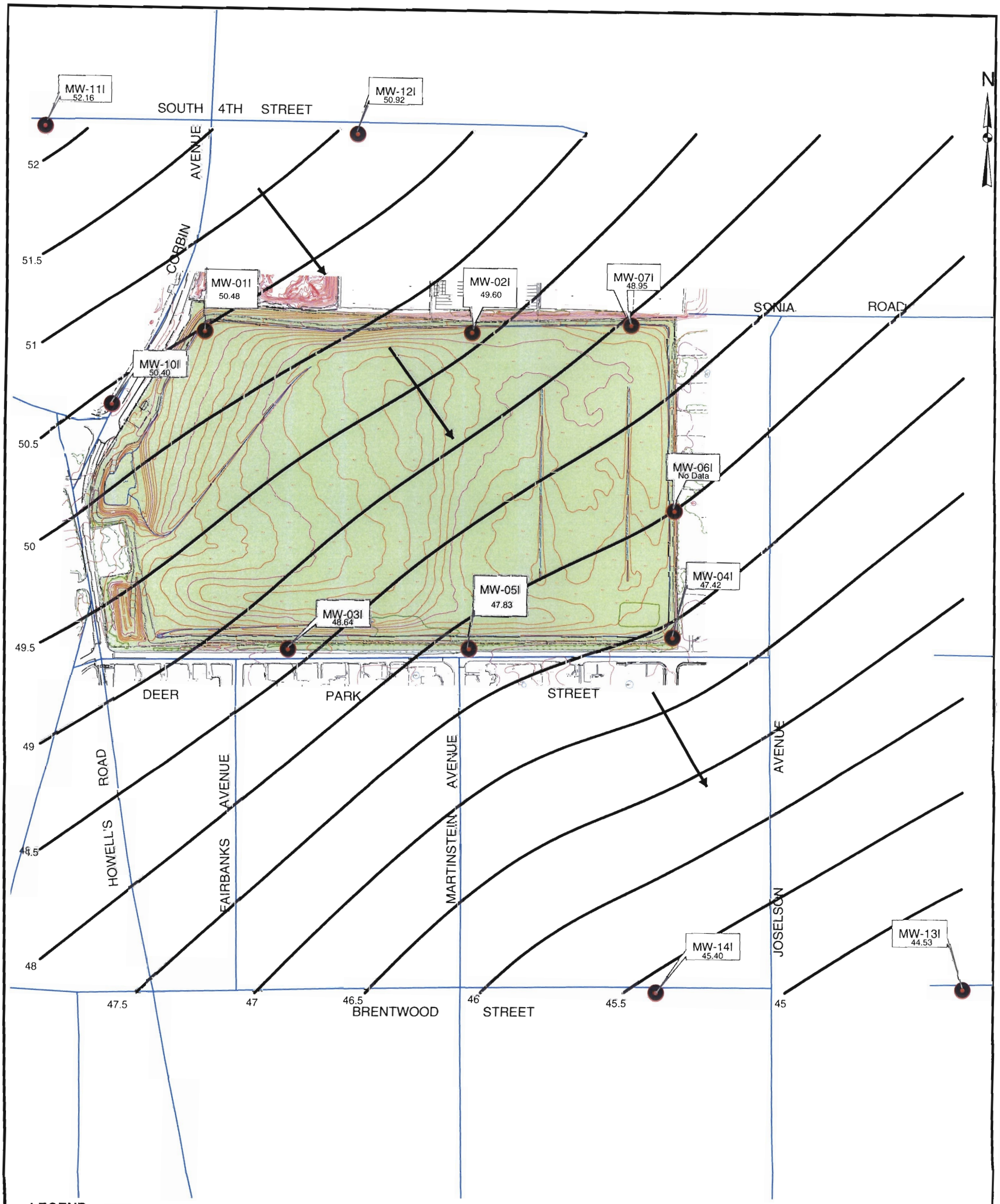
SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

WATER TABLE ELEVATION CONTOUR MAP
AUGUST 24, 2005

FIGURE 6-1

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

GIS_Arcview Projects\2023 Sonia Rd\Updated Sonia\Maps\2005\3rd Q\Scon8-24-05.mxd



SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

INTERMEDIATE DEPTH POTENTIOMETRIC SURFACE ELEVATION CONTOUR MAP AUGUST 24, 2005

FIGURE 6-2

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

GIS_Arcview Projects\2023 Sonia Rd\Updated Sonia\Maps\2005\3rd Q\Icon8-24-05.mxd

LEGEND

MW-01D 50.40 — MONITORING WELL LOCATION, DESIGNATION AND GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

→ APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTE: CONTOUR INTERVAL EQUALS 0.50 FT.

SOURCE: BASE MAP PROVIDED BY ISLIP RESOURCE RECOVERY AGENCY

1 inch equals 300 feet

0 150 300 450 600 Feet

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

DEEP POTENTIOMETRIC SURFACE ELEVATION CONTOUR MAP AUGUST 24, 2005

FIGURE 6-3

GIS_Arcview Projects\2023 Sonia Rd\Updated Sonia\Maps\2005\3rd Q\Dcon8-24-05.mxd

Section 7

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Groundwater Flow

Based on groundwater level measurements collected during the third quarter 2005 and the shallow (water table), intermediate and deep potentiometric surface elevation contour maps constructed for the site, groundwater flow at and in the vicinity of the Sonia Road Landfill is toward the southeast. This groundwater flow direction is consistent with previous maps prepared for the site.

Groundwater Quality

Based on a comparison of the third quarter 2005 results to the second quarter 2005 results and review of the historical trend graphs in Appendix A-4, groundwater quality in the vicinity of the Sonia Road Landfill has not substantially changed.

Since the only chloride concentration that exceeded the groundwater standard was in upgradient well MW-01D, the source of the detected chloride is not the Sonia Road Landfill. Similarly, the detected concentrations of ammonia, iron, manganese and sodium are likely not indicative of landfill-influenced groundwater, since concentrations of these parameters above groundwater standards were detected in both upgradient and downgradient wells.

Concentrations of bromide up to 5.6 mg/l (above the guidance value of 2 mg/l) were detected in one upgradient and three downgradient wells during this sampling event. Historic results show sporadic bromide detections above the guidance value in upgradient and downgradient wells (see Appendix A-1). As a result, it appears unlikely that the detected bromide is related to the landfill. The bromide concentrations for future sampling events will be monitored to reevaluate this conclusion.

7.2 Recommendations

Based on the third quarter 2005 results and comparison of these results to historic data for the Sonia Road Landfill, it is recommended to continue to sample the groundwater monitoring wells in accordance with the SAP. As of the third quarter 2005 well MW-02S has been abandoned and will no longer be included in the Post Closure Groundwater Monitoring Program.

Appendix A

APPENDIX A-1

HISTORIC AND CURRENT GROUNDWATER SAMPLE RESULTS - LEACHATE INDICATORS

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01S 10/24/97 (mg/l)	MW-01S 11/30/2000 (mg/l)	MW-01S 01/29/2001 (mg/l)	MW-01S 8/21/02 (mg/l)	MW-01S 11/20/02 (mg/l)	MW-01S 3/5/03 (mg/l)	MW-01S 6/3/03 (mg/l)	MW-01S 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	80	50	50	NS	50	NS	NS	20
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	264	183	180	126	211	177	151	161
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1	[redacted]	[redacted]	1.46	[redacted]	1.04	0.93	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	6	2 U	2 U	2 U	4	8
Bromide	2 GV	24959-67-9	(mg/l)	0.7	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	46	29.6	10.7	22.5	29.8	83.2	10 U	21.6
Chloride	250 ST	16887-00-6	(mg/l)	69.7	28.4	42	36.6	40.9	60.7	131	65.8
Hardness (as CaCO3)	-	-	(mg/l)	310	140	200	240	520	200	270	320
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.080 J	0.1 U	0.1 U	0.1 U	0.12	0.55
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	36.3	50	42.5	78	89	117	108	188
Total Organic Carbon	-	-	(mg/l)	11.7	6	9.1	4.8	5.1	6.9	4.3	5.6
Total Dissolved Solids	-	-	(mg/l)	432	259	310	250	420	74	506	534
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.3	1.9	3.3	1.26	2.11	1.21	0.84	0.85

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01S 11/10/03 (mg/l)	MW-01S 2/26/04 (mg/l)	MW-01S 5/20/04 (mg/l)	MW-01S 8/19/04 (mg/l)	MW-01S 11/8/04 (mg/l)	MW-01S 2/28/05 (mg/l)	MW-01S 5/25/05 (mg/l)	MW-01S 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	20	NS	NS	20	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	165	192	184	127	150	171	174	160
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.57	0.44	1.15	0.1 U	0.24	0.27	0.37	0.22
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	10	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	[redacted]	1 U	0.5 U	0.8	1.8	1.4	1.2	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	38.6	33	10 U	10 U	15.6	36.8	26.8	24.3
Chloride	250 ST	16887-00-6	(mg/l)	158	56.6	72.1	73.2	83.9	82.9	118	69.2
Hardness (as CaCO3)	-	-	(mg/l)	460	54	750	190	248	300	290	250
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.26	0.1 U	0.61	0.11	0.1 U	0.1 U	0.12
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	[redacted]	140	130	104	140	98.5	87	88.5
Total Organic Carbon	-	-	(mg/l)	8.3	7.4	6.6	5.2	6.1	6.4	7.2	9.2
Total Dissolved Solids	-	-	(mg/l)	690	498	477	455	497	468	491	545
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.72	0.77	1.07	1.09	0.68	0.47	0.56	2.83

NOTES:

NS: Not sampled

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

[redacted]: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01I 10/24/97 (mg/l)	MW-01I 11/30/2000 (mg/l)	MW-01I 01/30/2001 (mg/l)	MW-01I 8/21/02 (mg/l)	MW-01I 11/20/02 (mg/l)	MW-01I 3/5/03 (mg/l)	MW-01I 6/3/03 (mg/l)	MW-01I 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	5 U	5 U	NS	5	NS	NS	10
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	20.7	65.6	50	14.8	23.4	65.8	58.7	63.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.9	0.24	0.63	0.15	0.1 U	0.45	0.25	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2	2 U	2 U	2 U	2 U	8	7
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	1.1	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	3 U	10 U	10 U	12.7	10 U	30	10 U	16.8
Chloride	250 ST	16887-00-6	(mg/l)	195	34.6	72	16.4	68.7	59.5	13.1	122
Hardness (as CaCO3)	-	-	(mg/l)	42	5	30	40	32	80	14	48
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.72	0.53	1.3	2.74	0.6	0.1 U	0.1 U	0.91
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	35.2	10.2	5 U	5 U	12.1	23.4	9.2	5 U
Total Organic Carbon	-	-	(mg/l)	2.8	1.7	0.99 J	1.4	1 U	1.4	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	356	179	310	86	310	201	87	307
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.35	1.16	0.21	0.45	0.7	0.23	0.84

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01I 11/10/03 (mg/l)	MW-01I 2/26/04 (mg/l)	MW-01I 5/20/04 (mg/l)	MW-01I 8/19/04 (mg/l)	MW-01I 11/8/04 (mg/l)	MW-01I 2/28/05 (mg/l)	MW-01I 5/25/05 (mg/l)	MW-01I 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	50	34.8	42.6	37.6	39.2	29.4	28.4	17.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.93	1.53	0.55	0.1 U	0.1 U	0.1 U	1.24	0.92
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.3	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	1.1
Chemical Oxygen Demand	-	-	(mg/l)	11.9	13.1	10 U	10 U	10 U	16.8	14.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	96.7	98.8	21.9	31.2	26.9	29.6	20.3	15.5
Hardness (as CaCO3)	-	-	(mg/l)	106	140	22	15	26	92	40	31
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.79	0.26	1.55	1.63	1.88	1.41	0.1 U	0.74
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	9.6	7.7	9.8	5 U	5 U	6.2	8.9	11.2
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2
Total Dissolved Solids	-	-	(mg/l)	214	2910	157	119	125	121	140	169
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.41	1.12	0.84	0.59	0.56	0.30	1.59	1.15

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 10/24/97 (mg/l)	MW-01D 11/30/2000 (mg/l)	MW-01D 01/30/2001 (mg/l)	MW-01D 8/21/02 (mg/l)	MW-01D 11/20/02 (mg/l)	MW-01D 3/5/03 (mg/l)	MW-01D 6/3/03 (mg/l)	MW-01D 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	30	NS	NS	20
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	11.4	37	43	41.6	51.3	44	66.2	66.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.36	0.46	0.49	0.21	0.33	[redacted]	0.49	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	20	2 U	2 U	2 U	2 U	6	4	6
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	0.9	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	3 U	21.5	10.7	46.9	17.6	48.6	14.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	198	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Hardness (as CaCO3)	-	-	(mg/l)	146	74	80	140	290	100	58	23
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.2	0.42	1	1.08	1.66	0.84	0.61	2.22
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.8	19.8	33.2	60.2	27.5	26.7	46.8	33
Total Organic Carbon	-	-	(mg/l)	2.3	2.3	2.4	1.5	5.7	6	1.4	3.8
Total Dissolved Solids	-	-	(mg/l)	452	1060	1500	1340	1160	950	1100	548
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.59	0.660	0.42	1.37	3.24	0.53	0.33

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 11/10/03 (mg/l)	MW-01D 2/26/04 (mg/l)	MW-01D 5/20/04 (mg/l)	MW-01D 8/19/04 (mg/l)	MW-01D 11/8/04 (mg/l)	MW-01D 2/28/05 (mg/l)	MW-01D 5/25/05 (mg/l)	MW-01D 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	63.4	60.5	53.6	38	36.8	30.8	32.6	42.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.10 U	0.60	0.82	0.1 U	1.14	1.52	1.6	1.2
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	19	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	[redacted]	0.5 U	0.5 U	0.5 U	0.8	0.5 U	0.5	0.6
Chemical Oxygen Demand	-	-	(mg/l)	10 U	42.9	70.3	122	31.1	88.5	23.5	43.5
Chloride	250 ST	16887-00-6	(mg/l)	111	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Hardness (as CaCO3)	-	-	(mg/l)	15	160	260	184	220	196	176	136
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.69	0.41	0.56	1.82	0.51	0.6	0.92	1.54
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	27.5	17.8	30.2	46.5	46.2	44.2	46.8	44.8
Total Organic Carbon	-	-	(mg/l)	1.1	1 U	1.6	1 U	1.4	1.8	1.8	2
Total Dissolved Solids	-	-	(mg/l)	290	1040	1020	1770	2060	2050	1780	1960
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.34	0.52	0.61	1.76	1.35	1.80	1.67	1.62

NOTES:

NS: Not sampled

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

[redacted]: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02S 10/27/97 (mg/l)	MW-02S 11/30/2000 (mg/l)	MW-02S 01/31/2001 (mg/l)	MW-02S 8/21/02 (mg/l)	MW-02S 11/20/02 (mg/l)	MW-02S 3/5/03 (mg/l)	MW-02S 6/3/03 (mg/l)	MW-02S 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	86.6	86.2	85	NS	NS	NS	NS	NS
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.08	1.5	1.1	NS	NS	NS	NS	NS
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2	NS	NS	NS	NS	NS
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	NS	NS	NS	NS	NS
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	NS	NS	NS	NS	NS
Chloride	250 ST	16887-00-6	(mg/l)	21.2	9.5	10	NS	NS	NS	NS	NS
Hardness (as CaCO3)	-	-	(mg/l)	92	88	120	NS	NS	NS	NS	NS
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.82	2.4	1.8	NS	NS	NS	NS	NS
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	NS	NS	NS	NS	NS
Sulfate	250 ST	14808-79-8	(mg/l)	20.9	26.6	19.2	NS	NS	NS	NS	NS
Total Organic Carbon	-	-	(mg/l)	2.2	1.6	2.7	NS	NS	NS	NS	NS
Total Dissolved Solids	-	-	(mg/l)	171	138	170	NS	NS	NS	NS	NS
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2	1.4	1.1	NS	NS	NS	NS	NS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02S 11/11/03 (mg/l)	MW-02S 2/26/04 (mg/l)	MW-02S 5/20/04 (mg/l)	MW-02S 8/20/04 (mg/l)	MW-02S 11/10/04 (mg/l)	MW-02S 2/28/05 (mg/l)	MW-02S 5/26/05 (mg/l)	MW-02S 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Biochemical Oxygen Demand	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Bromide	2 GV	24959-67-9	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Chemical Oxygen Demand	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Chloride	250 ST	16887-00-6	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Hardness (as CaCO3)	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Phenols, total	0.001 ST	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Sulfate	250 ST	14808-79-8	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Total Dissolved Solids	-	-	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	NS	NS	NS	NS	NS	NS	NS	NS

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02I 10/27/97 (mg/l)	MW-02I 12/01/2000 (mg/l)	MW-02I 01/30/2001 (mg/l)	MW-02I 8/21/02 (mg/l)	MW-02I 11/20/02 (mg/l)	MW-02I 3/7/03 (mg/l)	MW-02I 6/3/03 (mg/l)	MW-02I 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	10	NS	NS	10
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	12.3	9	9.3	4.5	9.6	16.2	17.2	7.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.65	[redacted]	0.64	0.10 U	0.1 U	0.29	0.19	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	3	7
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
Chemical Oxygen Demand	-	-	(mg/l)	15 U	56.7	10 U	12.7	10 U	14	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	10	12.8	15	10.8	3.8	14	6.2	8.2
Hardness (as CaCO3)	-	-	(mg/l)	26	34	80	32	90	44	46	42
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.9	2.2	2.4	2.39	2.56	1.68	1.92	2.72
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	32.9	5.4	7.80	10.3	13.8	25.1	27.7	16.6
Total Organic Carbon	-	-	(mg/l)	1.5	1.5	1.1	1.3	1.3	3.2	2.3	1 U
Total Dissolved Solids	-	-	(mg/l)	103	88	99	58	97	83	82	112
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.8	9	1.20	0.1 U	0.28	1.45	0.66	0.26

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02I 11/11/03 (mg/l)	MW-02I 2/26/04 (mg/l)	MW-02I 5/20/04 (mg/l)	MW-02I 8/20/04 (mg/l)	MW-02I 11/8/04 (mg/l)	MW-02I 2/28/05 (mg/l)	MW-02I 5/26/05 (mg/l)	MW-02I 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	20	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	7.5	9.4	32.1	10.2	17.8	8.8	8.3	7.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.23	0.1 U	0.1 U	0.71	0.66	0.42
Biochemical Oxygen Demand	-	-	(mg/l)	3	3	2	2 U	8	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	1 U	0.5 U	1	0.8	0.5 U	0.9	0.9
Chemical Oxygen Demand	-	-	(mg/l)	10 U	28	23	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	11.1	14.7	8.3	11.4	11.3	11.4	12.4	15
Hardness (as CaCO3)	-	-	(mg/l)	40	44	110	25	39	34	36	37
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.82	2.28	2.19	3.04	3.03	2.28	2.19	1.96
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.9	15	27.2	19.4	16.5	16	15.3	17.1
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	5.7	1 U	1.3	1 U	1 U	1.2
Total Dissolved Solids	-	-	(mg/l)	74	69	127	111	87	80	90	129
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.46	0.36	1.02	0.86	0.92	0.84	0.64	0.64

NOTES:

NS: Not sampled

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

[redacted]: Concentration exceeds Standard/Guidance Value

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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02D 12/1/97 (mg/l)	MW-02D 12/01/2000 (mg/l)	MW-02D 01/30/2001 (mg/l)	MW-02D 8/21/02 (mg/l)	MW-02D 11/20/02 (mg/l)	MW-02D 3/5/03 (mg/l)	MW-02D 6/3/03 (mg/l)	MW-02D 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	5	NS	NS	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.2	13.8	14	10.5	11.9	13.6	13.5	13.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.24	0.2	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	4	11
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	0.8
Chemical Oxygen Demand	-	-	(mg/l)	15 U	73	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	9.4	5.2	5.5	4.3	6.4	7.3	8.6	6.3
Hardness (as CaCO3)	-	-	(mg/l)	30	30	68	34	40	24	36	100
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.4	1.2	1	0.69	1.48	1.49	1.45	1.47
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	12.6	5 U	8.2	18.6	19.2	18.9	16.1	18.3
Total Organic Carbon	-	-	(mg/l)	0.7	1 U	0.88 J	1.2	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	76	96	80	60	110	80	73	91
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.23	0.19	0.340	0.1 U	0.1 U	0.18	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-02D 11/11/03 (mg/l)	MW-02D 2/27/04 (mg/l)	MW-02D 5/20/04 (mg/l)	MW-02D 8/20/04 (mg/l)	MW-02D 11/8/04 (mg/l)	MW-02D 2/28/05 (mg/l)	MW-02D 5/26/05 (mg/l)	MW-02D 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	12.4	13	13.9	14.2	14.2	11.6	11	11.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	8	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	1 U	0.5 U	0.5 U	0.5 U	0.8	0.5	0.8
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	13.1	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	5.4	8.5	6.4	7.3	7	9.8	9.1	9.4
Hardness (as CaCO3)	-	-	(mg/l)	42	48	110	18	39	38	40	37
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.62	1.51	1.69	1.36	1.38	1.35	1.35	1.31
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.8	17.9	25.6	20.3	20.1	22.2	8.8	18.6
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	69	139	88	83	95	81	88	137
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.27	0.11	0.21	0.14	0.1 U	0.1 U

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-03S 10/30/97 (mg/l)	MW-03S 12/06/2000 (mg/l)	MW-03S 02/02/2001 (mg/l)	MW-03S 8/22/02 (mg/l)	MW-03S 11/22/02 (mg/l)	MW-03S 3/7/03 (mg/l)	MW-03S 6/5/03 (mg/l)	MW-03S 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	70	70	100	NS	50	NS	NS	60
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	187	183	160	169	146	5 U	175	297
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	2		1.66				1.66	
Biochemical Oxygen Demand	-	-	(mg/l)	11	11	18	5	13	10	8	8
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	1.5	0.5 U	0.5 U	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	37	10 U	32.6	34.7	44.5	35.3	33.8	77.6
Chloride	250 ST	16887-00-6	(mg/l)	75.3	28.8	26.8	37.6	40.2	30.5	21.2	42.9
Hardness (as CaCO3)	-	-	(mg/l)	190	180	188	220	340	500	400	650
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.254	0.1 U	0.67	0.88	0.1 U	0.27
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.1	19	96			96.5	30.4
Total Organic Carbon	-	-	(mg/l)	7.7	4.3	4.67	4.9	3.9	5.8	5.7	8.1
Total Dissolved Solids	-	-	(mg/l)	246	237	248	290	695	876	452	528
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.1	2	1.7	3	2.48	8.69	1.46	2.92

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-03S 11/13/03 (mg/l)	MW-03S 3/2/04 (mg/l)	MW-03S 5/24/04 (mg/l)	MW-03S 8/23/04 (mg/l)	MW-03S 11/10/04 (mg/l)	MW-03S 3/2/05 (mg/l)	MW-03S 5/31/05 (mg/l)	MW-03S 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	120	NS	NS	200	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	263	213	209	225	225	228	278	258
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		0.5 U	1.57		1.42	1.73		
Biochemical Oxygen Demand	-	-	(mg/l)	12	9	10	2 U	14	10	10	17
Bromide	2 GV	24959-67-9	(mg/l)			0.5 U	1.5				
Chemical Oxygen Demand	-	-	(mg/l)	38.6	50.4	25.5	10 U	10 U	29.3	66.8	24.3
Chloride	250 ST	16887-00-6	(mg/l)	52.3	32.7	41.7	51.1	69.7	52.4	47.9	45.2
Hardness (as CaCO3)	-	-	(mg/l)	440	300	700	172	320	250	370	270
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.5 U	0.56	0.1 U	0.14	0.42	0.18	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5.7	11.2	24.3	5 U	5 U	6	16.6	5 U
Total Organic Carbon	-	-	(mg/l)	7	6	6.8	6.1	6.2	7	9.5	8.4
Total Dissolved Solids	-	-	(mg/l)	345	320	320	513	334	335	393	486
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.23	2.03	2.27	2.61	2.08	2.06	2.89	2.99

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04S 10/29/97 (mg/l)	MW-04S 12/06/2000 (mg/l)	MW-04S 02/01/2001 (mg/l)	MW-04S 8/23/02 (mg/l)	MW-04S 11/22/02 (mg/l)	MW-04S 3/6/03 (mg/l)	MW-04S 6/3/03 (mg/l)	MW-04S 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	150	200	80	NS	70	NS	NS	60
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	618	364	400	405	543	489	452	374
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								
Biochemical Oxygen Demand	-	-	(mg/l)	5	37	34	26	23	44	34	31
Bromide	2 GV	24959-67-9	(mg/l)	1	1.2	1		0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	67	10 U	13.4	34.7	37.1	61.9	33.8	996
Chloride	250 ST	16887-00-6	(mg/l)	63.3	42.2	49	49.9	51.3	49.3	54.9	44.7
Hardness (as CaCO3)	-	-	(mg/l)	540	480	340	380	440	500	460	700
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U	0.26	0.1 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	8.9	5.30	5 U	14	6.4	11.2	15.9
Total Organic Carbon	-	-	(mg/l)	17.3	8.1	11	9	8.8	9.6	8.4	8.9
Total Dissolved Solids	-	-	(mg/l)	624	426	460	430	465	595	547	546
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	23.3	8.9	10.7	7.24	8.65	12.6	10.4	9.9

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04S 11/12/03 (mg/l)	MW-04S 3/2/04 (mg/l)	MW-04S 5/24/04 (mg/l)	MW-04S 8/23/04 (mg/l)	MW-04S 11/9/04 (mg/l)	MW-04S 3/1/05 (mg/l)	MW-04S 5/27/05 (mg/l)	MW-04S 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	140	NS	NS	140	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	402	343	379	378	438	375	336	348
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		1.16						
Biochemical Oxygen Demand	-	-	(mg/l)	41	31	67	22	12	17	21	33
Bromide	2 GV	24959-67-9	(mg/l)	1.1		0.5 U	0.6		1.7	1.4	1.2
Chemical Oxygen Demand	-	-	(mg/l)	48.4	60.3	35.5	10 U	37.9	24.3	46.8	31.8
Chloride	250 ST	16887-00-6	(mg/l)	37.9	40.3	49.3	52.5	51.1	50	59.2	58.3
Hardness (as CaCO3)	-	-	(mg/l)	660	560	900	296	410	440	300	380
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.21	0.5	0.48	0.1 U	0.5	0.24	0.1 U	0.15
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	125	28.2	49.4	16.5	30.9	12.4	5 U	11.6
Total Organic Carbon	-	-	(mg/l)	9.5	8.4	10.1	8.4	8.6	8.6	9.5	10.1
Total Dissolved Solids	-	-	(mg/l)	610	471	440	608	614	490	438	570
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.64	5.24	6.73	6.59	5.46	6.05	6.3	5.55

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04I 10/29/97 (mg/l)	MW-04I 12/06/2000 (mg/l)	MW-04I 02/01/2001 (mg/l)	MW-04I 8/23/02 (mg/l)	MW-04I 11/22/02 (mg/l)	MW-04I 3/6/03 (mg/l)	MW-04I 6/3/03 (mg/l)	MW-04I 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	30	200	60	NS	80	NS	NS	150
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	309	339	240	202	385	282	354	387
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.8							
Biochemical Oxygen Demand	-	-	(mg/l)	6	24	20	8	18	39	50	15
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.9	0.70		0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	37	10 U	10 U	20	46.9	51.3	31.4	21.6
Chloride	250 ST	16887-00-6	(mg/l)	28.7	50.9	48	22.1	49.5	44.4	49.8	47
Hardness (as CaCO3)	-	-	(mg/l)	210	480	200	80	460	290	440	320
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.12	0.1 U	0.1 U	0.59	0.15	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.5	5 U	5 U	5 U	10.7	5.6	6.3	5 U
Total Organic Carbon	-	-	(mg/l)	5.2	7.5	7.5	5.5	6.4	6.4	7.2	7.4
Total Dissolved Solids	-	-	(mg/l)	424	410	310	195	402	400	422	504
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.3	11.4	10.1	6.38	7.29	7.93	6.21	6.88

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04I 11/12/03 (mg/l)	MW-04I 2/26/04 (mg/l)	MW-04I 5/24/04 (mg/l)	MW-04I 8/23/04 (mg/l)	MW-04I 11/8/04 (mg/l)	MW-04I 3/1/05 (mg/l)	MW-04I 5/27/05 (mg/l)	MW-04I 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	120	NS	NS	140	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	326	311	278	279	373	308	300	266
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								
Biochemical Oxygen Demand	-	-	(mg/l)	62	28	10	8	11	15	19	15
Bromide	2 GV	24959-67-9	(mg/l)	0.5		0.5 U	0.6		0.5 U	0.8	0.7
Chemical Oxygen Demand	-	-	(mg/l)	48.4	30.5	18.1	10 U	37.9	31.8	64.3	26.8
Chloride	250 ST	16887-00-6	(mg/l)	46	40.2	40.8	40.5	36.3	35	36.8	33.5
Hardness (as CaCO3)	-	-	(mg/l)	390	270	850	208	268	330	250	260
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.48	0.1 U	0.11	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	5 U	5 U	13.5	5.3	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	6.5	6.6	6.7	7	8.9	8.2	8.79	8
Total Dissolved Solids	-	-	(mg/l)	368	420	370	480	465	403	333	437
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.09	4.45	4.38	4.34	5.37	8.62	7.94	6.64

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04D 10/28/97 (mg/l)	MW-04D 12/06/2000 (mg/l)	MW-04D 02/01/2001 (mg/l)	MW-04D 8/23/02 (mg/l)	MW-04D 11/21/02 (mg/l)	MW-04D 3/7/03 (mg/l)	MW-04D 6/3/03 (mg/l)	MW-04D 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	150	150	50	NS	60	NS	NS	80
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	210	232	260	117	103	88.2	110	1430
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								
Biochemical Oxygen Demand	-	-	(mg/l)	8	4	8	13	2 U	2	12	7
Bromide	2 GV	24959-67-9	(mg/l)	1.1	0.8	1.1		0.5 U	0.5 U	0.5 U	0.5
Chemical Oxygen Demand	-	-	(mg/l)	46	10 U	10.6	12.7	15.1	10 U	28.9	48.4
Chloride	250 ST	16887-00-6	(mg/l)	50.1	42.8	42	20	20.4	12.5	18.6	18.9
Hardness (as CaCO3)	-	-	(mg/l)	280	280	200	110	200	140	120	500
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	1.52	0.61	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	18.3	9.1	6.10	10	42.6	17.9	22.1	21.5
Total Organic Carbon	-	-	(mg/l)	4.7	6.5	6.2	3	1.7	2.9	2	1.8
Total Dissolved Solids	-	-	(mg/l)	318	304	310	170	241	40	162	214
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.6	6.6	7	4.47	3.06	4.85	4.14	4.69

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-04D 11/11/03 (mg/l)	MW-04D 2/26/04 (mg/l)	MW-04D 5/24/04 (mg/l)	MW-04D 8/23/04 (mg/l)	MW-04D 11/9/04 (mg/l)	MW-04D 3/1/05 (mg/l)	MW-04D 5/27/05 (mg/l)	MW-04D 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	200	NS	NS	250	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	148	163	174	267	295	178	184	198
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		1.19						
Biochemical Oxygen Demand	-	-	(mg/l)	4	9	12	2 U	5	4	5	6
Bromide	2 GV	24959-67-9	(mg/l)	2		0.5	0.5		0.6	0.5 U	0.8
Chemical Oxygen Demand	-	-	(mg/l)	19.2	37.9	13.1	10 U	30.5	16.8	34.3	14.3
Chloride	250 ST	16887-00-6	(mg/l)	17.8	25.1	27.6	34.8	41.7	34.7	37.5	37.3
Hardness (as CaCO3)	-	-	(mg/l)	320	132	800	172	220	260	270	230
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.8	8	13	5.1	5 U	13.8	17.7	14.2
Total Organic Carbon	-	-	(mg/l)	1.7	2.3	3	3.5	4.1	4.1	4.72	5.4
Total Dissolved Solids	-	-	(mg/l)	208	50	248	415	376	283	271	362
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.27	4.54	4.4	5.04	3.89	3.66	3.46	2.88

NOTES:
NS: Not sampled
U: Analyzed for but not detected, value shown is instrument detection limit
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05S 10/29/97 (mg/l)	MW-05S 12/08/2000 (mg/l)	MW-05S 02/02/2001 (mg/l)	MW-05S 8/23/02 (mg/l)	MW-05S 11/22/02 (mg/l)	MW-05S 3/7/03 (mg/l)	MW-05S 6/5/03 (mg/l)	MW-05S 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	60	400	100	NS	60	NS	NS	100
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	412	390	362	236	258	218	252	106
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								
Biochemical Oxygen Demand	-	-	(mg/l)	8	25	33	32	23	21	28	10
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6	0.9	1	1.4	0.5 U	0.5 U	0.5
Chemical Oxygen Demand	-	-	(mg/l)	46	10 U	21.8	22.5	15.1	38	31.4	63
Chloride	250 ST	16887-00-6	(mg/l)	82.1	36.4	36.6	39.4	46.1	36.3	29.5	37.5
Hardness (as CaCO3)	-	-	(mg/l)	400	290	276	240	210	250	600	650
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.29	0.1 U	0.28	0.83	0.17	1
Phenols, total	0.001 ST	-	(mg/l)	0.0049 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	5 U	8.9	25.1	27.5	36	78.5
Total Organic Carbon	-	-	(mg/l)	9.6	12	9.17	6.5	5.4	5.2	6.7	10.3
Total Dissolved Solids	-	-	(mg/l)	482	385	383	288	342	275	360	640
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.6	7.8	8.4	6.3	2.48	4.41	5.7	14.3

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05S 11/12/03 (mg/l)	MW-05S 3/2/04 (mg/l)	MW-05S 5/25/04 (mg/l)	MW-05S 8/23/04 (mg/l)	MW-05S 11/10/04 (mg/l)	MW-05S 3/2/05 (mg/l)	MW-05S 5/31/05 (mg/l)	MW-05S 8/29/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	140	NS	NS	120	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	386	160	160	317	270	177	302	377
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		0.97	1.44					
Biochemical Oxygen Demand	-	-	(mg/l)	21	4	15	2 U	9	15	12	28
Bromide	2 GV	24959-67-9	(mg/l)			0.8	1.3		0.5 U		1.8
Chemical Oxygen Demand	-	-	(mg/l)	50.8	65.3	28	15.6	10 U	11.8	69.3	29.3
Chloride	250 ST	16887-00-6	(mg/l)	41.4	17.9	35.8	40.7	50.7	49.8	47	47
Hardness (as CaCO3)	-	-	(mg/l)	660	220	1100	280	340	310	300	320
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.44	7.94	1.45	3.24	1.27	2.49	0.6	0.34
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.4	28.5	17.2	8.9	7.8	7	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	10.7	4.6	8.2	8	8	5.5	9.5	11.9
Total Dissolved Solids	-	-	(mg/l)	457	396	361	598	415	318	429	598
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	8.66	4.66	2.44	5.61	3.85	3.28	5.29	7.1

NOTES:
NS: Not sampled
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05I 10/29/97 (mg/l)	MW-05I 12/08/2000 (mg/l)	MW-05I 02/02/2001 (mg/l)	MW-05I 8/23/02 (mg/l)	MW-05I 11/22/02 (mg/l)	MW-05I 3/7/03 (mg/l)	MW-05I 6/5/03 (mg/l)	MW-05I 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	40	300	100	NS	60	NS	NS	50
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	30.4	113	157	93	92.5	133	135	105
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.49			1.28	0.1			0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	4 U	9	10	7	2 U	3	13
Bromide	2 GV	24959-67-9	(mg/l)	0.6	0.5 U	0.5 U	1.3	1	0.5 U	0.5 U	0.9
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	10 U	27.3	10 U	43.5
Chloride	250 ST	16887-00-6	(mg/l)	24.3	29.6	39.9	25.3	34.3	39.1	31.6	27.5
Hardness (as CaCO3)	-	-	(mg/l)	50	104	140	100	140	120	160	170
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	1.4	1.94	0.66	0.32	0.1 U	3.16
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	8.9	24.2	17	21.5	20.4	22.3	25.1	15.2
Total Organic Carbon	-	-	(mg/l)	1.8	4.7	5.12	3.4	2.5	3.2	2.5	3.7
Total Dissolved Solids	-	-	(mg/l)	100	216	250	432	207	280	218	257
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.7	4.4	5	2.44	1.43	4.77	3.46	0.7

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05I 11/12/03 (mg/l)	MW-05I 3/2/04 (mg/l)	MW-05I 5/25/04 (mg/l)	MW-05I 8/23/04 (mg/l)	MW-05I 11/10/04 (mg/l)	MW-05I 3/2/05 (mg/l)	MW-05I 5/31/05 (mg/l)	MW-05I 8/29/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	40	NS	NS	140	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	177	140	184	136	188	178	156	150
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		0.86		0.1 U				
Biochemical Oxygen Demand	-	-	(mg/l)	4	7	6	4	3	6	6	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U		0.5 U	0.5 U		1.7	1.2	1.7
Chemical Oxygen Demand	-	-	(mg/l)	21.6	25.5	10 U	10 U	10 U	21.8	26.8	16.8
Chloride	250 ST	16887-00-6	(mg/l)	49.1	46.4	49.6	37.4	58.8	45.1	45.4	46.6
Hardness (as CaCO3)	-	-	(mg/l)	240	400	850	98	184	210	200	230
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	4.52	0.1 U	3.88	0.11	0.39	0.15	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	27.9	17.1	14	15.6	17.7	17.1	27.1	41
Total Organic Carbon	-	-	(mg/l)	4.5	4	4.8	3.7	5.5	4.8	4.6	5.5
Total Dissolved Solids	-	-	(mg/l)	291	303	287	396	313	284	275	383
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.75	3.62	5.92	4.28	6.11	4.18	3.28	2.69

NOTES:
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05D 10/29/97 (mg/l)	MW-05D 12/08/2000 (mg/l)	MW-05D 02/02/2001 (mg/l)	MW-05D 8/23/02 (mg/l)	MW-05D 11/22/02 (mg/l)	MW-05D 3/7/03 (mg/l)	MW-05D 6/5/03 (mg/l)	MW-05D 8/25/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	50	10	NS	5	NS	NS	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	234	467	505	138	128	90	50.9	34.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	[redacted]	[redacted]	[redacted]	[redacted]	0.1 U	[redacted]	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	5	12	8	10	2 U	13	6
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	[redacted]	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	43	40.5	32.6	17.6	22.5	10 U	10 U	36.2
Chloride	250 ST	16887-00-6	(mg/l)	51.5	65.4	51.6	27.9	32.8	34	38.5	27.1
Hardness (as CaCO3)	-	-	(mg/l)	260	410	360	148	130	136	160	110
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	1.5	4.46	5.73	[redacted]	0.68	[redacted]
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	27.5	25.5	17.8	33.5	32.7	15	9.8	7.6
Total Organic Carbon	-	-	(mg/l)	6	13.6	11.1	4.3	2.7	1.7	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	337	549	566	266	297	242	258	344
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6	15.3	18	4.57	2.54	3.46	1.86	1.4

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05D 11/12/03 (mg/l)	MW-05D 3/2/04 (mg/l)	MW-05D 5/25/04 (mg/l)	MW-05D 8/23/04 (mg/l)	MW-05D 11/10/04 (mg/l)	MW-05D 3/2/05 (mg/l)	MW-05D 5/31/05 (mg/l)	MW-05D 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	29.6	41.5	39.6	31.2	29.6	29.2	27.2	27.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	1.44	1.4	0.1 U	0.1 U	0.93	0.88	0.69
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2	2 U	2 U	2 U	2 U	4	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.1	[redacted]	1	1.6	[redacted]	[redacted]	1.9	1.8
Chemical Oxygen Demand	-	-	(mg/l)	21.6	15.6	10 U	10 U	10 U	10 U	24.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	23.3	32.7	23.9	24.8	27.9	28.9	25.6	25.9
Hardness (as CaCO3)	-	-	(mg/l)	300	190	160	40	110	84	84	80
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	[redacted]	8.85	7.52	9.95	10.1	8.12	7.49	7.87
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	8.9	9	13.4	12.2	9.5	11.1	9.9	11.9
Total Organic Carbon	-	-	(mg/l)	1.4	1.3	1 U	1 U	1.2	1 U	1 U	1.3
Total Dissolved Solids	-	-	(mg/l)	190	284	189	300	150	154	168	285
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.14	1.39	1.52	1.28	1.36	0.72	1.02	0.77

NOTES:
NS: Not sampled
[redacted]: Concentration exceeds Standard/Guidance Value
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06S 10/27/97 (mg/l)	MW-06S 12/5/00 (mg/l)	MW-06S 02/01/2001 (mg/l)	MW-06S 8/21/02 (mg/l)	MW-06S 11/20/02 (mg/l)	MW-06S 3/5/03 (mg/l)	MW-06S 6/4/03 (mg/l)	MW-06S 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	150	100	70	NS	60	NS	NS	150
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	453	245	200	161	183	156	202	279
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								
Biochemical Oxygen Demand	-	-	(mg/l)	5	17	10	2 U	6	3	55	16
Bromide	2 GV	24959-67-9	(mg/l)	0.6	0.7	0.5 U	1.2	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	46	10.7	10 U	24.9	10 U	27.3	10 U	41.1
Chloride	250 ST	16887-00-6	(mg/l)	39.8	14.8	20	15.8	19.6	10.7	20	22.3
Hardness (as CaCO3)	-	-	(mg/l)	440	280	140	220	280	80	200	420
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.21	1.97	0.32	0.17	0.29
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	8.40	33.8	38.2	18.3	20.6	133
Total Organic Carbon	-	-	(mg/l)	11.4	4.4	5.8	4.6	2.9	5.1	4.2	13.1
Total Dissolved Solids	-	-	(mg/l)	480	270	220	213	391	230	239	564
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	17.3	3.9	4.9	4.68	3.24	3.53	3.3	7.64

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06S 11/11/03 (mg/l)	MW-06S 2/27/04 (mg/l)	MW-06S 5/24/04 (mg/l)	MW-06S 8/20/04 (mg/l)	MW-06S 11/9/04 (mg/l)	MW-06S 3/1/05 (mg/l)	MW-06S 5/25/05 (mg/l)	MW-06S 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	100	NS	NS	300	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	239	258	206	337	182	166	126	310
Ammonia (as N)	2 ST	7664-41-7	(mg/l)							0.96	
Biochemical Oxygen Demand	-	-	(mg/l)	25	9	4	14	5	6	2 U	6
Bromide	2 GV	24959-67-9	(mg/l)			0.5 U	2	1	0.5 U		
Chemical Oxygen Demand	-	-	(mg/l)	21.6	30.5	23	18.1	185	16.8	19.3	109
Chloride	250 ST	16887-00-6	(mg/l)	17.4	19.9	16.4	37.4	29.6	28.1	13	37
Hardness (as CaCO3)	-	-	(mg/l)	280	36	950	250	150	184	330	280
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	1.15	3.76	0.17	0.22	3.76		0.17
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	39.8	12.2	80	5.5	6.7	12.8	72.2	6.6
Total Organic Carbon	-	-	(mg/l)	5.7	9	7.8	9.6	4.1	1 U	10.8	10.3
Total Dissolved Solids	-	-	(mg/l)	338	395	336	442	292	269	327	564
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.11	3.67	4.7	12.3	4.29	2.8	3.37	7.36

NOTES:
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06I 10/28/97 (mg/l)	MW-06I 12/05/2000 (mg/l)	MW-06I 02/01/2001 (mg/l)	MW-06I 8/21/02 (mg/l)	MW-06I 11/21/02 (mg/l)	MW-06I 3/5/03 (mg/l)	MW-06I 6/5/03 (mg/l)	MW-06I 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	10	30	30	NS	5	NS	NS	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	115	97.1	77	43.7	50.7	55.7	48.9	58.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.76	1.7	1.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	14	2	2 U	2 U	2 U	11	8
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.8
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	10.2	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	25.4	20.1	18	12.3	16.2	8.8	8.4	10.1
Hardness (as CaCO3)	-	-	(mg/l)	180	108	120	80	170	40	108	85
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.14	2.24	0.97	0.79	2.1	0.95
Phenols, total	0.001 ST	-	(mg/l)	0.002	0.005 U	0.005 U	0.005	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	21.2	47.8	50.4	12.7	12.7	16	17.4	25.9
Total Organic Carbon	-	-	(mg/l)	2.4	1.8	2.4	1.7	1.4	1	1.2	1 U
Total Dissolved Solids	-	-	(mg/l)	190	211	120	99	151	94	123	153
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.4	2	2.30	0.1 U	0.1 U	0.23	0.13	0.14

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06I 11/11/03 (mg/l)	MW-06I 2/27/04 (mg/l)	MW-06I 5/24/04 (mg/l)	MW-06I 8/20/04 (mg/l)	MW-06I 11/9/04 (mg/l)	MW-06I 3/1/05 (mg/l)	MW-06I 5/27/05 (mg/l)	MW-06I 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	20	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	45	37.2	33.2	45.4	58.8	41.9	44.6	42.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.17	0.17	0.22	0.1 U	0.49	0.27	0.562	0.87
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	3	2 U
Bromide	2 GV	24959-67-9	(mg/l)	2.5	0.5 U	0.5 U	0.5 U	2.5	0.5 U	0.5 U	1.3
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	70.3	10 U	51.8	16.8
Chloride	250 ST	16887-00-6	(mg/l)	13.1	12.7	18.7	19.4	42.9	25.9	14	14
Hardness (as CaCO3)	-	-	(mg/l)	88	110	180	34	92	112	70	66
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.15	1.19	1.67	1.18	1.06	1.89	1.33	1.34
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	30.9	31	20.5	26.7	28.7	36.1	18.7	19.5
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.2	1	1.8	1.7	2.03	1.2
Total Dissolved Solids	-	-	(mg/l)	119	60	119	142	189	144	108	203
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.19	0.18	0.2	0.17	0.96	0.34	0.664	1.06

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06D 10/28/97 (mg/l)	MW-06D 12/05/2000 (mg/l)	MW-06D 01/31/2001 (mg/l)	MW-06D 8/22/02 (mg/l)	MW-06D 11/20/02 (mg/l)	MW-06D 3/5/03 (mg/l)	MW-06D 6/5/03 (mg/l)	MW-06D 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	10	30	5 U	NS	20	NS	NS	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	31.3	40.6	38	40	31.2	35.5	27.3	34.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.32	0.1 U	0.24	0.1 U	0.1 U	0.14	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	37	2 U	2 U	2 U	2 U	2 U	8
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.60	0.5 U	0.5 U	0.5 U	0.5 U	0.7
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	22.5	22.5	19.3	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	7.3	12.6	9.3	14.7	16.2	10.5	5.6	5.1
Hardness (as CaCO3)	-	-	(mg/l)	120	44	68	72	62	80	80	80
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.2	0.14	0.67	0.4	0.36	1.47	0.2
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	20.3	23.3	17.2	14.5	23	26	25.5	24.4
Total Organic Carbon	-	-	(mg/l)	2	1.7	1.1	1.2	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	78	130	120	100	150	96	97	117
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.2	0.46	0.1 U	0.1 U	0.1	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-06D 11/11/03 (mg/l)	MW-06D 2/27/04 (mg/l)	MW-06D 5/24/04 (mg/l)	MW-06D 8/20/04 (mg/l)	MW-06D 11/9/04 (mg/l)	MW-06D 3/1/05 (mg/l)	MW-06D 5/27/05 (mg/l)	MW-06D 8/26/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	36.8	24.7	11.6	23.8	30.8	22.5	21	21.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.24	0.2	0.21	0.1 U	0.1 U	0.12	0.1 U	0.12
Biochemical Oxygen Demand	-	-	(mg/l)	16	2 U	2 U	2 U	10	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)			0.6				0.5	
Chemical Oxygen Demand	-	-	(mg/l)	55.7	10.6	10 U	10 U	135	11.8	24.3	16.8
Chloride	250 ST	16887-00-6	(mg/l)	5	7	5.9	8	8.9	9.7	8.58	8.1
Hardness (as CaCO3)	-	-	(mg/l)	80	40	105	28	63	58	52	40
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.04	0.33	0.45	0.5	0.21	0.71	0.519	0.18
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	26.8	17.8	26.6	19.2	16.9	16.8	20.5	17.9
Total Organic Carbon	-	-	(mg/l)	1.7	1 U	1.1	1 U	3.2	1	1.19	1 U
Total Dissolved Solids	-	-	(mg/l)	105	155	93	109	92	105	87	99
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.07	0.24	0.23	0.73	2.06	0.88	1 J	0.1 U

NOTES:
NS: Not sampled
U: Analyzed for but not detected, value shown is instrument detection limit
: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-07I 10/28/97 (mg/l)	MW-07I 12/01/2000 (mg/l)	MW-07I 01/31/2001 (mg/l)	MW-07I 8/21/02 (mg/l)	MW-07I 11/20/02 (mg/l)	MW-07I 3/5/03 (mg/l)	MW-07I 6/3/03 (mg/l)	MW-07I 8/22/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	5	NS	NS	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	23.4	22.1	23	13.9	12.6	17.5	28.1	24.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.3	0.89	1.2	0.1 U	0.1 U	0.54	0.99	0.51
Biochemical Oxygen Demand	-	-	(mg/l)	6	2 U	8	2 U	3	3	7	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	12.7	10 U	27.3	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	9.2	37.6	31	7.8	5.8	6.4	19.8	10.1
Hardness (as CaCO3)	-	-	(mg/l)	180	72	88	40	160	80	34	58
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.88	3.4	3.1	3.63	2.47	2.03	1.6	1.7
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.9	6	18.9	13.8	17.9	16.6	15.9	22.3
Total Organic Carbon	-	-	(mg/l)	1.9	1 U	1.2	1.6	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	65	164	140	74	54	84	89	99
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.7	0.84	1.6	0.1 U	0.1 U	0.92	1.03	0.62

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-07I 11/11/03 (mg/l)	MW-07I 2/27/04 (mg/l)	MW-07I 5/20/04 (mg/l)	MW-07I 8/20/04 (mg/l)	MW-07I 11/9/04 (mg/l)	MW-07I 2/28/05 (mg/l)	MW-07I 5/27/05 (mg/l)	MW-07I 8/24/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	21.5	23.6	16.8	23	25.2	23.6	23	23.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.52	1.84	1.41	0.1 U	1.04	1.17	1.07	0.68
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	11	2 U	4	2 U	5	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)		1.2	1.7	1.7			0.7	
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	30.5	10 U	172	14.3	11.8	10 U
Chloride	250 ST	16887-00-6	(mg/l)	10.3	24	28.4	27.6	24	21.5	21.6	22.7
Hardness (as CaCO3)	-	-	(mg/l)	40	48	100	30	43	47	54	70
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.46	1.66	2.66	4.72	2.66	2.76	2.89	2.61
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	15.9	15.8	21.8	20.4	13.9	17.2	19.3	25.8
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1	1 U	1.02	1.7
Total Dissolved Solids	-	-	(mg/l)	74	90	114	129	111	101	112	214
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.02	1.5	1.53	2.75	2.08	1.3	1.27	0.75

NOTES:
NS: Not sampled
U: Analyzed for but not detected, value shown is instrument detection limit
: Concentration exceeds Standard/Guidance Value
J: Reported value is estimated due to variance from quality control limits

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11S 10/31/97 (mg/l)	MW-11S 12/13/2000 (mg/l)	MW-11S 02/07/2001 (mg/l)	MW-11S 8/22/02 (mg/l)	MW-11S 11/21/02 (mg/l)	MW-11S 3/6/03 (mg/l)	MW-11S 6/4/03 (mg/l)	MW-11S 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	100	5 U	5 U	NS	5	NS	NS	10
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	127	134	135	91.2	133	106	125	174
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1	1.3	1.51	1.16	0.1 U	0.58	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	6
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5	0.8	0.5 U	0.5	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	22	10 U	11	12.7	10 U	19.3	19.2	10 U
Chloride	250 ST	16887-00-6	(mg/l)	65.1	50.7	36.1	35.1	21.3	23	97.7	139
Hardness (as CaCO3)	-	-	(mg/l)	120	210	156	120	230	156	250	270
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.28	0.21	0.25	2.6	2.25	1.6	1.65	1.31
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	42.1	28.6	49.6	29.2	41	64.8	80.5	68
Total Organic Carbon	-	-	(mg/l)	3.7	4.6	3.53	2.8	2.8	4	3.8	7.2
Total Dissolved Solids	-	-	(mg/l)	261	253	254	179	326	250	423	560
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.2	1.5	7.76	4.53	0.18	0.77	0.26	0.34

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11S 11/13/03 (mg/l)	MW-11S 3/1/04 (mg/l)	MW-11S 5/21/04 (mg/l)	MW-11S 8/24/04 (mg/l)	MW-11S 11/11/04 (mg/l)	MW-11S 2/24/05 (mg/l)	MW-11S 5/26/05 (mg/l)	MW-11S 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	206	160	113	117	151	96	116	120
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.35	1.81	0.1 U	[redacted]	[redacted]	[redacted]	[redacted]
Biochemical Oxygen Demand	-	-	(mg/l)	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	1.2	1.8	0.6	0.8	2.0	0.5	1.1
Chemical Oxygen Demand	-	-	(mg/l)	21.6	20.5	25.5	10 U	10 U	11.8	10 U	16.8
Chloride	250 ST	16887-00-6	(mg/l)	96.6	86.4	79.6	73.7	57.3	76.9	88.5	65.4
Hardness (as CaCO3)	-	-	(mg/l)	290	220	450	120	208	220	220	200
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.52	1.59	1.04	2.87	1.15	1.21	1.07	1.2
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	76.4	45.5	61	55.8	48.8	45.8	50.3	72.5
Total Organic Carbon	-	-	(mg/l)	5	4	4.2	3.8	4.9	3.7	3.7	4.3
Total Dissolved Solids	-	-	(mg/l)	465	392	300	532	322	339	366	442
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.31	0.32	1.65	1.27	1.93	2.69	3.54	2.31

NOTES:
NS: Not sampled
U: Analyzed for but not detected, value shown is instrument detection limit
[redacted]: Concentration exceeds Standard/Guidance Value
J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11I 10/31/97 (mg/l)	MW-11I 12/13/2000 (mg/l)	MW-11I 02/07/2001 (mg/l)	MW-11I 8/22/02 (mg/l)	MW-11I 11/21/02 (mg/l)	MW-11I 3/6/03 (mg/l)	MW-11I 6/4/03 (mg/l)	MW-11I 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	5 U	NS	NS	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	27.6	34.2	27.4	14.4	28.2	58	57.6	32.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.99	1.1	0.91	0.1 U	0.1 U	1.15	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2	2 U	3	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.8	0.8	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	12.7	10 U	16.7	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	40.4	17.3	17.5	7	24.3	7.7	14.3	19.7
Hardness (as CaCO3)	-	-	(mg/l)	54	34	40	40	180	56	62	40
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.13	0.42	1.8	3.07	1.85	0.1 U	1.03	1.01
Phenols, total	0.001 ST	-	(mg/l)	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.9	6.8	7	5	7.9	10	5.8	10.7
Total Organic Carbon	-	-	(mg/l)	1.6	1.3	1 U	1.1	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	96	42	63	58	152	109	84	103
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.5	1.2	0.79	0.1	0.19	0.99	1.18	0.8

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11I 11/13/03 (mg/l)	MW-11I 3/1/04 (mg/l)	MW-11I 5/21/04 (mg/l)	MW-11I 8/24/04 (mg/l)	MW-11I 11/11/04 (mg/l)	MW-11I 2/24/05 (mg/l)	MW-11I 5/26/05 (mg/l)	MW-11I 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	28.6	48	37.8	28.8	27.8	19.4	32.4	24
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	1.15	1.19	0.1 U	0.15	0.1 U	1.08	0.79
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	4	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.7	1.7	0.5 U	1.7	0.5 U	0.6	1.5
Chemical Oxygen Demand	-	-	(mg/l)	10 U	15.6	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	11.7	22.7	14.1	10	15.3	17.5	15.1	9.6
Hardness (as CaCO3)	-	-	(mg/l)	36	48	150	25	45	52	52	45
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.96	0.53	0.33	1.85	0.74	1.16	1.5	2.11
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	12.9	5 U	0.5 U	11	10.7	13.4	14.4	15.4
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	78	110	38	149	83	92	107	155
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.36	1.11	0.93	0.88	0.79	0.12	0.85	0.77

NOTES:
NS: Not sampled
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Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11D 10/31/97 (mg/l)	MW-11D 12/13/2000 (mg/l)	MW-11D 02/07/2001 (mg/l)	MW-11D 8/22/02 (mg/l)	MW-11D 11/21/02 (mg/l)	MW-11D 3/6/03 (mg/l)	MW-11D 6/4/03 (mg/l)	MW-11D 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	80	5 U	5 U	NS	5	NS	NS	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	36.8	3.6	6.8	5.2	4.4	4	3.7	2.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.5	0.14	0.481	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	4	2	2 U	2 U	2 U	2 U	2 U	6
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.8	0.6	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	40	10 U	10 U	12.7	10 U	22	11.9	10 U
Chloride	250 ST	16887-00-6	(mg/l)	13.3	7.9	10.3	5.4	17.3	13.9	16.6	19
Hardness (as CaCO3)	-	-	(mg/l)	26	17	28	24	110	22	24	28
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.5	1.9	1.79	0.74	1.91	1.96	2.59	3.67
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	31.3	11.3	10.9	17.2	12	13.5	10.1	9.3
Total Organic Carbon	-	-	(mg/l)	5.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	124	61	84	60	109	69	88	126
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.58	0.1 U	0.46	0.1 U	0.1 U	0.2 U	0.2 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11D 11/13/03 (mg/l)	MW-11D 3/1/04 (mg/l)	MW-11D 5/21/04 (mg/l)	MW-11D 8/24/04 (mg/l)	MW-11D 11/11/04 (mg/l)	MW-11D 2/24/05 (mg/l)	MW-11D 5/26/05 (mg/l)	MW-11D 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	20	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	3.8	3.3	26.4	19.2	7.8	7.8	5.8	5.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.23	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.16
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	[redacted]	0.8	0.9	0.8
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	45.4	10 U	10 U	19.3	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	18.2	23.8	18.3	16.9	19.3	26.7	25	20.1
Hardness (as CaCO3)	-	-	(mg/l)	43	30	120	24	42	40	46	40
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.92	4.17	4.32	4.4	4.65	3.9	3.44	3.42
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	12.1	8.6	13.7	13	10.3	10.7	11.1	14.4
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	103	194	70	274	144	160	153	219
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.11	0.1 U	0.18	0.65	0.1 U	0.27	0.1 U	0.1 U

NOTES:

NS: Not sampled

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

[redacted]: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12S 10/31/97 (mg/l)	MW-12S 12/07/2000 (mg/l)	MW-12S 02/05/2001 (mg/l)	MW-12S 8/22/02 (mg/l)	MW-12S 11/21/02 (mg/l)	MW-12S 3/6/03 (mg/l)	MW-12S 6/4/03 (mg/l)	MW-12S 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5	NS	5	NS	NS	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	102	104	98	113	111	77.8	74.3	141
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.11	0.02 U	0.07 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	2	2 U	2 U	2 U	2 U	2 U	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.8	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	10 U	16.7	21.6	10 U
Chloride	250 ST	16887-00-6	(mg/l)	21	16	24	15.7	17.7	113	25.6	11.2
Hardness (as CaCO3)	-	-	(mg/l)	90	96	100	140	108	108	82	110
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.75	0.67	0.4	2.21	1.14	0.89	0.58	1.54
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	32.8	36.4	13.4	37.5	27.6	32.1	23.3	32
Total Organic Carbon	-	-	(mg/l)	2.3	1.7	2.2	3.3	1.7	1.9	1.6	1.8
Total Dissolved Solids	-	-	(mg/l)	170	175	250	185	290	352	151	241
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.21	0.2 U	0.12	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12S 11/13/03 (mg/l)	MW-12S 3/1/04 (mg/l)	MW-12S 5/21/04 (mg/l)	MW-12S 8/24/04 (mg/l)	MW-12S 11/11/04 (mg/l)	MW-12S 2/24/05 (mg/l)	MW-12S 5/26/05 (mg/l)	MW-12S 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	150	118	119	130	74	97.1	98	105
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.13	0.1 U	0.1 U	0.11	0.12	0.19
Biochemical Oxygen Demand	-	-	(mg/l)	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	0.5 U	0.5 U	0.7	1.8	0.5	0.5 U	1
Chemical Oxygen Demand	-	-	(mg/l)	10 U	13.1	10 U	10 U	10 U	21.8	29.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	25.8	52.2	31.6	31.6	19.7	245	42.2	45.5
Hardness (as CaCO3)	-	-	(mg/l)	220	120	320	88	94	172	128	98
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.89	1.18	1.24	1.76	0.52	0.83	1.06	1.18
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	38.4	24.4	29.5	54.8	17.7	39.1	28.4	32.6
Total Organic Carbon	-	-	(mg/l)	2	1.6	1.7	1.8	2.6	1.7	2.7	2.8
Total Dissolved Solids	-	-	(mg/l)	265	296	184	474	170	568	216	382
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.22	0.13	0.18	0.17	0.1 U	0.19	0.21	0.2

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12I 10/31/97 (mg/l)	MW-12I 12/07/2000 (mg/l)	MW-12I 02/08/2001 (mg/l)	MW-12I 8/22/02 (mg/l)	MW-12I 11/21/02 (mg/l)	MW-12I 3/6/03 (mg/l)	MW-12I 6/4/03 (mg/l)	MW-12I 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	10	NS	NS	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.5	31.8	17.2	2.8	6.8	4.4	7.1	3.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.51	0.61	0.703	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2 U	2 U	2 U	2 U	2 U	6
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.700	0.5 U	1.1	1	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	39.6	14	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	17.5	14.9	13.1	4.5	8.4	4.6	13.1	7.9
Hardness (as CaCO3)	-	-	(mg/l)	54	52	36.0	16	1900	32	32	20
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.7	0.73	1.1	0.93	1.54	0.33	0.53	0.21
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	43.1	48.3	24.2	10	10.4	11.6	11.3	8.6
Total Organic Carbon	-	-	(mg/l)	3.6	1.2	0.0010 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	106	143	90	39	79	55	62	49
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.46	0.84	8.30	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12I 11/13/03 (mg/l)	MW-12I 3/1/04 (mg/l)	MW-12I 5/21/04 (mg/l)	MW-12I 8/24/04 (mg/l)	MW-12I 11/11/04 (mg/l)	MW-12I 2/24/05 (mg/l)	MW-12I 5/26/05 (mg/l)	MW-12I 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	4.4	4.2	3.5	5.6	6.4	29.6	4.3	5.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.14	0.1 U	0.1 U	0.29	0.1 U	0.29	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	5	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.6	1.2	0.7	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	15.6	10 U	10 U	10 U	10 U	14.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)	4.8	5.5	4.3	12.5	28.1	45.5	10.5	18.5
Hardness (as CaCO3)	-	-	(mg/l)	26	24	22	10	34	66	18	22
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.3	0.7	0.52	1.65	1.23	0.72	0.52	0.86
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	9.8	6.9	8.8	7.6	6.7	8.7	9	7.5
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1.4	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	40	14	47	152	77	136	50	101
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.13	0.1 U	0.56	0.5	0.53	0.24	0.36

NOTES:

NS: Not sampled

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

: Concentration exceeds Standard/Guidance Value

J: Reported value is estimated due to variance from quality control limits

Appendix A-1

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12D 10/31/97 (mg/l)	MW-12D 12/08/2000 (mg/l)	MW-12D 02/07/2001 (mg/l)	MW-12D 8/22/02 (mg/l)	MW-12D 11/21/02 (mg/l)	MW-12D 3/6/03 (mg/l)	MW-12D 6/4/03 (mg/l)	MW-12D 8/21/03 (mg/l)
Color (APHA Units)	-	-	(mg/l)	5 U	5 U	5 U	NS	5	NS	NS	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	19.3	7.3	7.8	6.7	6.8	8.4	7.9	8.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	7	4	2 U	2 U	2 U	4	7
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	15.1	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	11.7	4.7	5.71	3.1	4.3	5.6	8.9	6.2
Hardness (as CaCO3)	-	-	(mg/l)	34	15	28	16	36	64	34	36
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.32	0.38	0.31	0.13	0.24	0.58	0.66	0.63
Phenols, total	0.001 ST	-	(mg/l)	0.002	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.5	20.1	12.8	6.9	11.9	17.1	15.6	16.6
Total Organic Carbon	-	-	(mg/l)	0.5 U	2.1	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	45	77	380	37	69	78	58	88
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.1 U	8.54	0.16	0.1 U	0.2 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12D 11/3/03 (mg/l)	MW-12D 3/1/04 (mg/l)	MW-12D 5/21/04 (mg/l)	MW-12D 8/24/04 (mg/l)	MW-12D 11/11/04 (mg/l)	MW-12D 2/24/05 (mg/l)	MW-12D 5/26/05 (mg/l)	MW-12D 8/25/05 (mg/l)
Color (APHA Units)	-	-	(mg/l)	NS	NS	5 U	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	7.4	6.7	6.8	7	7.4	7.1	6.7	6.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.11
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.7	0.7
Chemical Oxygen Demand	-	-	(mg/l)	11.9	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	4.2	4.8	3.6	4.3	4.0	6.1	4.5	4.9
Hardness (as CaCO3)	-	-	(mg/l)	33	22	36	5 U	18	18	19	15
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.54	0.75	0.29	0.30	0.26	0.16	0.13	0.19
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.5	8.3	11.3	11.7	10.5	11.1	9.5	10.8
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	50	10 U	25	113	52	58	49	77
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.1 U	0.97	0.1 U	0.26	0.1 U	0.1 U

NOTES:
NS: Not sampled
U: Analyzed for but not detected, value shown is instrument detection limit
: Concentration exceeds Standard/Guidance Value
J: Reported value is estimated due to variance from quality control limits

APPENDIX A-2

HISTORIC AND CURRENT GROUNDWATER SAMPLE RESULTS - INORGANIC PARAMETERS

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 10/24/97 (ug/l)	MW-01S 11/30/00 (ug/l)	MW-01S 1/29/01 (ug/l)	MW-01S 8/21/02 (ug/l)	MW-01S 11/20/02 (ug/l)	MW-01S 3/5/03 (ug/l)	MW-01S 6/3/03 (ug/l)	MW-01S 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	378	21 B	32.1	NA	101 B	NA	NA	30.7 B
Antimony	3 GV	7440-36-0	ug/l	3.0 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.5	2.5 U	5.9	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	75.5	52.7 B	58	NA	67.4 B	NA	NA	66.9 B
Beryllium	3 GV	7440-41-7	ug/l	0.2	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	622	553	NA	271	NA	NA	140
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.50 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	93000	53000	63900	65400	82400	87700	81200	92000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	2.7	3.5 U	1.5	NA	1.1 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	2.5	2.8 B	4.8	NA	5.4 B	NA	NA	3.4 B
Copper	200 ST	7440-50-8	ug/l	3.2	1.5 U	2.4	NA	3.5 B	NA	NA	3.4 B
Iron	300 ST	7439-89-6	ug/l	6710	4360	4870	5300	14000	1400	870	3040
Lead	25 ST	7439-92-1	ug/l	12.7	1.4 U	6.5	2.2 B	1.4 B	1.5 U	1.9 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	8940	6010	7240	7530	8980	10700	9690	9000
Manganese	300 ST	7439-96-5	ug/l	634	1230	2210	1330	2240	2670	1820	824
Mercury	0.7 ST	7439-97-6	ug/l	0.12	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	1.2 B	NA	NA	4.6 B
Potassium	-	7440-09-7	ug/l	10000	16200	15700	8380	11000	9900	13600	9910
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	5.5 N	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.58 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	51400	35400	36000	29400	41100	49000	28700	43500
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	3.0 U
Vanadium	-	7440-62-2	ug/l	1.2	0.7 U	1.7 U	NA	0.65 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	37	2.2 U	22.4	NA	40.6	NA	NA	66.9
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	7654	5580	7080	6630	16740	4470	2690	3864

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 11/10/03 (ug/l)	MW-01S 2/26/04 (ug/l)	MW-01S 5/20/04 (ug/l)	MW-01S 8/19/04 (ug/l)	MW-01S 11/8/04 (ug/l)	MW-01S 2/28/05 (ug/l)	MW-01S 2/25/05 (ug/l)	MW-01S 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	30.3 B	NA	NA	67 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	46.1 B	NA	NA	45.9 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	168 B	NA	NA	152	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.30 U	0.20 U	0.3 U	0.30 U	0.23 U	0.34 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	133000	93100	83800	88500	79900	77400	80100	66500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.8 B	NA	NA	1.0 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	5.2 B	NA	NA	4.8 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.3 B	NA	NA	1.5 B	NA	NA
Iron	300 ST	7439-89-6	ug/l								
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	1.3 B	1.2 U	1.1 U	1.1 U	3.2	2.4 B
Magnesium	35000 GV	7439-95-4	ug/l	14000	13300	9930	10100	9680	10200	9940	7950
Manganese	300 ST	7439-96-5	ug/l								
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	2.2 B	NA	NA	1.8 B	NA	NA
Potassium	-	7440-09-7	ug/l	16600	8580	8960	10700	11400	10100	10800	9530
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.6 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l								
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	40.7	NA	NA	72	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l								

NOTES:

NS: Not sampled

ST*: Standard for the sum of iron and manganese is 500 ug/l

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 10/24/97 (ug/l)	MW-01I 11/30/00 (ug/l)	MW-01I 1/30/01 (ug/l)	MW-01I 8/21/02 (ug/l)	MW-01I 11/20/02 (ug/l)	MW-01I 3/5/03 (ug/l)	MW-01I 6/3/03 (ug/l)	MW-01I 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	60.8	12.5 B	27.7	NA	19 B	NA	NA	13.9 U
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	93.2	4.3 B	7.8	NA	26.2 B	NA	NA	38.9 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.2 U
Boron	1000 ST	7440-42-8	ug/l	NA	65.8 B	94.3	NA	68.1 B	NA	NA	176
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.21 B	0.50 U	0.16 B	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	7510	723 B	1350	4840 B	10200	5850	2520 B	13200
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.4 U	3.5 U	0.6 U	NA	0.80 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	2.7	2.2 B	1.7 U	NA	5.7 B	NA	NA	5.8 B
Copper	200 ST	7440-50-8	ug/l	0.93	2.1 B	1.7	NA	2.0 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	ug/l	80.1	13.3 B	22.8	242	78.8 B	105	45.2 B	23.6 U
Lead	25 ST	7439-92-1	ug/l	1	1.4 U	1.1 U	1.3 B	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	3720	154 B	266	904 B	1910 B	1160 B	439	2490 B
Manganese	300 ST	7439-96-5	ug/l	286	1.3 B	3.9	32.4	24	16.5	7.4 B	24.4
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	5.1	1.9 U	1.4 U	NA	8.2 B	NA	NA	6.1 B
Potassium	-	7440-09-7	ug/l	4250	951 B	1510	1370 B	1770 B	1970 B	1250 B	2700 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.5 U	2.6	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	16100	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	[illegible]
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7	NA	0.60 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	29.5	2.2 U	8.6	NA	27.6	NA	NA	3.4 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	366.1	14.6	26.7	274.4	102.8	121.5	52.6	48

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 11/10/03 (ug/l)	MW-01I 2/26/04 (ug/l)	MW-01I 5/20/04 (ug/l)	MW-01I 8/19/04 (ug/l)	MW-01I 11/8/04 (ug/l)	MW-01I 2/28/05 (ug/l)	MW-01I 5/25/05 (ug/l)	MW-01I 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	21.5 B	NA	NA	99.2 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	9.2 B	NA	NA	17.3 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	229 B	NA	NA	299	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.30 U	0.20 U	0.3 U	0.30 U	0.23 U	0.35 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	25100	17300	2720 B	6790	5700	13000	10500	7890
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	1.4 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	11 B	NA	NA	5.7 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.6 B	NA	NA	15.6 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	44.1 B	31.6 B	82.6 B	48.9 B	30.6 B	99.4 B	37.2 B	43.4 B
Lead	25 ST	7439-92-1	ug/l	1.2 B	1.6 U	1.2 U	1.2 U	1.1 U	1.6 B	1.7 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	4750 B	3560 B	559 B	1710 B	1320 B	3010 B	2430 B	1860 B
Manganese	300 ST	7439-96-5	ug/l	71.2	70.6	16	51.6	13.6	33.3	63.2	147
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	7.4 B	NA	NA	6.4 B	NA	NA
Potassium	-	7440-09-7	ug/l	3040 B	3860	1640 B	1900 B	2180 B	2700 B	2630 B	1950 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.85 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l							13700	12000
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	13.3 B	NA	NA	89	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	115.3	102.2	98.6	100.5	44.2	132.7	100.4	190.4

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 10/24/97 (ug/l)	MW-01D 11/30/00 (ug/l)	MW-01D 1/30/01 (ug/l)	MW-01D 8/21/02 (ug/l)	MW-01D 11/20/02 (ug/l)	MW-01D 3/5/03 (ug/l)	MW-01D 6/3/03 (ug/l)	MW-01D 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	105	59.6 B	79.6 B	NA	131 B	NA	NA	39.8 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	4.4 B	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	111	124 B	87.6	NA	93	NA	NA	22.4 B
Beryllium	3 GV	7440-41-7	ug/l	0.13	0.1 U	0.21	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	102	161	NA	113	NA	NA	139
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.11 B	0.5 U	0.81 B	0.10 B	0.30 U
Calcium	-	7440-70-2	ug/l	35300	19500	15200	26400	24400	21100	15800	5650
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.53	3.5 U	0.6 U	NA	3.6 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	1.3	2.1 B	1.7 U	NA	5 B	NA	NA	5.0 B
Copper	200 ST	7440-50-8	ug/l	1.9	2 B	2.1	NA	7 B	NA	NA	2.3 B
Iron	300 ST	7439-89-6	ug/l	110	32 B	34.2	205	301	301	120	63.1 B
Lead	25 ST	7439-92-1	ug/l	1.3	1.4 U	1.1 U	0.8 U	1.4 U	3.2	1.7 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	10700	6010	4800	9680	8130	7530	5740	1710 B
Manganese	300 ST	7439-96-5	ug/l	132	9.9 B	7.3	34.3	28.6	67.5	6.8 B	3.6 B
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	2.2	1.9 U	1.4 U	NA	7.5 B	NA	NA	6.0 B
Potassium	-	7440-09-7	ug/l	6780	10400	9240	7740	20500	10700	6830	2390 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.77 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	61000	490000	390000	445000	394000	346000	404000	156000
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	4.0 B
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	1.4 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	39	3.8 B	5.1	NA	190	NA	NA	33.2
Cyanide	200 ST	0057-12-5	ug/l	17	17	20.4	NA	30.4	NA	NA	29
Iron + Manganese	500 ST*	-	ug/l	242	41.9	41.5	239.3	329.6	368.5	126.8	66.7

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 11/10/03 (ug/l)	MW-01D 2/26/04 (ug/l)	MW-01D 5/20/04 (ug/l)	MW-01D 8/19/04 (ug/l)	MW-01D 11/8/04 (ug/l)	MW-01D 2/28/05 (ug/l)	MW-01D 5/25/05 (ug/l)	MW-01D 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	52.5 B	NA	NA	143 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	123 B	NA	NA	284	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	173 B	NA	NA	158	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.3 U	0.30 U	0.23 U	0.23 U	0.74 B	0.65 U
Calcium	-	7440-70-2	ug/l	1420 B	19500	27800	61300	62800	57100	49800	38500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.63 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	7.2 B	NA	NA	12.4 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.6 B	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	119	79.6 B	96.9 B	61.7 B	22.3 B	59.1 B	64.9 B	192
Lead	25 ST	7439-92-1	ug/l	2.5 B	1.6 U	1.2 U	1.2 U	1.1 U	1.1 U	1.7 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	504 B	6270	9620	17700	16300	12700	10200	8020
Manganese	300 ST	7439-96-5	ug/l	3.6 B	9.3 B	17.6	22.5	21	23.4	21.7	28.5
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	5.1 B	NA	NA	17.4 B	NA	NA
Potassium	-	7440-09-7	ug/l	1380 B	5480	7230	12200	13700	15300	9870	8800
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.86 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l								
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	3.7 B	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	32.4	NA	NA	50.9	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	18	NA	NA
Iron + Manganese	500 ST*	-	ug/l	122.6	88.9	114.5	84.2	43.3	82.5	86.6	220.5

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 10/27/97 (ug/l)	MW-02S 11/30/00 (ug/l)	MW-02S 1/31/01 (ug/l)	MW-02S 8/21/02 (ug/l)	MW-02S 11/20/02 (ug/l)	MW-02S 3/5/03 (ug/l)	MW-02S 6/3/03 (ug/l)	MW-02S 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	146	15.8 B	11.8 U	NS	NS	NS	NS	NS
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NS	NS	NS	NS	NS
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NS	NS	NS	NS	NS
Barium	1000 ST	7440-39-3	ug/l	26.3	34.1 B	31.9	NS	NS	NS	NS	NS
Beryllium	3 GV	7440-41-7	ug/l	0.77	0.1 U	0.14	NS	NS	NS	NS	NS
Boron	1000 ST	7440-42-8	ug/l	NA	59.7 B	87.8	NS	NS	NS	NS	NS
Cadmium	5 ST	7440-43-9	ug/l	0.57	0.4 U	0.2 U	NS	NS	NS	NS	NS
Calcium	-	7440-70-2	ug/l	27000	30300	33100	NS	NS	NS	NS	NS
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NS	NS	NS	NS	NS
Chromium Total	50 ST	7440-47-3	ug/l	1.1	3.5 U	0.6 U	NS	NS	NS	NS	NS
Cobalt	-	7440-48-4	ug/l	1.5	0.9 U	1.7 U	NS	NS	NS	NS	NS
Copper	200 ST	7440-50-8	ug/l	4	2.6 B	1.5 U	NS	NS	NS	NS	NS
Iron	300 ST	7439-89-6	ug/l	[redacted]	18.7 B	13.8	NS	NS	NS	NS	NS
Lead	25 ST	7439-92-1	ug/l	2.1	1.4 U	1.1 U	NS	NS	NS	NS	NS
Magnesium	35000 GV	7439-95-4	ug/l	2890	2360 B	2750	NS	NS	NS	NS	NS
Manganese	300 ST	7439-96-5	ug/l	5.6	61.1	68.4	NS	NS	NS	NS	NS
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NS	NS	NS	NS	NS
Nickel	100 ST	7440-02-0	ug/l	1.3	1.9 U	1.4 U	NS	NS	NS	NS	NS
Potassium	-	7440-09-7	ug/l	4660	7850	7600	NS	NS	NS	NS	NS
Selenium	10 ST	7782-49-2	ug/l	2.8 U	4 B	1.5 U	NS	NS	NS	NS	NS
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.93 B	1.6 U	NS	NS	NS	NS	NS
Sodium	20000 ST	7440-23-5	ug/l	18900	12900	13100	NS	NS	NS	NS	NS
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 B	2.8 U	NS	NS	NS	NS	NS
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NS	NS	NS	NS	NS
Zinc	2000 ST	7440-66-6	ug/l	20.8	2.8 B	3.6 U	NS	NS	NS	NS	NS
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NS	NS	NS	NS	NS
Iron + Manganese	500 ST*	-	ug/l	317.6	79.8	82.2	NS	NS	NS	NS	NS

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 11/11/03 (ug/l)	MW-02S 2/26/04 (ug/l)	MW-02S 5/20/04 (ug/l)	MW-02S 8/20/04 (ug/l)	MW-02S 11/10/04 (ug/l)	MW-02S 2/28/05 (ug/l)	MW-02S 5/26/05 (ug/l)	MW-02S 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	3 GV	7440-36-0	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	25 ST	7440-38-2	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Barium	1000 ST	7440-39-3	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	3 GV	7440-41-7	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Boron	1000 ST	7440-42-8	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	5 ST	7440-43-9	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	-	7440-70-2	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Chromium Total	50 ST	7440-47-3	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	-	7440-48-4	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Copper	200 ST	7440-50-8	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300 ST	7439-89-6	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Lead	25 ST	7439-92-1	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Magnesium	35000 GV	7439-95-4	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300 ST	7439-96-5	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	0.7 ST	7439-97-6	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	100 ST	7440-02-0	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Potassium	-	7440-09-7	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	10 ST	7782-49-2	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Silver	50 ST	7440-22-4	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000 ST	7440-23-5	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Thallium	0.5 GV	7440-28-0	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	-	7440-62-2	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	2000 ST	7440-66-6	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide	200 ST	0057-12-5	ug/l	NS	NS	NS	NS	NS	NS	NS	NS
Iron + Manganese	500 ST*	-	ug/l	NS	NS	NS	NS	NS	NS	NS	NS

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 10/27/97 (ug/l)	MW-02I 12/1/00 (ug/l)	MW-02I 1/30/01 (ug/l)	MW-02I 8/21/02 (ug/l)	MW-02I 11/20/02 (ug/l)	MW-02I 3/7/03 (ug/l)	MW-02I 6/3/03 (ug/l)	MW-02I 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	80.2	26.4 B	11.8 U	NA	70.4 B	NA	NA	48.0 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	47.9	39.9 B	36.9	NA	30.8 B	NA	NA	35.5 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	126	97.2	NA	105	NA	NA	103
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.43 B	0.5 U	0.19 B	0.11 B	0.30 U
Calcium	-	7440-70-2	ug/l	4990	10700	10500	7090	6060	11600	13200	9450
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.7	3.5 U	0.6 U	NA	0.8 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	1.1	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	3.6	1.5 U	1.5 U	NA	5.9 B	NA	NA	1.4 B
Iron	300 ST	7439-89-6	ug/l	249	6.9 B	5.4	207	173	44.3 B	142	99.8 B
Lead	25 ST	7439-92-1	ug/l	3.5	1.4 U	1.1 U	1.2 B	1.7 B	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	685	2670 B	2600	1900 B	1780	3240 B	3320 B	2680 B
Manganese	300 ST	7439-96-5	ug/l	40.9	[illegible]	406	181	[illegible]	[illegible]	[illegible]	295
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	1.1	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	3100	1630 B	1680	1740 B	3600	3070 B	4130 B	1480 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	15300	8700	7580	7370	7100	12300	8740	6460
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.60 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	37	2.2 U	3.6 U	NA	36	NA	NA	9.8 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	289.9	423.9	411.4	388	[illegible]	[illegible]	470	394.8

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 11/11/03 (ug/l)	MW-02I 2/26/04 (ug/l)	MW-02I 5/20/04 (ug/l)	MW-02I 8/20/04 (ug/l)	MW-02I 11/8/04 (ug/l)	MW-02I 2/28/05 (ug/l)	MW-02I 5/26/05 (ug/l)	MW-02I 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	133 B	NA	NA	184 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	31.2 B	NA	NA	39.5 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.33 B	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	39.5 B	NA	NA	58.9 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.41 B	0.3 U	0.36 B	0.43 B	0.53 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	9840	11200	17700	10900	11900	10200	9950	9410
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.7 B	NA	NA	1.5 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	8.3 B	NA	NA	14.3 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	121	94.5 B	177	93.2 B	109	198	67.2 B	93.9 B
Lead	25 ST	7439-92-1	ug/l	1.9 B	1.6 U	3.2	1.9 B	1.1 U	2.4 B	2.3 B	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	2310 B	2400	2980 B	1910 B	1840 B	1910 B	1940 B	1900 B
Manganese	300 ST	7439-96-5	ug/l			266		249	239		
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	2.2 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	1670 B	1760 B	3100 B	1780 B	2390 B	2010 B	1570 B	1340 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.50 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	6510	9210	6970	8040	7660	9060	8630	9060
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	36.4	NA	NA	110	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l		454.5	443	413.2	358	437	396.2	403.9

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 10/27/97 (ug/l)	MW-02D 12/1/00 (ug/l)	MW-02D 1/30/01 (ug/l)	MW-02D 8/21/02 (ug/l)	MW-02D 11/20/02 (ug/l)	MW-02D 3/5/03 (ug/l)	MW-02D 6/3/03 (ug/l)	MW-02D 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	33.5	15.3 B	16	NA	21.9 B	NA	NA	22.3 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	6.9	5.2 B	5	NA	7.4 B	NA	NA	6.0 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	5.1 B	32.9	NA	18 B	NA	NA	22.4 B
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.17 B	0.5 U	0.29 B	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	4750	6070	5720	6040	8290	8530	8370	7610
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.4 U	3.5 U	0.6 U	NA	1.6 B	NA	NA	1.2 B
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	0.7 U	1.5 U	1.5 U	NA	8.7 B	NA	NA	1.4 B
Iron	300 ST	7439-89-6	ug/l	33.2	4.2 B	12.3	139	89.1 B	119	52.6 B	96.2
Lead	25 ST	7439-92-1	ug/l	1 U	1.4 U	1.1 U	0.8 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	2220	2840 B	2680	2600 B	3530 B	3640 B	3610 B	3250 B
Manganese	300 ST	7439-96-5	ug/l	54.8	1.6 B	1.1 U	30.6	11 B	7.3 B	3.4 B	5.9 B
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	1.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	636	740 B	806	741 B	710 B	768 B	895 B	736 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.5 U	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	8120	8460	7560	6780	8170	8210	8650	7640
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.0 B
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	27.5	3.6 B	5.3	NA	57.8	NA	NA	9.9 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	88	5.8	12.3	169.6	100.1	126.3	56	102.1

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 11/11/03 (ug/l)	MW-02D 2/27/04 (ug/l)	MW-02D 5/20/04 (ug/l)	MW-02D 8/20/04 (ug/l)	MW-02D 11/8/04 (ug/l)	MW-02D 2/28/05 (ug/l)	MW-02D 5/26/05 (ug/l)	MW-02D 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	20.7 B	NA	NA	53.8 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	6.9 B	NA	NA	6.7 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	16.7 B	NA	NA	21.2 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.3 U	0.30 U	0.23 U	0.23 U	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	7640	7800	7980	7810	8590	8360	8570	9260
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.5 B	NA	NA	1.2 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	4.2 B	NA	NA	1.2 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	62.4 B	26.8 B	103	56.8 B	46.8 B	64.4 B	48.4 B	98.4 B
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	1.2 U	1.2 U	1.1 U	1.1 U	1.7 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	3340 B	3420 B	3260 B	3250 B	3620 B	3530 B	3580 B	3960 B
Manganese	300 ST	7439-96-5	ug/l	3.7 B	1.2 B	14.9 B	2.6 B	2.8 B	3.1 B	3.4 B	5.6 B
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	697 B	674 B	883 B	730 B	877 B	848 B	734 B	741 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	7590	8450	7760	8290	8840	8540	7380	9170
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	15.2 B	NA	NA	72.3	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	66.1	28	117.9	59.4	49.6	67.5	51.8	104

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-03S 10/30/97 (ug/l)	MW-03S 12/6/00 (ug/l)	MW-03S 2/2/01 (ug/l)	MW-03S 8/22/02 (ug/l)	MW-03S 11/22/02 (ug/l)	MW-03S 3/7/03 (ug/l)	MW-03S 6/3/03 (ug/l)	MW-03S 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	1080	16.5 B	53.7	NA	803	NA	NA	46.0 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[redacted]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	3.2	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	136	125 B	125	NA	176 B	NA	NA	158 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.24	NA	0.80 B	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	128	153	NA	139	NA	NA	222
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.22	0.13 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	50800	51200	57700	67400	92400	112000	84900	91600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	3.1	3.5 U	0.6	NA	2.9 B	NA	NA	1.2 B
Cobalt	-	7440-48-4	ug/l	1.1	0.9 U	1.7 U	NA	13.1 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	3.3	2.6 B	1.5 U	NA	11.5 B	NA	NA	5.2 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.4	1.4 U	1.1 U	0.8 U	2.1 B	1.5 U	1.8 B	0.84 B
Magnesium	35000 GV	7439-95-4	ug/l	7970	7620	8320	9840	16000	21700	14100	14600
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	2.6	1.9 U	1.4 U	NA	23.4 B	NA	NA	2.8 B
Potassium	-	7440-09-7	ug/l	7870	8310	9590	8680	7850	12200	19300	14100
Selenium	10 ST	7782-49-2	ug/l	2.8 U	2.8 B	2 N	NA	6	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.7 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	17600	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	3.7	0.7 U	1.7 U	NA	2.9 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	34	3.5 B	3.6 U	NA	799	NA	NA	57.5
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-03S 11/13/03 (ug/l)	MW-03S 3/2/04 (ug/l)	MW-03S 5/24/04 (ug/l)	MW-03S 8/23/04 (ug/l)	MW-03S 11/10/04 (ug/l)	MW-03S 3/2/05 (ug/l)	MW-03S 5/31/05 (ug/l)	MW-03S 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	57.5 B	NA	NA	121 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	5.1 B	NA	NA	4.6 B	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	147 B	NA	NA	192 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	171 B	NA	NA	161	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.92 B	0.30 U	0.51 B	1.3 B	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	76200	66200	67100	69300	72800	71000	82600	74800
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.9 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	2.1 B	NA	NA	2.1 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.1 U	0.70 U	0.7 U	1.2 U	1.1 U	1.1 U	1.2 U	3.9
Magnesium	35000 GV	7439-95-4	ug/l	11800	9800	10100	9850	10400	10400	13000	10000
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.5 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	15900	12900	10800	12000	12400	13200	13600	16000
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	20.7 B	NA	NA	72.2	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 10/29/97 (ug/l)	MW-04S 12/6/00 (ug/l)	MW-04S 2/1/01 (ug/l)	MW-04S 8/23/02 (ug/l)	MW-04S 11/22/02 (ug/l)	MW-04S 3/6/03 (ug/l)	MW-04S 6/3/03 (ug/l)	MW-04S 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	574	28.8 B	32.4	NA	102 B	NA	NA	27.2 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	11.4	3.7 B	7.8	NA	4.5 U	NA	NA	8.1 B
Barium	1000 ST	7440-39-3	ug/l	441	278	285	NA	316	NA	NA	240
Beryllium	3 GV	7440-41-7	ug/l	0.2	0.12 B	0.18	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	263	296	NA	320	NA	NA	273
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	152000	99400	109000	115000	123000	139000	138000	109000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	1.6	3.5 U	0.6 U	NA	0.92 B	NA	NA	1.0 B
Cobalt	-	7440-48-4	ug/l	2.1	0.9 U	1.7 U	NA	1 U	NA	NA	2.8 B
Copper	200 ST	7440-50-8	ug/l	2.5	1.5 U	2.2	NA	6.7 B	NA	NA	2.7 B
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.0 U	1.4 U	2.8	2.8 B	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	22600	14400	15300	14000	13700	16300	16100	11900
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	4.3 B	NA	NA	4.7 B
Potassium	-	7440-09-7	ug/l	30800	19800	21800	17900	17500	20300	21800	14300
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.3 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	3.2	1.1 B	1.7 U	NA	2.6 B	NA	NA	2.1 B
Zinc	2000 ST	7440-66-6	ug/l	32.3	2.2 U	3.6 U	NA	10 B	NA	NA	14.9 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 11/12/03 (ug/l)	MW-04S 3/2/04 (ug/l)	MW-04S 5/24/04 (ug/l)	MW-04S 8/23/04 (ug/l)	MW-04S 11/9/04 (ug/l)	MW-04S 3/1/05 (ug/l)	MW-04S 5/27/05 (ug/l)	MW-04S 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	43.2 B	NA	NA	93.8 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	11.4	NA	NA	15.8	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	191 B	NA	NA	248	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	261 B	NA	NA	310	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.30 U	0.20 U	2.2 B	0.30 U	1.3 B	2.7 B	0.94 B	0.65 U
Calcium	-	7440-70-2	ug/l	139000	122000	124000	118000	122000	132000	119000	106000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	5 B	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.1 U	0.70 U	0.7 U	3.0 B	1.1 U	1.1 U	1.2 U	2.9 B
Magnesium	35000 GV	7439-95-4	ug/l	18100	13600	14600	13200	13500	15200	13800	12000
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	4.4 B	NA	NA	3.8 B	NA	NA
Potassium	-	7440-09-7	ug/l	20000	17200	16700	19000	18200	21900	20800	14900
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.1 B	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	14.7 B	NA	NA	53.3	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 10/29/97 (ug/l)	MW-04I 12/6/00 (ug/l)	MW-04I 2/1/01 (ug/l)	MW-04I 8/23/02 (ug/l)	MW-04I 11/22/02 (ug/l)	MW-04I 3/6/03 (ug/l)	MW-04I 6/3/03 (ug/l)	MW-04I 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	365	19.9 B	18.7	NA	13.9 B	NA	NA	17.7 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[illegible]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	10.1	14.6	17.1	NA	11.5	NA	NA	17.5
Barium	1000 ST	7440-39-3	ug/l	128	175 B	107	NA	135 B	NA	NA	124 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.14	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	300	285	NA	231	NA	NA	211
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.25 B	0.50 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	53200	92000	62200	41700	85700	85500	101000	90100
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.3 U	3.5 U	0.6 U	NA	1 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	2.5	1.7 B	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	5.2	1.5 U	1.5 U	NA	2.8 B	NA	NA	2.2 B
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	3.7	1.9 B	1.9	0.8 U	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	9580	15700	9960	5690	10700	11100	12800	10400
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	3.9	1.9 U	1.4 U	NA	3.5 B	NA	NA	5.0 B
Potassium	-	7440-09-7	ug/l	69400	21700	19400	10100	14800	15400	18900	13600
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	3.9 B	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.5 U	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	13400	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	4.4	0.7 U	1.7 U	NA	1.8 B	NA	NA	2.0 B
Zinc	2000 ST	7440-66-6	ug/l	96.1	6.8 B	3.6 U	NA	19.3 B	NA	NA	7.1 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 11/12/03 (ug/l)	MW-04I 3/1/04 (ug/l)	MW-04I 5/24/04 (ug/l)	MW-04I 8/23/04 (ug/l)	MW-04I 11/9/04 (ug/l)	MW-04I 3/1/05 (ug/l)	MW-04I 5/27/05 (ug/l)	MW-04I 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	50.8 B	NA	NA	73.0 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	17.4	NA	NA	19.4	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	100 B	NA	NA	189 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.10 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	177 B	NA	NA	291	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	1.4 B	0.30 U	1.0 B	2.1 B	1.2 B	0.65 U
Calcium	-	7440-70-2	ug/l	91200	99100	78500	87100	86700	87700	78000	68800
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]							
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	0.7 U	2.0 B	1.1 U	1.1 U	1.2 U	3.2
Magnesium	35000 GV	7439-95-4	ug/l	10500	10600	8680	9570	10600	12800	11600	9230
Manganese	300 ST	7439-96-5	ug/l	[redacted]							
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.8 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	16000	14000	11700	14500	16500	26000	20200	14400
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]							
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	26.2 B	NA	NA	46.3	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]							

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 10/28/97 (ug/l)	MW-04D 12/6/00 (ug/l)	MW-04D 2/1/01 (ug/l)	MW-04D 8/23/02 (ug/l)	MW-04D 11/21/02 (ug/l)	MW-04D 3/7/03 (ug/l)	MW-04D 6/3/03 (ug/l)	MW-04D 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	52.9	17.7 B	15.7	NA	29.4 B	NA	NA	27.3 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	7.6	11.9	14.4	NA	7.2 B	NA	NA	13.7
Barium	1000 ST	7440-39-3	ug/l	186	249	224	NA	90.8 B	NA	NA	108 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.16	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	291	326	NA	170	NA	NA	120
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.37	0.1 B	0.5 U	0.1 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	56100	60000	59100	30800	24700	24000	27500	30900
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.4 U	3.5 U	0.6 U	NA	1.3 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	14.9	17.7 B	14.4	NA	4.3 B	NA	NA	4.4 B
Copper	200 ST	7440-50-8	ug/l	0.7 U	1.5 U	1.5 U	NA	3.4 B	NA	NA	1.6 B
Iron	300 ST	7439-89-6	ug/l	66000	75500	69500	24500	20400	24800	28300	34500
Lead	25 ST	7439-92-1	ug/l	1 U	4	3.6	0.88 B	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	8830	11500	11100	5380	4060 B	4080 B	4550 B	4840 B
Manganese	300 ST	7439-96-5	ug/l	1700	2900	2470	589	690	725	864	829
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	7.4	7.1 B	5.4	NA	2.3 B	NA	NA	2.6 B
Potassium	-	7440-09-7	ug/l	14000	14900	16200	10700	8650	8970	10500	8800
Selenium	10 ST	7782-49-2	ug/l	2.8 U	2.2 B	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.3 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	21100	26500	27500	15300	13700	14000	14900	13300
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.82 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	85.9	5.9 B	3.6 U	NA	16.7 B	NA	NA	22.8
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	67700	78400	71970	25089	21090	25525	29064	35329

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 11/11/03 (ug/l)	MW-04D 3/1/04 (ug/l)	MW-04D 5/24/04 (ug/l)	MW-04D 8/23/04 (ug/l)	MW-04D 11/9/04 (ug/l)	MW-04D 3/1/05 (ug/l)	MW-04D 5/27/05 (ug/l)	MW-04D 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	30.3 B	NA	NA	94.5 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	16.8	NA	NA	20.3	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	135 B	NA	NA	172 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.35 B	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	96.7 B	NA	NA	161	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	1.5 B	0.30 U	0.84 B	2.6 B	1.3 B	0.65 U
Calcium	-	7440-70-2	ug/l	34000	43400	45500	63500	62500	60600	58300	56800
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	4.7 B	NA	NA	5.0 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.9 U	NA	NA	1.3 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	0.7 U	2.6 B	1.1 U	1.1 U	1.2 U	4.4
Magnesium	35000 GV	7439-95-4	ug/l	5720	7110	7730	9970	9860	9350	8950	8050
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.5 B	NA	NA	2.0 B	NA	NA
Potassium	-	7440-09-7	ug/l	11000	10500	10400	13400	12500	13200	10800	8460
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	13900	16400	15000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	3.1 B	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	18 B	NA	NA	63.6	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 10/29/97 (ug/l)	MW-05S 12/8/00 (ug/l)	MW-05S 2/2/01 (ug/l)	MW-05S 8/23/02 (ug/l)	MW-05S 11/22/02 (ug/l)	MW-05S 3/7/03 (ug/l)	MW-05S 6/5/03 (ug/l)	MW-05S 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	121	234	313	NA	540	NA	NA	534
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[redacted]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	6.0 B
Barium	1000 ST	7440-39-3	ug/l	296	214	206	NA	164 B	NA	NA	326
Beryllium	3 GV	7440-41-7	ug/l	0.13	0.23	0.3	NA	0.4 U	NA	NA	0.59 B
Boron	1000 ST	7440-42-8	ug/l	NA	254	226	NA	153	NA	NA	376
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	105000	93500	90500	71800	74500	74600	78100	102000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	6.5	3.5 U	1.7	NA	6 U	NA	NA	1.5 B
Cobalt	-	7440-48-4	ug/l	1.3	0.9 U	1.7 U	NA	1 U	NA	NA	7.4 B
Copper	200 ST	7440-50-8	ug/l	0.7 U	1.5 U	1.5 U	NA	5.4 B	NA	NA	2.9 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.0 U	2.9	2.5	0.80 U	1.7 B	1.5 U	1.6 B	1.1 B
Magnesium	35000 GV	7439-95-4	ug/l	17900	13300	12900	8580	7910	9790	10100	14700
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	4.6	1.9 U	1.4 U	NA	8.0 B	NA	NA	5.3 B
Potassium	-	7440-09-7	ug/l	20600	14000	14300	10600	9940	11500	11900	13000
Selenium	10 ST	7782-49-2	ug/l	2.8 U	3.1	2.4	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	2.1	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.8	2.5	2.6	NA	3.6 B	NA	NA	1.9 B
Zinc	2000 ST	7440-66-6	ug/l	25	2.2 U	3.6 U	NA	33.9	NA	NA	112
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 11/12/03 (ug/l)	MW-05S 3/2/04 (ug/l)	MW-05S 5/25/04 (ug/l)	MW-05S 8/23/04 (ug/l)	MW-05S 11/10/04 (ug/l)	MW-05S 3/2/05 (ug/l)	MW-05S 5/31/05 (ug/l)	MW-05S 8/29/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	721	NA	NA	214	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	5 B	NA	NA	5.1 B	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	163 B	NA	NA	251	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.68 B	NA	NA	0.41 B	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	122 B	NA	NA	158	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.30 U	0.20 U	1.2 B	0.30 U	0.54 B	1.5 B	1.0 B	0.65 U
Calcium	-	7440-70-2	ug/l	102000	69500	49800	95800	86300	66900	88000	110000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	2.5 B	NA	NA	0.91 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	14.7 B	NA	NA	11.3 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.96 B	NA	NA	1.2 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.1 U	0.70 U	0.7 U	2.1 B	1.1 U	1.1 U	1.2 U	3.4
Magnesium	35000 GV	7439-95-4	ug/l	14200	9650	7280	12100	10900	9740	12200	14400
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	7.7 B	NA	NA	7.4 B	NA	NA
Potassium	-	7440-09-7	ug/l	14900	12500	8370	17000	14600	11900	16500	14400
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	18600	14600	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	2 B	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	25 B	NA	NA	62.9	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 10/29/97 (ug/l)	MW-05I 12/8/00 (ug/l)	MW-05I 2/2/01 (ug/l)	MW-05I 8/23/02 (ug/l)	MW-05I 11/22/02 (ug/l)	MW-05I 3/7/03 (ug/l)	MW-05I 6/3/03 (ug/l)	MW-05I 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	330	12.2 U	15.8	NA	287	NA	NA	143 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	4.3	3.5	5.5	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	17.8	50.4	57.7	NA	43.2 B	NA	NA	50.5 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	176	138	NA	86 B	NA	NA	99.8 B
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.36	0.1 U	0.5 U	0.1 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	8280	39200	45300	28100	34500	36700	36000	34500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	3.3	3.5 U	0.6 U	NA	2.1 B	NA	NA	1.4 B
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	2.5	1.5 U	1.5 U	NA	2.3 B	NA	NA	3.8 B
Iron	300 ST	7439-89-6	ug/l	7250	14600	15400	7070	9080	10300	10900	4950
Lead	25 ST	7439-92-1	ug/l	3	1.4 U	1.1 U	3.5	2.9 B	1.5 U	1.5 U	1.6 B
Magnesium	35000 GV	7439-95-4	ug/l	1260	6780	8460	5000 B	5940	6570	6110	5460
Manganese	300 ST	7439-96-5	ug/l	1080	1160	1380	1130	1650	1270	1240	1170
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	3.6	1.9 U	1.4 U	NA	1.8 B	NA	NA	1.6 B
Potassium	-	7440-09-7	ug/l	4820	14900	15300	9360	8270	14400	15400	12900
Selenium	10 ST	7782-49-2	ug/l	2.8 U	2.1	1.6	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.1	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	12500	20100	23100	17500	25600	23900	23000	20700
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.67 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	95.3	4.6	3.6 U	NA	57.4	NA	NA	149
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	8330	15760	16780	8200	10230	11570	12270	6160

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 11/12/03 (ug/l)	MW-05I 3/2/04 (ug/l)	MW-05I 5/25/04 (ug/l)	MW-05I 8/23/04 (ug/l)	MW-05I 11/10/04 (ug/l)	MW-05I 3/2/05 (ug/l)	MW-05I 5/31/05 (ug/l)	MW-05I 8/29/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	49 B	NA	NA	98.6 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.3 B	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	7 B	NA	NA	5.6 B	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	83.3 B	NA	NA	85.6 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	139 B	NA	NA	132	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.56 B	0.30 U	0.23 U	0.46 B	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	43700	48100	49000	40200	55000	53400	51600	59200
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.1 U	0.70 U	0.7 U	1.2 U	1.1 U	1.1 U	1.2 U	2.7 B
Magnesium	35000 GV	7439-95-4	ug/l	7340	8540	9360	6720	9750	9810	9170	8740
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.1 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	22300	25500	21500	20300	23900	22300	19600	16300
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	24.9 B	NA	NA	52.8	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 10/29/97 (ug/l)	MW-05D 12/8/00 (ug/l)	MW-05D 2/2/01 (ug/l)	MW-05D 8/23/02 (ug/l)	MW-05D 11/22/02 (ug/l)	MW-05D 3/7/03 (ug/l)	MW-05D 6/3/03 (ug/l)	MW-05D 8/25/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	241	12.2 U	11.8 U	NA	365	NA	NA	20.8 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	117	206	190	NA	53.9 B	NA	NA	28.3 B
Beryllium	3 GV	7440-41-7	ug/l	0.17	0.1 U	0.17	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	324	292	NA	83.1 B	NA	NA	57.8 B
Cadmium	5 ST	7440-43-9	ug/l	0.3	0.77	0.69	0.30 B	0.5 U	0.10 U	0.25 B	0.30 U
Calcium	-	7440-70-2	ug/l	47300	107000	99900	39500	36900	33700	27800	21600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	2.9	3.5 U	0.85	NA	2.3 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	4.6	5.3	4.6	NA	1.6 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	4.8	6.3	4.6	NA	4.9 B	NA	NA	1.2 B
Iron	300 ST	7439-89-6	ug/l	[illegible]	101	23.2	[illegible]	[illegible]	122	60.6 B	53.8 B
Lead	25 ST	7439-92-1	ug/l	1.2	2.1	1.1 U	0.80 U	8.1	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	12400	26200	23300	7740	7250	8000	6820	4800 B
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	5.1	7.7	6.7	NA	3.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	20200	33100	33000	13500	11100	9080	8860	5700
Selenium	10 ST	7782-49-2	ug/l	2.8 U	9.3	7.4	NA	3.6 B	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	5.5	2.9	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19400	13700
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	4.6 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	1.1 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	283	18.7	6	NA	193	NA	NA	12 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 11/12/03 (ug/l)	MW-05D 3/2/04 (ug/l)	MW-05D 5/25/04 (ug/l)	MW-05D 8/23/04 (ug/l)	MW-05D 11/10/04 (ug/l)	MW-05D 3/2/05 (ug/l)	MW-05D 5/31/05 (ug/l)	MW-05D 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	32 B	NA	NA	80.8 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	2.1 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	24.3 B	NA	NA	28.7 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.14 B	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	38 B	NA	NA	49.8 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.25 B	0.5 B	0.30 B	0.23 B	0.32 B	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	20400	26000	17600	19900	20800	21800	19400	20100
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.9 B	NA	NA	1.4 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 B	NA	NA	1.8 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	1.3 B	NA	NA	1.9 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	257	[redacted]	99.9 B	35.6 B	32.8 B	43.6 B	6.7 B	61.2 B
Lead	25 ST	7439-92-1	ug/l	2.5 B	1.5 B	1.1 B	1.2 U	1.4 B	1.1 U	1.2 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	4110 B	5030	3630 B	3700 B	4040 B	4190 B	3730 B	3610 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	2.1 B	NA	NA	1.7 B	NA	NA
Potassium	-	7440-09-7	ug/l	6410	8980	5710	6430	6870	6490	5640	4490 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.88 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	12500	[redacted]	12800	14200	14100	14800	13500	13300
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	14.7 B	NA	NA	45.3	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 10/28/97 (ug/l)	MW-06S 12/5/00 (ug/l)	MW-06S 2/1/01 (ug/l)	MW-06S 8/21/02 (ug/l)	MW-06S 11/20/02 (ug/l)	MW-06S 3/5/03 (ug/l)	MW-06S 6/5/03 (ug/l)	MW-06S 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	96.2	45.5 B	12.1	NA	143 B	NA	NA	77.2 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[illegible]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	9.6	3.2 B	8	NA	5.2 B	NA	NA	6.0 B
Barium	1000 ST	7440-39-3	ug/l	306	121 B	101	NA	121 B	NA	NA	219
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	162	183	NA	167	NA	NA	362
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.17 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	131000	64500	53100	61000	59500	571000	62400	114000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	1.3	3.5 U	0.6 U	NA	1.9 B	NA	NA	1.8 B
Cobalt	-	7440-48-4	ug/l	2.2	0.9 U	1.7 U	NA	2.9 B	NA	NA	5.0 B
Copper	200 ST	7440-50-8	ug/l	0.7 U	1.5 U	1.5 U	NA	2.9 B	NA	NA	2.9 B
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.0 U	1.4 B	1.9	1.3 B	1.4 U	1.5 U	1.5 U	0.86 B
Magnesium	35000 GV	7439-95-4	ug/l	16400	6280	4680	5550	5080	5480	6040	12300
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	2.9 B	NA	NA	4.8 B
Potassium	-	7440-09-7	ug/l	18200	8250	8050	7460	6980	7490	8980	10900
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.63 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	18900	12800	13200	14900	13500	10300	13900	19100
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	2 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	14.2	2.2 U	3.6 U	NA	6.1 B	NA	NA	67.6
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 11/11/03 (ug/l)	MW-06S 2/27/04 (ug/l)	MW-06S 5/24/04 (ug/l)	MW-06S 8/20/04 (ug/l)	MW-06S 11/9/04 (ug/l)	MW-06S 3/1/05 (ug/l)	MW-06S 5/25/05 (ug/l)	MW-06S 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	34.7 B	NA	NA	69.1 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	6.4 B	NA	NA	7.3 B	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	125 B	NA	NA	137 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	279 B	NA	NA	203	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.61 B	0.30 U	0.57 B	1.1 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	78800	96000	69000	107000	63700	58500	71580	96900
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.2 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	3 B	NA	NA	2.3 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	0.7 U	1.5 B	1.1 U	1.1 U	1.9 B	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	8330	10800	9770	12800	6250	6490	11390	11800
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	213	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.6 B	NA	NA	1.5 B	NA	NA
Potassium	-	7440-09-7	ug/l	9660	13400	13200	15100	11200	11800	15740	11800
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.84 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	17700	10400	[redacted]	[redacted]	[redacted]	8140	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	8.4 B	NA	NA	49.9	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 10/28/97 (ug/l)	MW-06I 12/5/00 (ug/l)	MW-06I 2/1/01 (ug/l)	MW-06I 8/21/02 (ug/l)	MW-06I 11/21/02 (ug/l)	MW-06I 3/5/03 (ug/l)	MW-06I 6/5/03 (ug/l)	MW-06I 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	140	17.6 B	16.4	NA	38.8 B	NA	NA	14.2 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	4.3	2.5 U	2.6	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	107	88.4 B	91.4	NA	39.9 B	NA	NA	51.5 B
Beryllium	3 GV	7440-41-7	ug/l	0.1	0.1 U	0.14	NA	0.4 U	NA	NA	0.2 U
Boron	1000 ST	7440-42-8	ug/l	NA	149	186	NA	209	NA	NA	357
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.29 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	33300	36900	36000	19700	19100	20500	20300	22400
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.73	3.5 U	0.6 U	NA	1.5 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	6.4	3 B	2.3	NA	1.1 B	NA	NA	2.5 B
Copper	200 ST	7440-50-8	ug/l	3.9	2.6 B	1.5 U	NA	9.6 B	NA	NA	2.2 B
Iron	300 ST	7439-89-6	ug/l	[redacted]							
Lead	25 ST	7439-92-1	ug/l	1	1.4 U	1.1 U	1.9 B	1.4 U	1.5 U	1.9 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	3810	4020 B	3680	1890 B	1980 B	1790 B	1970 B	2000 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]				277		278	
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	2	1.9 U	1.4 U	NA	2.7 B	NA	NA	1.5 B
Potassium	-	7440-09-7	ug/l	7680	8540	9670	5500	4310 B	5080	5200	5290
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.75 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	14000	19600	17400	10700	9230	9870	10000	11400
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.62 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	61.4	5 B	3.6 U	NA	36.6	NA	NA	9.3 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]							

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 11/11/03 (ug/l)	MW-06I 2/27/04 (ug/l)	MW-06I 5/24/04 (ug/l)	MW-06I 8/20/04 (ug/l)	MW-06I 11/9/04 (ug/l)	MW-06I 3/1/05 (ug/l)	MW-06I 5/27/05 (ug/l)	MW-06I 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	59 B	NA	NA	88.6 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.7 B	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	32.7 B	NA	NA	65.7 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	398 B	NA	NA	223	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.2 U	0.30 U	0.23 U	0.23 U	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	21600	19700	18700	19600	29600	28600	24400	20100
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.69 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.2 B	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	9.3 B	NA	NA	7.2 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	0.7 U	1.2 U	1.7 B	1.1 U	1.2 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	2100 B	1930 B	2200 B	2020 B	3370 B	3770 B	2480 B	1680 B
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	229	[illegible]	248	[illegible]	262
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	4.5 B	NA	NA	2.5 B	NA	NA
Potassium	-	7440-09-7	ug/l	5990	4200 B	4520 B	4420 B	5450	5830	3870 B	3730 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	1.4 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	9000	9820	8590	13600	19500	[illegible]	11700	13300
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	26.8 B	NA	NA	43.5	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 10/28/97 (ug/l)	MW-06D 12/5/00 (ug/l)	MW-06D 1/31/01 (ug/l)	MW-06D 8/22/02 (ug/l)	MW-06D 11/20/02 (ug/l)	MW-06D 3/5/03 (ug/l)	MW-06D 6/5/03 (ug/l)	MW-06D 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	320	12.2 U	14.9	NA	19.3 B	NA	NA	17.2 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[illegible]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	3.2	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	15.1	23.8 B	20.1	NA	19 B	NA	NA	20.4 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	44.7 B	63.6	NA	63.2 B	NA	NA	54.9 B
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.16 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	5070	4640 B	4290	7740	6460	7600	6200	5050
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	1.3	3.5 U	0.6 U	NA	1.5 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	6.6	5.7 B	5.3	NA	6.2 B	NA	NA	5.3 B
Copper	200 ST	7440-50-8	ug/l	2.5	2.1 B	1.5 U	NA	6.6 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	25 ST	7439-92-1	ug/l	1.0 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	2.6 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	2040	1930 B	1800	4020 B	3300 B	3580 B	2740 B	2080 B
Manganese	300 ST	7439-96-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	3.3	2.3 B	2	NA	5.2 B	NA	NA	2.8 B
Potassium	-	7440-09-7	ug/l	1140	1220 B	1260	1560 B	1180 B	1540 B	1680 B	1140 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	4.3 B	2.9	NA	5.2	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	2.4 B	1.8	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	11600	[illegible]	17700	11800	11000	11400	10900	8960
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.63 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	75.1	3.8 B	3.6 U	NA	31.8	NA	NA	8.8 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES:

NS: Not sampled

[illegible]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 11/11/03 (ug/l)	MW-06D 2/27/04 (ug/l)	MW-06D 5/24/04 (ug/l)	MW-06D 8/20/04 (ug/l)	MW-06D 11/9/04 (ug/l)	MW-06D 3/1/05 (ug/l)	MW-06D 5/27/05 (ug/l)	MW-06D 8/26/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	87.6 B	NA	NA	105 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.4 B	NA	NA	3.0 B	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	4 B	NA	NA	23.6 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.1 U	NA	NA	0.34 B	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	55.8 B	NA	NA	57.8 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.23 B	0.30 U	0.23 U	0.56 B	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	5600	5820	6590	5290	5950	5600	5050	4940 B
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.96 B	NA	NA	2.2 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	0.9 B	NA	NA	5.9 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	5.8 B	NA	NA	1.3 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	2.4 B	1.6 U	1.8 B	1.2 U	2.2 B	1.1 U	1.2 U	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	2390 B	2470 B	2530 B	2380 B	2490 B	2520 B	2440 B	2110 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	5.7 B	NA	NA	4.2 B	NA	NA
Potassium	-	7440-09-7	ug/l	1930 B	1340 B	1570 B	1440 B	1660 B	1590 B	1610 B	1180 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	1.8 U	NA	NA	3.0 B	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	1.2 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	8940	9980	7930	10100	9390	10100	10100	10200
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	45.8	NA	NA	69.2	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 10/28/97 (ug/l)	MW-07I 12/1/00 (ug/l)	MW-07I 1/31/01 (ug/l)	MW-07I 8/21/02 (ug/l)	MW-07I 11/20/02 (ug/l)	MW-07I 3/5/03 (ug/l)	MW-07I 6/3/03 (ug/l)	MW-07I 8/22/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	90.1	16 B	23.6	NA	37.1 B	NA	NA	13.9
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	32.2	39.6 B	29.3	NA	15.4 B	NA	NA	21.6 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	33 B	45.4	NA	30.1 B	NA	NA	38.1 B
Cadmium	5 ST	7440-43-9	ug/l	0.47	0.4 U	0.2 U	0.29 B	0.5 U	0.12 B	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	8890	20000	14700	9820	7360	8670	8420	8160
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.8	3.5 U	0.6 U	NA	0.8 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	2.3	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	1.6	1.5 U	1.5 U	NA	3.9 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	26.2 B	35.2	[redacted]	172	53.9 B	41.4 B	45.0 B
Lead	25 ST	7439-92-1	ug/l	2.8	1.4 U	1.1 U	1.6 B	1.5 B	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	1300	4310 B	3080	1630 B	1150 B	1470	1410 B	1060 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.8	1.9 U	1.4 U	NA	1.1 U	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	3840	2590 B	2460	2330B	2000 B	2020 B	2580 B	2100 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.8	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20000 ST	7440-23-5	ug/l	6950	[redacted]	19600	10700	7960	9570	[redacted]	10200
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	51.7	3.8 B	3.6 U	NA	27.9	NA	NA	8.4 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 11/11/03 (ug/l)	MW-07I 2/27/04 (ug/l)	MW-07I 5/20/04 (ug/l)	MW-07I 8/20/04 (ug/l)	MW-07I 11/9/04 (ug/l)	MW-07I 2/28/05 (ug/l)	MW-07I 5/27/05 (ug/l)	MW-07I 8/24/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	16.3 U	NA	NA	77.4 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	34.3 B	NA	NA	29.3 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	28.9 B	NA	NA	41.6 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.36 B	0.3 U	0.30 U	0.24 B	0.26 B	0.37 U	0.65 U
Calcium	-	7440-70-2	ug/l	7020	12400	13300	10800	12200	12600	13900	17300
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	1.2 B	NA	NA	2.5 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	4.2 B	NA	NA	1.4 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	172	55.0 B	65.2 B	78.6 B	85.5 B	68.8 B	51.6 B	136
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	1.2 U	1.2 U	1.3 B	1.1 B	1.2 U	2.2 B
Magnesium	35000 GV	7439-95-4	ug/l	1290 B	1960 B	2150 B	1660 B	1940 B	2040 B	2310 B	2340 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	1730 B	2600 B	2450 B	3470 B	3100 B	2790 B	2660 B	2080 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 B	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	7950	13200	15700	18200	16500	16600	16500	15700
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	20.4 B	NA	NA	47.7	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 10/31/97 (ug/l)	MW-11S 12/13/00 (ug/l)	MW-11S 2/7/01 (ug/l)	MW-11S 8/22/02 (ug/l)	MW-11S 11/21/02 (ug/l)	MW-11S 3/6/03 (ug/l)	MW-11S 6/4/03 (ug/l)	MW-11S 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	703	31.7	47.7	NA	127 B	NA	NA	17.4 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	30.5	27.3	24.1	NA	28.3 B	NA	NA	8.8 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	635	630	NA	206	NA	NA	160
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	39100	58600	53800	46600	51800	51500	78300	9900
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.73	3.5 U	9.8	NA	38.9	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	2.1	1.4	1.8	NA	1.8 B	NA	NA	18.2 B
Copper	200 ST	7440-50-8	ug/l	3.2	3.2	3	NA	2.9 B	NA	NA	1.8 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	45.6	65.1	[redacted]	[redacted]	271	193	107
Lead	25 ST	7439-92-1	ug/l	1 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 B	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	4000	6250	5770	4090 B	5250	5880	7590	1750 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	2.6	3.1	3.3	NA	3.9 B	NA	NA	39.3 B
Potassium	-	7440-09-7	ug/l	8620	9070	7980	6970	6570	9540	15100	1390 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	3	3	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	3.6	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	15000	16700	[redacted]	[redacted]	13800
Thallium	0.5 GV	7440-28-0	ug/l	[redacted]	2.3 U	2.8 U	NA	4.2 U	NA	NA	[redacted]
Vanadium	-	7440-62-2	ug/l	1.8	0.98	1.7 U	NA	0.97 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	12.7	2.2 U	3.6 U	NA	15.2 B	NA	NA	6.6 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 11/13/03 (ug/l)	MW-11S 3/1/04 (ug/l)	MW-11S 5/21/04 (ug/l)	MW-11S 8/24/04 (ug/l)	MW-11S 11/11/04 (ug/l)	MW-11S 2/24/05 (ug/l)	MW-11S 5/26/05 (ug/l)	MW-11S 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	39.9 B	NA	NA	153 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	31.4 B	NA	NA	28.8 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	176 B	NA	NA	324	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.3 U	0.20 U	0.23 U	0.23 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	66600	94900	53300	63600	72800	73000	63500	58000
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	[redacted]	NA	NA	36.5	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.8 B	NA	NA	2.8 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	8 B	NA	NA	5.9 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	[redacted]	[redacted]	[redacted]	40.4 B	67.9 B	[redacted]	[redacted]	160
Lead	25 ST	7439-92-1	ug/l	1.1 U	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	3.4	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	5100	7510	5430	5180	5330	6110	5590	4930 B
Manganese	300 ST	7439-96-5	ug/l	207	172	[redacted]	239	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	10.2 B	NA	NA	5.5 B	NA	NA
Potassium	-	7440-09-7	ug/l	15100	13700	12000	15100	13000	12700	9800	9520
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.3 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	3.9 B	NA	NA	46.3	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	279.4	386.9	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 10/31/97 (ug/l)	MW-11I 12/13/00 (ug/l)	MW-11I 2/7/01 (ug/l)	MW-11I 8/22/02 (ug/l)	MW-11I 11/21/02 (ug/l)	MW-11I 3/6/03 (ug/l)	MW-11I 6/4/03 (ug/l)	MW-11I 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	113	22.3	11.8 U	NA	32.8 B	NA	NA	23.8 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	22.2	13.1	10.3	NA	12.3 B	NA	NA	46.1 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	98.2	84	NA	207	NA	NA	124
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.23	0.20 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	10200	9570	9150	8810	15000	15400	16400	77300
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.4 U	3.5 U	0.6 U	NA	2.2 B	NA	NA	157
Cobalt	-	7440-48-4	ug/l	4.7	4	3.2	NA	5 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	3.1	2.4	1.5 U	NA	2.8 B	NA	NA	7.7 B
Iron	300 ST	7439-89-6	ug/l	191	24.1	10.2	513	130	63.3 B	58 B	908
Lead	25 ST	7439-92-1	ug/l	1.7 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	6510	2670	2670	2620 B	3740 B	3120 B	3180 B	6750
Manganese	300 ST	7439-96-5	ug/l	245	1590	1340	974	327	1000	1500	248
Mercury	0.7 ST	7439-97-6	ug/l	0.3 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	4.3	3.5	2.5	NA	8.4 B	NA	NA	14.7 B
Potassium	-	7440-09-7	ug/l	3870	2690	2270	1640 B	1740 B	1830 B	2050 B	14700
Selenium	10 ST	7782-49-2	ug/l	8.4 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	2.8 U	1.7	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	11100	13200	10400	6680	9510	11400	12600	19100
Thallium	0.5 GV	7440-28-0	ug/l	2.3 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	2.6 U	0.95	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	100	5.4	4.1	NA	51.4	NA	NA	8.6
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	436	1614.1	1350.2	707	457	1063.3	1558	1156

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 11/13/03 (ug/l)	MW-11I 3/1/04 (ug/l)	MW-11I 5/21/04 (ug/l)	MW-11I 8/24/04 (ug/l)	MW-11I 11/11/04 (ug/l)	MW-11I 2/24/05 (ug/l)	MW-11I 5/26/05 (ug/l)	MW-11I 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	16.3 U	NA	NA	384	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	8.8 B	NA	NA	9.8 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	148 B	NA	NA	327	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.29 B	0.3 U	0.23 B	0.26 B	0.78 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	7960	16400	14000	12000	12400	15000	15200	10900
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.6 U	NA	NA	1.9 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	25.9 B	NA	NA	26.9 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.8 B	NA	NA	3.1 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	56.5 B	31.2 B	29.7 B	26.2 B	30 B	[redacted]	25.6 B	53.4 B
Lead	25 ST	7439-92-1	ug/l	1.2 B	1.6 U	1.2 U	0.70 U	1.1 U	2.2 B	2.4 B	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	1400 B	2840 B	2480 B	2300 B	2250 B	2550 B	2860 B	2140 B
Manganese	300 ST	7439-96-5	ug/l	247	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	33.8 B	NA	NA	15.4 B	NA	NA
Potassium	-	7440-09-7	ug/l	1420 B	1690 B	1300 B	1720 B	1510 B	1490 B	1500 B	1160 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.6 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.8 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	13900	14400	6370	7180	8760	9660	12300	11900
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	4.7 B	NA	NA	76.9	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	303.5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 10/31/97 (ug/l)	MW-11D 12/13/00 (ug/l)	MW-11D 2/7/01 (ug/l)	MW-11D 8/22/02 (ug/l)	MW-11D 11/21/02 (ug/l)	MW-11D 3/6/03 (ug/l)	MW-11D 6/4/03 (ug/l)	MW-11D 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	473	578	581	NA	717	NA	NA	629
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	27.8	34	31.9	NA	37.1 B	NA	NA	38.4 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.22	0.13	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	42.2	32.6	NA	311	NA	NA	144
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.22	0.28 B	0.5 U	0.10 U	0.11 B	0.30 U
Calcium	-	7440-70-2	ug/l	7300	4290	5130	7280	6940	5900	6120	6990
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.43	3.5 U	1.6	NA	1.6 B	NA	NA	1.3 B
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	0.7 U	2.3	1.5 U	NA	1.9 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	ug/l	153	16.7	30.6	536	261	155	59.9 B	43.5 B
Lead	25 ST	7439-92-1	ug/l	1 U	1.4 U	1.1 U	2.0 B	1.4 B	1.5 U	1.5 U	0.8 U
Magnesium	35000 GV	7439-95-4	ug/l	1330	1340	1440	1480 B	1810 B	1580 B	1650 B	1940 B
Manganese	300 ST	7439-96-5	ug/l	74.6	76.7	83.5	308	188	143	144	178
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	2.1	5.3	5.8	NA	12 B	NA	NA	12.4 B
Potassium	-	7440-09-7	ug/l	10000	6950	7120	2530 B	5190	5200	6460	5530
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	2	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.2	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	8050	7840	7610	6010	9640	9940	10900	10500
Thallium	0.5 GV	7440-28-0	ug/l	2.7	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.4	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	19	2.8	13.6	NA	21	NA	NA	6.0 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	227.6	93.4	114.1	844	449	298	203.9	221.5

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 11/13/03 (ug/l)	MW-11D 3/1/04 (ug/l)	MW-11D 5/21/04 (ug/l)	MW-11D 8/24/04 (ug/l)	MW-11D 11/11/04 (ug/l)	MW-11D 2/24/05 (ug/l)	MW-11D 5/26/05 (ug/l)	MW-11D 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	1250	NA	NA	1420	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	47.4 B	NA	NA	55.2 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.22 B	NA	NA	0.29 B	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	61 B	NA	NA	65.4 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.22 B	0.3 U	0.57 B	0.23 U	2.8 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	7920	8560	11800	14100	8100	11200	8680	7570
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	2.7 B	NA	NA	2.6 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.3 B	NA	NA	2.4 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	162	38.0 B	[redacted]	[redacted]	97.7 B	[redacted]	268	145
Lead	25 ST	7439-92-1	ug/l	1.2 B	1.6 U	4.2	8.8	1.1 U	3.4	2.0 B	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	2140 B	2330 B	2080 B	2650 B	2050 B	2700 B	2150 B	1940 B
Manganese	300 ST	7439-96-5	ug/l	171	227	233	218	220	290	269	261
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	14 B	NA	NA	17.1 B	NA	NA
Potassium	-	7440-09-7	ug/l	7020	7170	6450	8810	8390	6750	5690	4900 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.76 B	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	11000	13300	10600	11700	13000	15800	11000	11200
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	2.1 B	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	13 B	NA	NA	94	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	333	265	[redacted]	[redacted]	317.7	[redacted]	[redacted]	406

NOTES:

NS: Not sampled

[redacted] : Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 10/31/97 (ug/l)	MW-12S 12/7/00 (ug/l)	MW-12S 2/5/01 (ug/l)	MW-12S 8/22/02 (ug/l)	MW-12S "F" 8/22/02 (ug/l)	MW-12S 11/21/02 (ug/l)	MW-12S 3/6/03 (ug/l)	MW-12S 6/4/03 (ug/l)	MW-12S 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	275	135 B	109	NA	NA	182 B	NA	NA	13.9 U
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	24.7	35.5 B	32.6	NA	NA	32.7 B	NA	NA	29.1 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	102	108	NA	NA	94.5 B	NA	NA	103
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	32500	33500	38700	45800	45600	42500	40400	28700	46600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	8.3	8.7 B	3	NA	NA	[redacted]	NA	NA	9.5 B
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	0.7 U	3.2 B	1.5 U	NA	NA	2.8 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	170	88.4	[redacted]	[redacted]	[redacted]	231	81.8 B	63.5 B
Lead	25 ST	7439-92-1	ug/l	1.0 U	1.4 U	1.1 U	2.9 B	0.8 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	1730	1990 B	2280	2530 B	2430 B	2080 B	2070 B	1720 B	2470 B
Manganese	300 ST	7439-96-5	ug/l	29.2	45	14.1	247	36.2	20.3	45.8	4.8 B	3.4 B
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	3.5 B	1.4 U	NA	NA	2.7 B	NA	NA	2.6 B
Potassium	-	7440-09-7	ug/l	14700	14900	15400	14400	14200	10700	13500	9400	10700
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.5 U	1.6 U	NA	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	17800	18000	[redacted]	[redacted]	[redacted]	14300	[redacted]	[redacted]	16200
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.98 B	1.7 U	NA	NA	1.6 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	15	2.2 U	3.6 U	NA	NA	13.9 B	NA	NA	5.3 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	355.2	215	102.5	[redacted]	[redacted]	[redacted]	276.8	86.6	66.9

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

"F": Filterd by lab for dissolved metals

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 11/13/03 (ug/l)	MW-12S 3/1/04 (ug/l)	MW-12S 5/21/04 (ug/l)	MW-12S 8/24/04 (ug/l)	MW-12S 11/11/04 (ug/l)	MW-12S 2/24/05 (ug/l)	MW-12S 5/26/05 (ug/l)	MW-12S 8/25/05 (ug/l)	MW-12S (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	22.3 B	NA	NA	79.2 B	NA	NA	
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA	
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA	
Barium	1000 ST	7440-39-3	ug/l	NA	NA	26.8 B	NA	NA	40 B	NA	NA	
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA	
Boron	1000 ST	7440-42-8	ug/l	NA	NA	57.3 B	NA	NA	66.5 B	NA	NA	
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.3 U	0.20 U	0.23 U	0.23 U	0.65 U	0.65 U	
Calcium	-	7440-70-2	ug/l	43000	46700	36300	46000	22700	63700	34700	32900	
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA	
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	41.6	NA	NA	36.8	NA	NA	
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA	
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.9 B	NA	NA	3.5 B	NA	NA	
Iron	300 ST	7439-89-6	ug/l	40.6 B	[redacted]	[redacted]	203	[redacted]	287	[redacted]	[redacted]	
Lead	25 ST	7439-92-1	ug/l	1.6 B	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	2.8 B	1.7 U	
Magnesium	35000 GV	7439-95-4	ug/l	2260 B	2580 B	1880 B	2820 B	1180 B	3990 B	1840 B	1660 B	
Manganese	300 ST	7439-96-5	ug/l	6.2 B	33.7	22.8	6.0 B	7.4 B	10.4 B	9.2 B	30.4	
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA	
Nickel	100 ST	7440-02-0	ug/l	NA	NA	10.6 B	NA	NA	16.1 B	NA	NA	
Potassium	-	7440-09-7	ug/l	26900	17500	15000	12600	7410	21500	13100	8730	
Selenium	10 ST	7782-49-2	ug/l	NA	NA	3.1 B	NA	NA	3.0 U	NA	NA	
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	1.2 B	NA	NA	
Sodium	20000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	11800	[redacted]	[redacted]	[redacted]	
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA	
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA	
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	6 B	NA	NA	34	NA	NA	
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA	
Iron + Manganese	500 ST*	-	ug/l	46.8	357.7	352.8	209	317.4	297.4	[redacted]	[redacted]	

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

"F": Filterd by lab for dissolved metals

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 1031/1997 (ug/l)	MW-12I 12/7/00 (ug/l)	MW-12I 2/8/01 (ug/l)	MW-12I 8/22/02 (ug/l)	MW-12I 11/21/02 (ug/l)	MW-12I 3/6/03 (ug/l)	MW-12I 6/4/03 (ug/l)	MW-12I 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	281	38.1 B	13.5	NA	88.5 B	NA	NA	23.4 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	25.1	20.2 B	12.6	NA	16.8 B	NA	NA	4.9 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	865	423	NA	47.6 B	NA	NA	42.4 B
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	13000	13500	9680	4240 B	6480	4390 B	6470	4020 B
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.4 U	3.5 U	0.6 U	NA	2.7 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	1.2 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	1	2.4 B	1.5 U	NA	2.8 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	ug/l	213	20.9 B	12.4	257	[redacted]	37.3 B	48.5 B	25.8 B
Lead	25 ST	7439-92-1	ug/l	1 U	1.4 U	1.1 U	0.80 U	1.9 B	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	4930	3600 B	2400	1220 B	1680 B	1250 B	2120 B	1260 B
Manganese	300 ST	7439-96-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	289	153	233	132
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	NA	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	ug/l	1.5	1.9 U	1.4 U	NA	3 B	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	1520	2110 B	1810	915 B	1330 B	796 B	1180 B	692 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.65 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	10800	[redacted]	13900	5820	6080	5320	8590	5990
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	1.4 B	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	39.2	13.7 B	9	NA	44.9	NA	NA	8.2 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	190.3	281.5	157.8

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 11/13/03 (ug/l)	MW-12I 3/1/04 (ug/l)	MW-12I 5/21/04 (ug/l)	MW-12I 8/24/04 (ug/l)	MW-12I 11/11/04 (ug/l)	MW-12I 2/24/05 (ug/l)	MW-12I 5/26/05 (ug/l)	MW-12I 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	18.2 B	NA	NA	1240	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	6 B	NA	NA	54.7 B	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	36.8 B	NA	NA	69.9 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.21 B	0.3 U	0.39 B	0.32 B	1.2 B	0.65 U	0.65 U
Calcium	-	7440-70-2	ug/l	4040 B	3880 B	3270 B	5770	8850	21700	4200 B	6480
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.7 B	NA	NA	6.1 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3 B	NA	NA	8.2 B	NA	NA
Iron	300 ST	7439-89-6	ug/l	30.1 B	63.3 B	61.8 B	23.2 B	50.8 B	[redacted]	148	122
Lead	25 ST	7439-92-1	ug/l	1.5 B	1.6 U	1.2 U	0.70 U	1.1 U	12.4	3.4	1.7 U
Magnesium	35000 GV	7439-95-4	ug/l	1280 B	1160 B	982 B	1840 B	2470 B	2980 B	1030 B	1810 B
Manganese	300 ST	7439-96-5	ug/l	125	127	86.4	222	[redacted]	213	133	214
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.6 U	NA	NA	6.1 B	NA	NA
Potassium	-	7440-09-7	ug/l	688 B	757 I	658 B	1280 B	1750 B	3620 B	973 B	1090 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.5 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	5900	5350	4700 B	7400	9940	[redacted]	6960	9820
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	4.9 B	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	19 B	NA	NA	298	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	155.1	190.3	148.2	245.2	442.8	[redacted]	281	336

NOTES:

NS: Not sampled

[redacted]: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B: Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 10/31/97 (ug/l)	MW-12D 12/8/00 (ug/l)	MW-12D 2/7/01 (ug/l)	MW-12D 8/22/02 (ug/l)	MW-12D 11/21/02 (ug/l)	MW-12D 3/6/03 (ug/l)	MW-12D 6/4/03 (ug/l)	MW-12D 8/21/03 (ug/l)
Aluminum	-	7429-90-5	ug/l	288	14.9	18.6	NA	43.5 B	NA	NA	19.9 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1000 ST	7440-39-3	ug/l	6.5	1.5	2.9 U	NA	3.4 B	NA	NA	2.2 B
Beryllium	3 GV	7440-41-7	ug/l	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1000 ST	7440-42-8	ug/l	NA	29.4	25.2	NA	16.1 B	NA	NA	24.8 B
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	ug/l	8460	3180	3660	2580 B	3860 B	5990	6940	6600
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.87	3.5 U	1	NA	2 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	ug/l	2.4	1.5 U	1.5 U	NA	1.8 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	ug/l	310	20.9	16.5	129	132	12.4 B	33.2 B	23.6 U
Lead	25 ST	7439-92-1	ug/l	1 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35000 GV	7439-95-4	ug/l	2330	1520	1760	1000 B	1590 B	2630 B	3080 B	2900 B
Manganese	300 ST	7439-96-5	ug/l	82.5	1.8	1.4	11.6 B	4.7 B	3.9 B	1.9 B	1.3 B
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	1.3 U	1.9 U	1.4 U	NA	1.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	ug/l	837	554	673	552 B	438 B	551 B	833 B	481 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	1.4	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20000 ST	7440-23-5	ug/l	8400	8610	9340	6450	6010	5770	6120	5490
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	ug/l	1.2	0.7 U	1.7 U	NA	0.60 U	NA	NA	1.8 U
Zinc	2000 ST	7440-66-6	ug/l	311	2.2 U	3.6 U	NA	24.1	NA	NA	2.4 B
Cyanide	200 ST	0057-12-5	ug/l	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST*	-	ug/l	394.5	22.7	17.9	129	136.7	16.3	35.1	24.9

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

Appendix A-2

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

CONSTITUENT	NYSDEC Class GA Groundwater Standards/Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 11/13/03 (ug/l)	MW-12D 3/1/04 (ug/l)	MW-12D 5/21/04 (ug/l)	MW-12D 8/24/04 (ug/l)	MW-12D 11/11/04 (ug/l)	MW-12D 2/24/05 (ug/l)	MW-12D 5/26/05 (ug/l)	MW-12D 8/25/05 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	16.3 U	NA	NA	73.7 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1000 ST	7440-39-3	ug/l	NA	NA	4 U	NA	NA	1.7 U	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1000 ST	7440-42-8	ug/l	NA	NA	19.4 B	NA	NA	30.6 B	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.57 B	0.3 U	0.20 U	0.23 U	0.23 U	0.65 U	0.68 B
Calcium	-	7440-70-2	ug/l	5460	4550 B	3540 B	3870 B	3910 B	3870 B	3050 B	2870 B
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.89 B	NA	NA	1.1 B	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	2 B	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	21.9 B	58.3 B	33 B	98.1 B	4.0 B	30.8 B	20.2 B	57.3 B
Lead	25 ST	7439-92-1	ug/l	1.3 B	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	1.7	2.4 B
Magnesium	35000 GV	7439-95-4	ug/l	2340 B	1940 B	1530 B	1720 B	1660 B	1640 B	1250 B	1210 B
Manganese	300 ST	7439-96-5	ug/l	1.8 B	3.1 B	2.6 B	1.4 B	0.58 B	1.0 B	1.2 U	1.9 B
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	ug/l	440 B	474 B	403 B	692 B	597 B	591 B	446 B	415 B
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20000 ST	7440-23-5	ug/l	5090	5530	4890 B	5690	6310	6750	5950	6750
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2000 ST	7440-66-6	ug/l	NA	NA	3 B	NA	NA	56.6	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	23.7	61.4	35.6	99.5	4.58	31.8	21.4	59.2

NOTES:

NS: Not sampled

: Concentration exceeds Standard/Guidance Value

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

NA: Not analyzed

B : Compound detected above instrument detection limit but below contract required detection limit

ST*: Standard for the sum of iron and manganese is 500 ug/l

APPENDIX A-3

HISTORIC GROUNDWATER SAMPLE RESULTS - VOLATILE ORGANIC COMPOUNDS

APPENDIX A-3

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

Sample ID		MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	NYSDEC Class GA
Date of Collection		10/24/1997	01/28/1998	11/30/2000	01/29/2001	11/20/2002	08/21/2003	05/20/2004	02/28/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]	[redacted]	5 U	5 U	5 U	2 J	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	[redacted]	3 J	2.2 J	2 J	3 J	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	2 J	3.3 J	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		8	12	12	13.5	2	3	0	2	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	NYSDEC Class GA
Date of Collection		10/24/1997	01/28/1998	11/30/2000	01/30/2001	11/20/2002	08/21/2003	05/20/2004	02/28/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	[redacted]				5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]					2 J	5 U	2 J	5 ST
1,1-Dichloroethene	000075-35-4	2 J	10.0 U	2 J	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		38	18.1	29	16.5	53	2	0	2	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	NYSDEC Class GA
Date of Collection		10/24/1997	01/28/1998	11/30/2000	01/30/2001	11/20/2002	08/21/2003	05/20/2004	02/28/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]		5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	[redacted]		[redacted]	5 U	1.1 J	5 U	3 J	1 J	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	[redacted]		[redacted]	3 J	3.3 J	3 J	[redacted]		3 J	5 ST
1,1-Dichloroethene	000075-35-4	5 J	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	4 J	3.7 J	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		84	227	15	13.1	3	26	17	3	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-02S	MW-02S	MW-02S	MW-02S	MW-02S	MW-02S	MW-02S	MW-02S	NYSDEC Class GA
Date of Collection		10/27/1997	01/28/1998	11/30/2000	01/31/2001	11/20/2003	08/21/2003	05/20/2004	02/28/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	NS	NS	NS	NS	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	NS	NS	NS	NS	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	NS	NS	NS	NS	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NS	NS	NS	NS	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	NS	NS	NS	NS	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	NS	NS	NS	NS	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	NS	NS	NS	NS	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	NS	NS	NS	NS	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	NS	NS	NS	NS	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NS	NS	NS	NS	5 ST
TOTAL VOCs		0	0	0	0	NS	NS	NS	NS	

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.

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

APPENDIX A-3

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

Sample ID		MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
Date of Collection		10/27/1997	01/28/1998	12/01/2000	01/30/2001	11/20/2002	08/21/2003	05/20/2004	02/28/05	
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	3 J	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	1.8 J	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		0	0	0	1.8	0	0	4	0	

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

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

APPENDIX A-3

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

Sample ID		MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	NYSDEC Class GA
Date of Collection		10/27/1997	01/28/1998	12/01/2000	01/30/2001	11/20/2002	08/22/2003	05/20/2004	02/28/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		0	0	0	0	1	0	0	0	

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

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

APPENDIX A-3

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

Sample ID		MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	NYSDEC Class GA
Date of Collection		10/30/1997	02/02/1998	12/06/2000	02/02/2001	11/22/2002	08/25/2003	05/24/2004	03/02/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	4 J	10.0 U	3 J	2.8 J	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		4	0	3	2.8	0	0	0	0	

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

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

APPENDIX A-3

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

Sample ID		MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	NYSDEC Class GA
Date of Collection		10/29/1997	02/02/1998	12/06/2000	02/01/2001	11/22/2002	08/25/2003	05/24/2004	03/01/2005	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	1 J	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	4 J	3.0 J	3 J	2.9 J	[redacted]	3 J	2 J	2 J	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	3.4 J	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	[redacted]	[redacted]	5 J	3.8 J	5 U	3 J	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	[redacted]	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		12	13.6	8	6.7	11.2	7	2	2	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	NYSDEC Class GA
Date of Collection		10/29/1997	01/28/1998	12/06/2000	02/01/2001	11/22/2002	08/22/2003	05/24/2004	03/01/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	2 J	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	3 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	2 J	1.4 J	2 J	3 J	1 J	3 J	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	5 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	20	8.6 U	65	20	13	5	59	10	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		29	8.6	65	30.4	13	8	59	15	

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.

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

APPENDIX A-3

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

Sample ID		MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	NYSDEC Class GA
Date of Collection		10/28/1997	01/28/1998	12/06/2000	02/01/2001	11/21/2002	08/25/2003	05/24/2004	03/01/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1 J	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	4 J	2.5 J	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	3.0 J	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	[redacted]	[redacted]	4 J	2.5 J	5 U	3 J	3 J	4 J	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		23	32.5	4	2.5	1	3	4	4	

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

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	NYSDEC Class GA
Date of Collection		10/29/1997	02/03/1998	12/08/2000	02/02/2001	11/22/2002	08/25/2003	05/25/2004	03/02/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	1.2 J	5 U	1 J	1 J	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	5 J	2.4 J	3 J	4.9 J	5 U	1 J	2 J	1 J	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	NA	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	NA	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	2 J	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3			3 J			5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		14	7.5	6	13.3	6.6	2	3	1	

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.

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

APPENDIX A-3

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

Sample ID		MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	NYSDEC Class GA
Date of Collection		10/29/1997	02/02/1998	12/08/2000	02/02/2001	11/22/2002	08/25/2003	05/25/2004	03/02/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	4 J	4.2 J	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	1 J	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	3.5 J	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.8 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	4 J	2.2 J	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		8	9.9	0	0	1	0	0	0	

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

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

APPENDIX A-3

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

Sample ID		MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	NYSDEC Class GA
Date of Collection		10/29/1997	02/03/1998	12/08/2000	02/02/2001	11/22/2002	08/25/2003	05/25/2004	03/02/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	1 J	2.4 J	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	2 J	3.9 J	2 J	3.4 J	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	3 J	10.0 U	5 U	1.2 J	1 J	2 J	2 J	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		6	3.9	3	7	2	2	2	0	

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

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

APPENDIX A-3

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

Sample ID		MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	NYSDEC Class GA
Date of Collection		10/28/1997	01/28/1998	12/05/2000	02/01/2001	11/20/2002	08/22/2003	05/24/2004	03/01/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	1 J	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	4 J	[redacted]	5 U	1.1 J	2 J	2 J	1 J	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	1 J	[redacted]	1 J	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	[redacted]	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	[redacted]	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		9	10.3	1	9.7	3	3	1	0	

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

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	NYSDEC Class GA
Date of Collection		10/28/1997	01/28/1998	12/05/2000	02/01/2001	11/21/2002	08/22/2003	05/24/2004	03/01/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	3 J	10.0 U	2 J	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	4 J	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	5 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	[redacted]	3.1 J	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		12	0	29	3.1	0	0	0	0	

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

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-6D	NYSDEC Class GA
Date of Collection		10/28/1997	01/28/1998	12/05/2000	01/31/2001	11/20/2002	08/22/2003	05/24/2004	03/01/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1 J	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	[redacted]	[redacted]	[redacted]	[redacted]	5	2 J	5 U	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	[redacted]	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	1 J	1	1 J	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	[redacted]	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	[redacted]	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	[redacted]	[redacted]	2 J	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		1776	2032	18	12	8	2	0	0	

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

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
Date of Collection		10/28/1997	01/28/1998	12/01/2000	01/31/2001	11/20/2002	08/22/2003	05/20/2004	02/28/05	
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U*	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	3 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U*	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	[redacted]	2.6 J	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		0	0	6	2.6	3	0	1	0	

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

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	NYSDEC Class GA
Date of Collection		10/31/1997	01/28/1998	12/13/2000	02/07/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	[redacted]	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]	5 J	5 U	5 U	[redacted]	3 J	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	3 J	[redacted]	5 U	2.0 J	2 J	2 J	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	[redacted]	[redacted]	[redacted]	2.2 J	5 U	5 U	1 J	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		39	29.7	31	9.2	2	2	11	3	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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

Sample ID		MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
Date of Collection		10/31/1997	01/28/1998	12/13/2000	02/07/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	2 J	10.0 U	[redacted]	[redacted]	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	3.2 J	[redacted]	[redacted]	5 U	2 J	[redacted]	1 J	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	1.6 J	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		9	3.2	62	120.6	0	2	12	1	

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.

NOTES
GV: Guidance Value NS: Not Sampled
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value

APPENDIX A-3

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		10/31/1997	01/28/1998	12/13/2000	02/07/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U*	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	2 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		2	0	0	0	1	0	0	0	

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

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

APPENDIX A-3

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

Sample ID		MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	NYSDEC Class GA
Date of Collection		10/31/1997	01/30/1998	12/07/2000	02/05/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		0	0	0	0	2	0	0	0	

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

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

APPENDIX A-3

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

Sample ID		MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	NYSDEC Class GA
Date of Collection		10/31/1997	01/30/1998	12/07/2000	02/08/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	2 J	1 J	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		1	0	0	0	0	2	1	0	

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

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

APPENDIX A-3

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		10/31/1997	01/28/1998	12/08/2000	02/07/2001	11/21/2002	08/21/2003	05/21/2004	02/24/05	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.4 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	0.6 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	-
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	7 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	60 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	50 GV
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	0.04 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	5 ST
TOTAL VOCs		0	0	0	0	2	0	1	0	

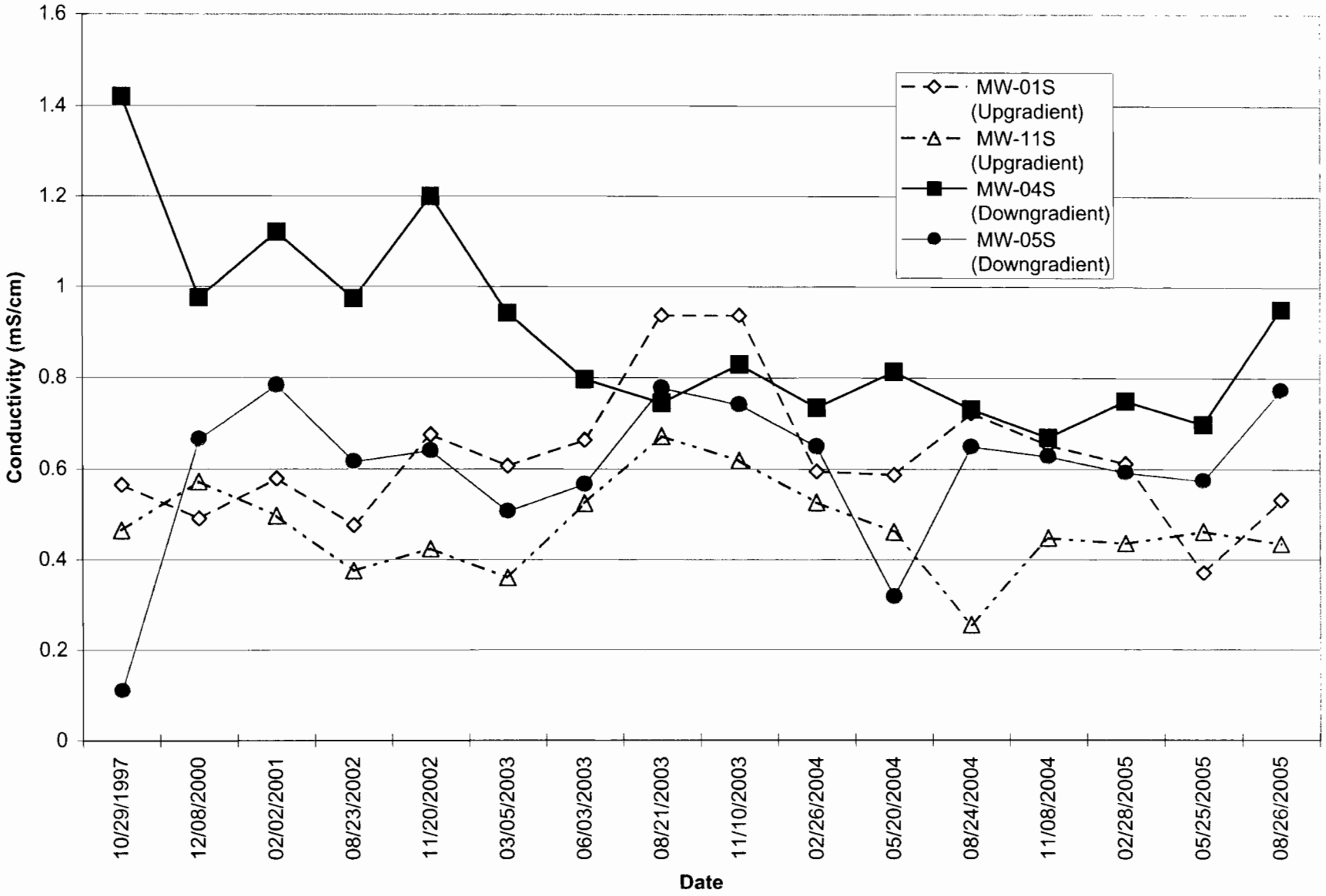
QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.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

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

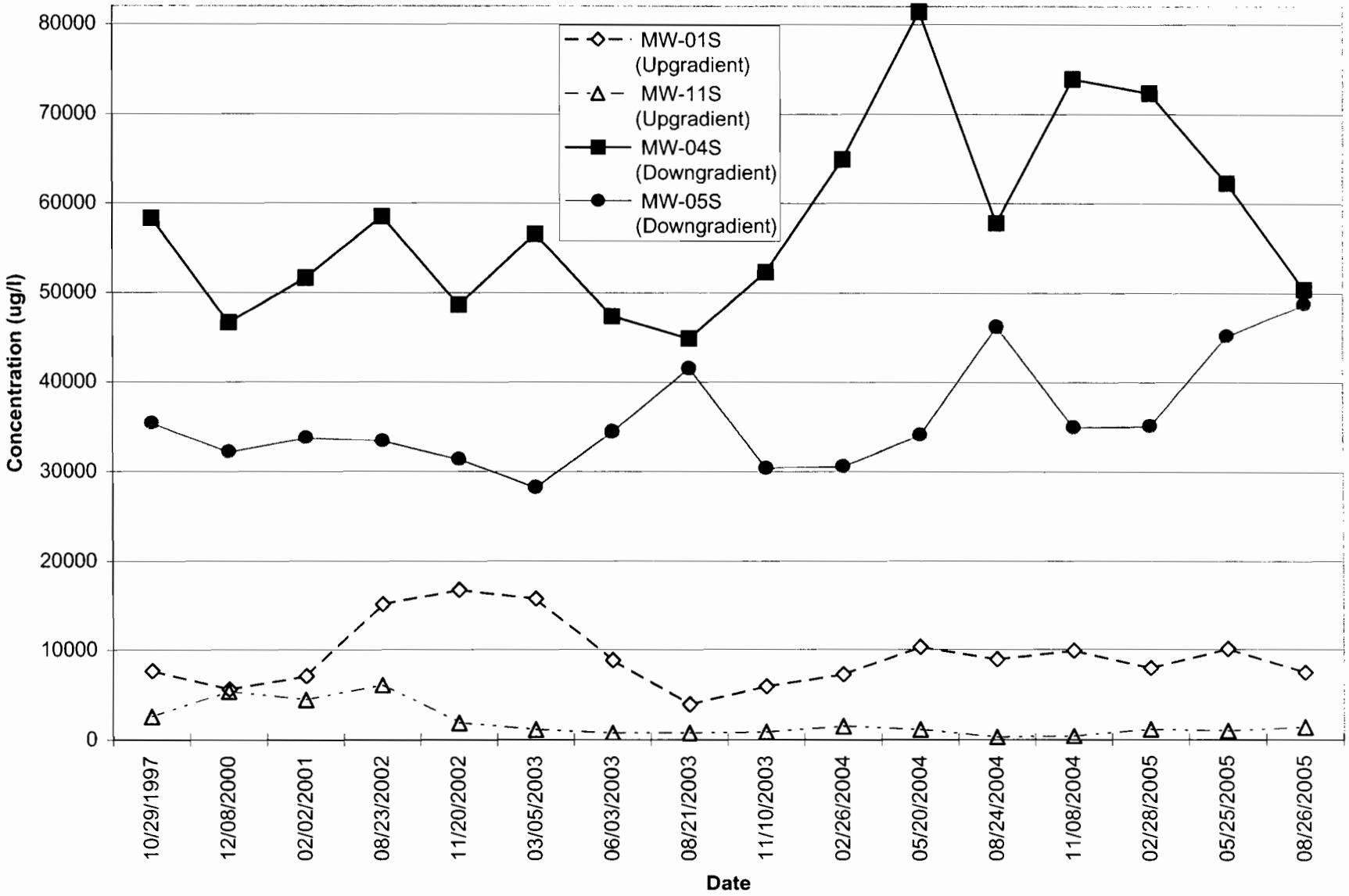
APPENDIX A-4

HISTORIC TREND GRAPHS - ALKALINITY, IRON PLUS MANGANESE, TOTAL DISSOLVED SOLIDS AND SPECIFIC CONDUCTIVITY RESULTS FROM SELECTED MONITORING WELLS

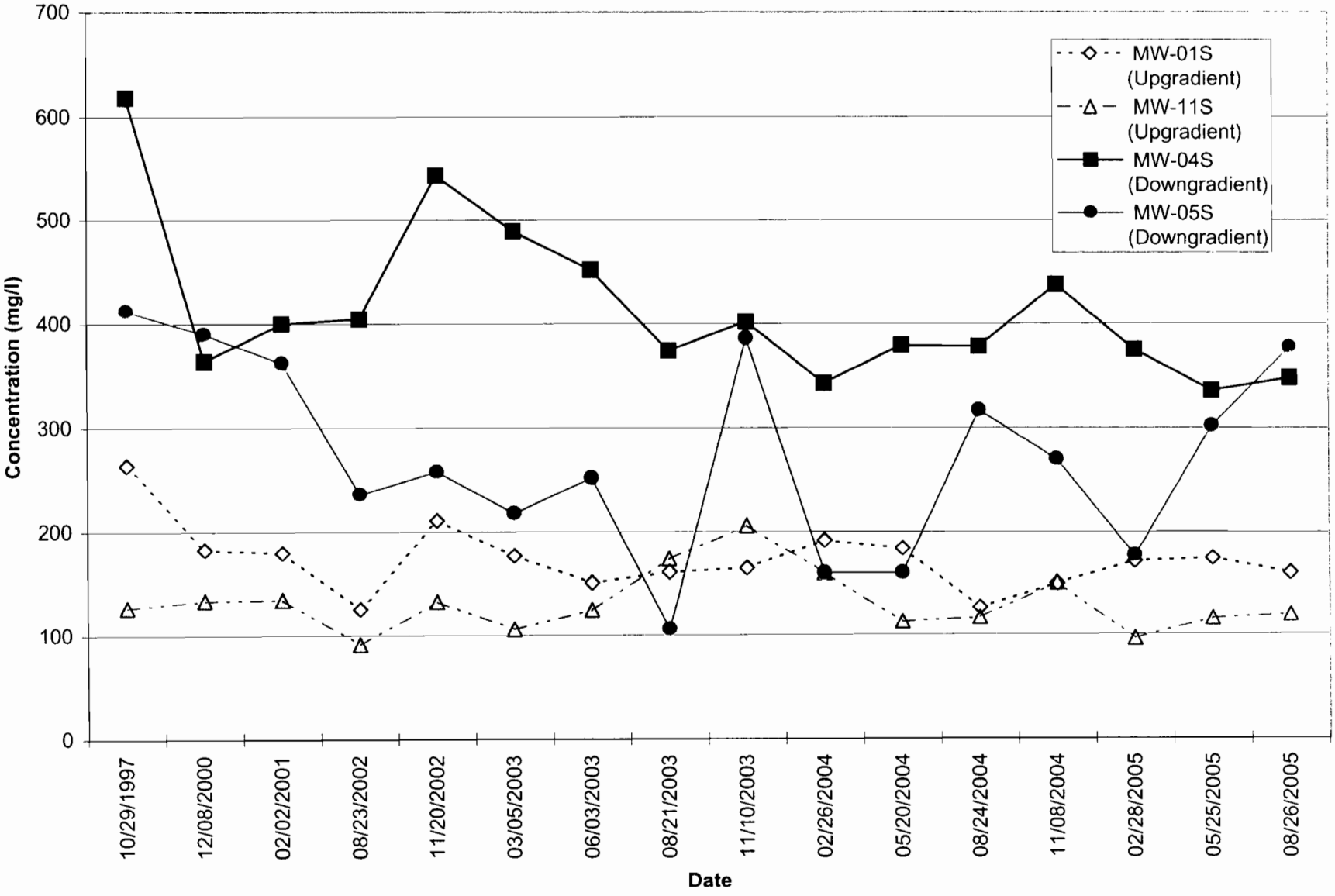
HISTORIC SPECIFIC CONDUCTIVITY RESULTS IN SELECTED SHALLOW WELLS



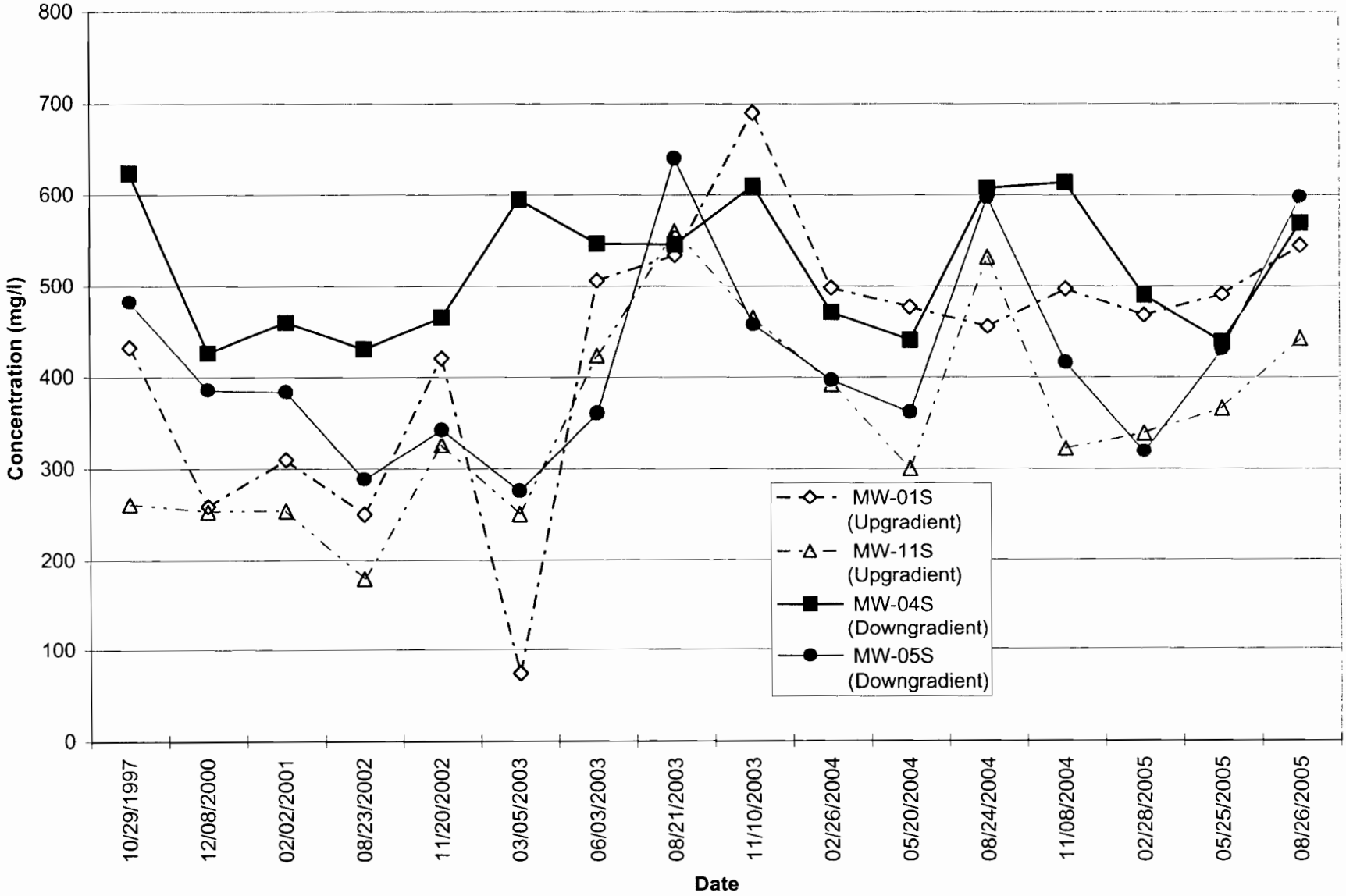
HISTORIC IRON + MANGANESE RESULTS IN SELECTED SHALLOW WELLS



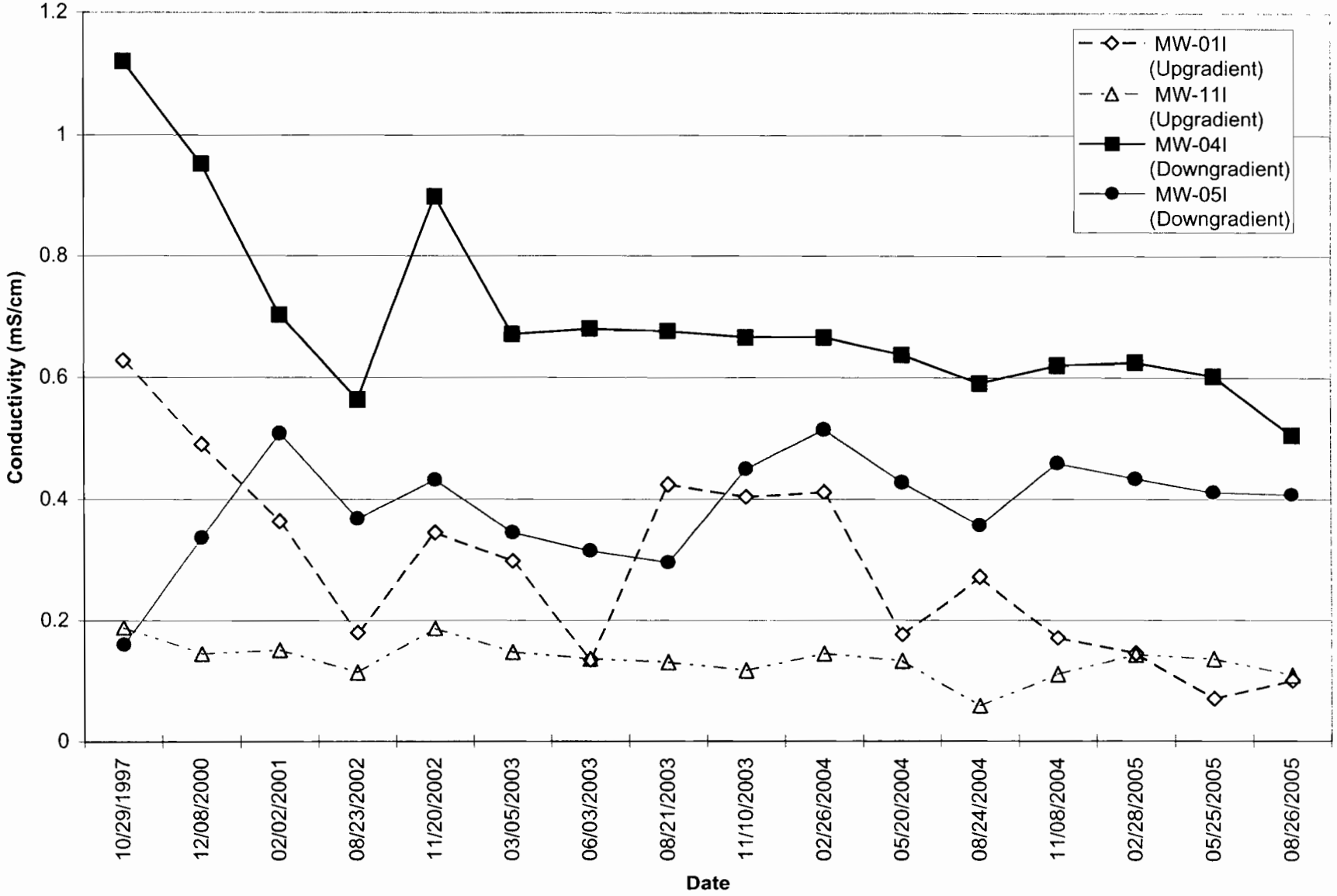
HISTORIC ALKALINITY RESULTS IN SELECTED SHALLOW WELLS



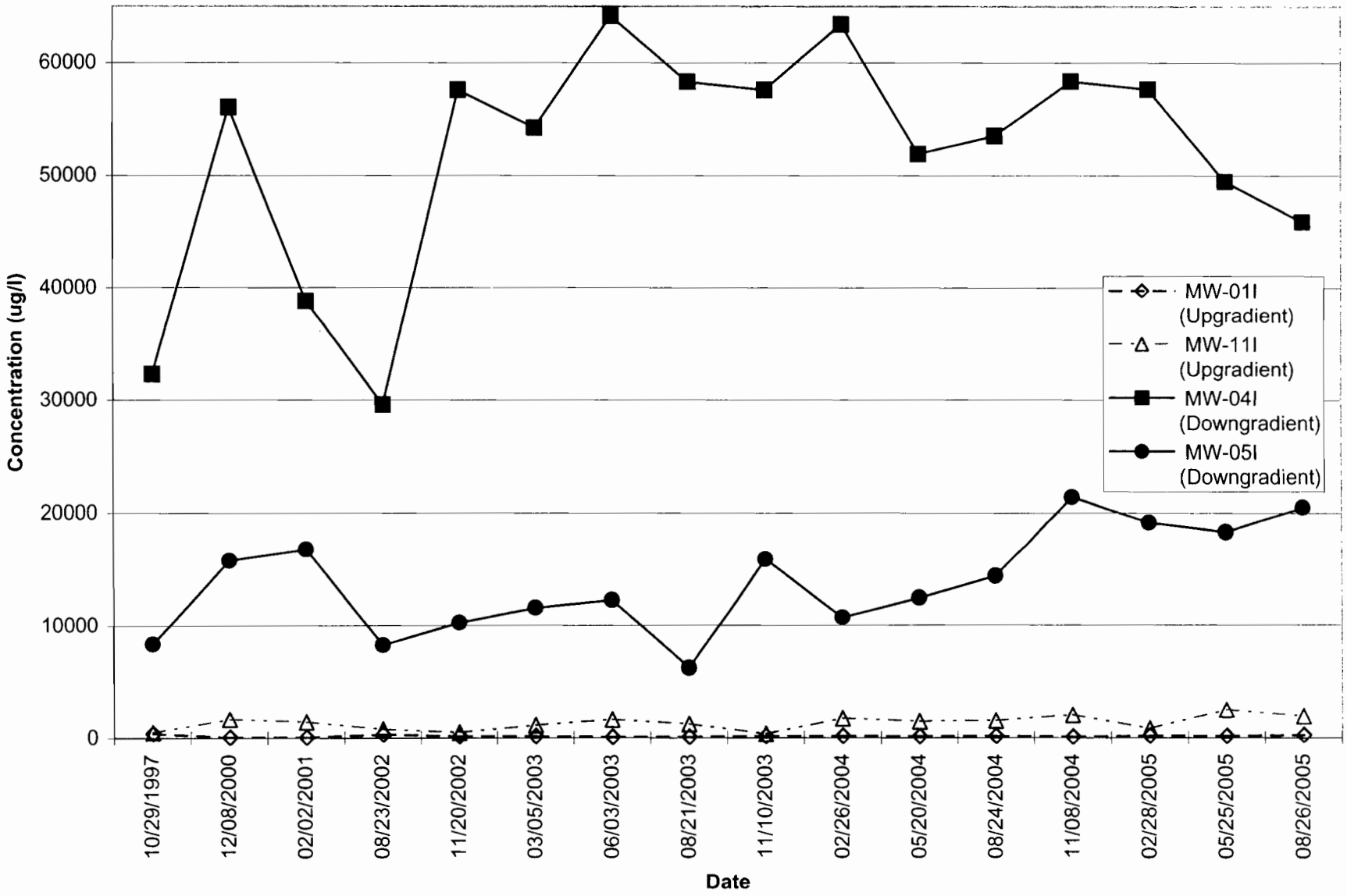
HISTORIC TOTAL DISSOLVED SOLID RESULTS IN SELECTED SHALLOW WELLS



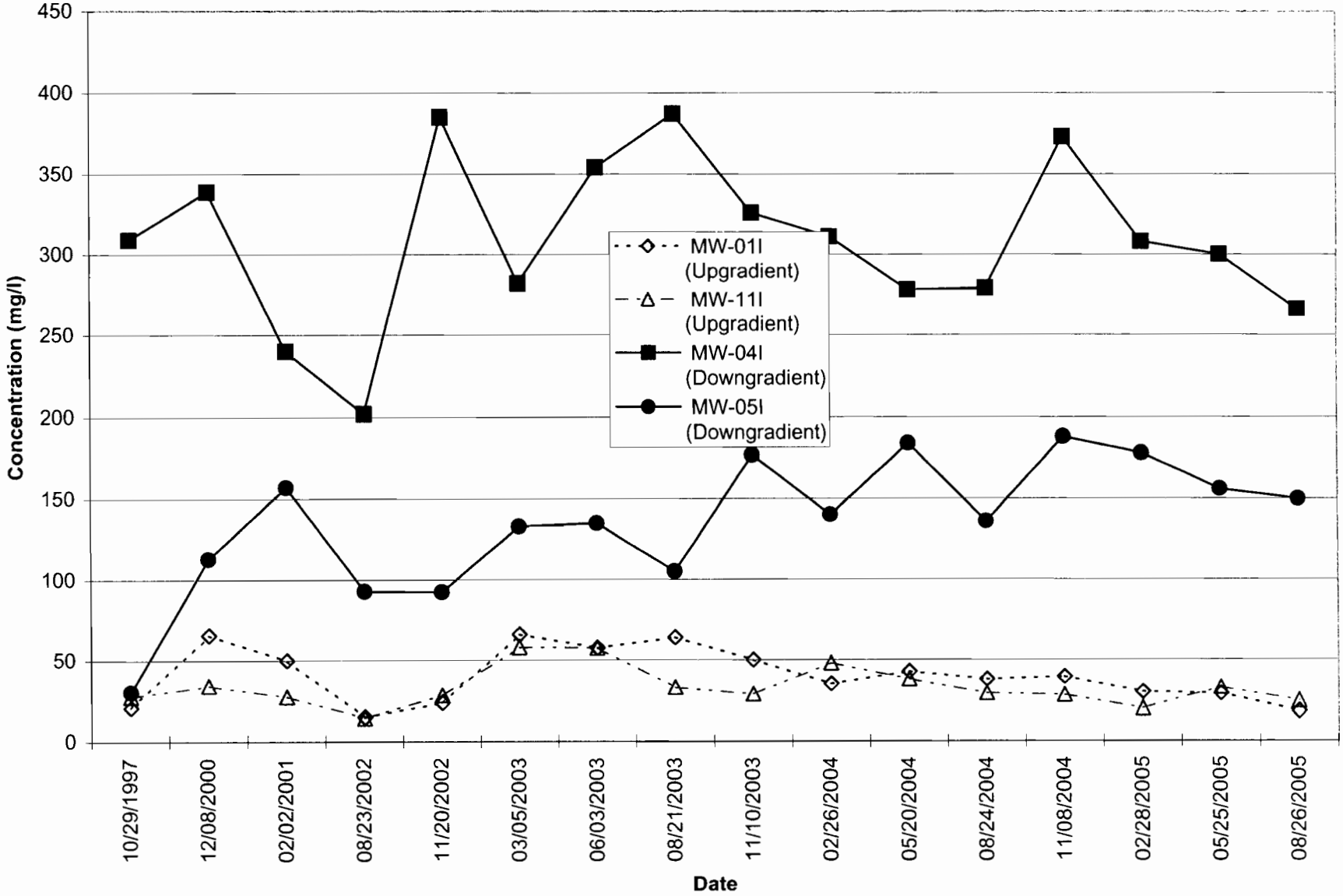
HISTORIC SPECIFIC CONDUCTIVITY RESULTS IN SELECTED INTERMEDIATE WELLS



HISTORIC IRON + MANGANESE RESULTS IN SELECTED INTERMEDIATE WELLS

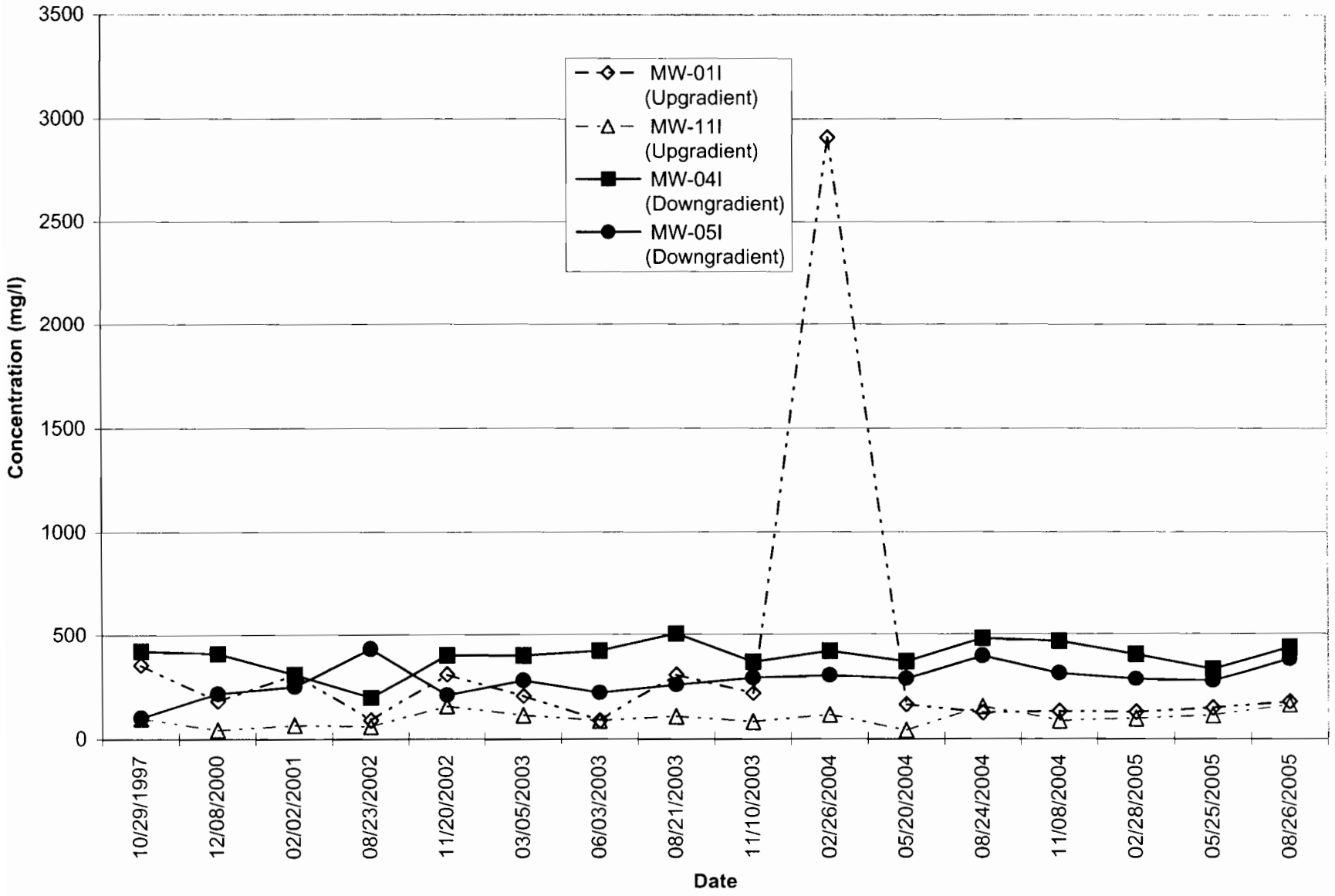


HISTORIC ALKALINITY RESULTS IN SELECTED INTERMEDIATE WELLS

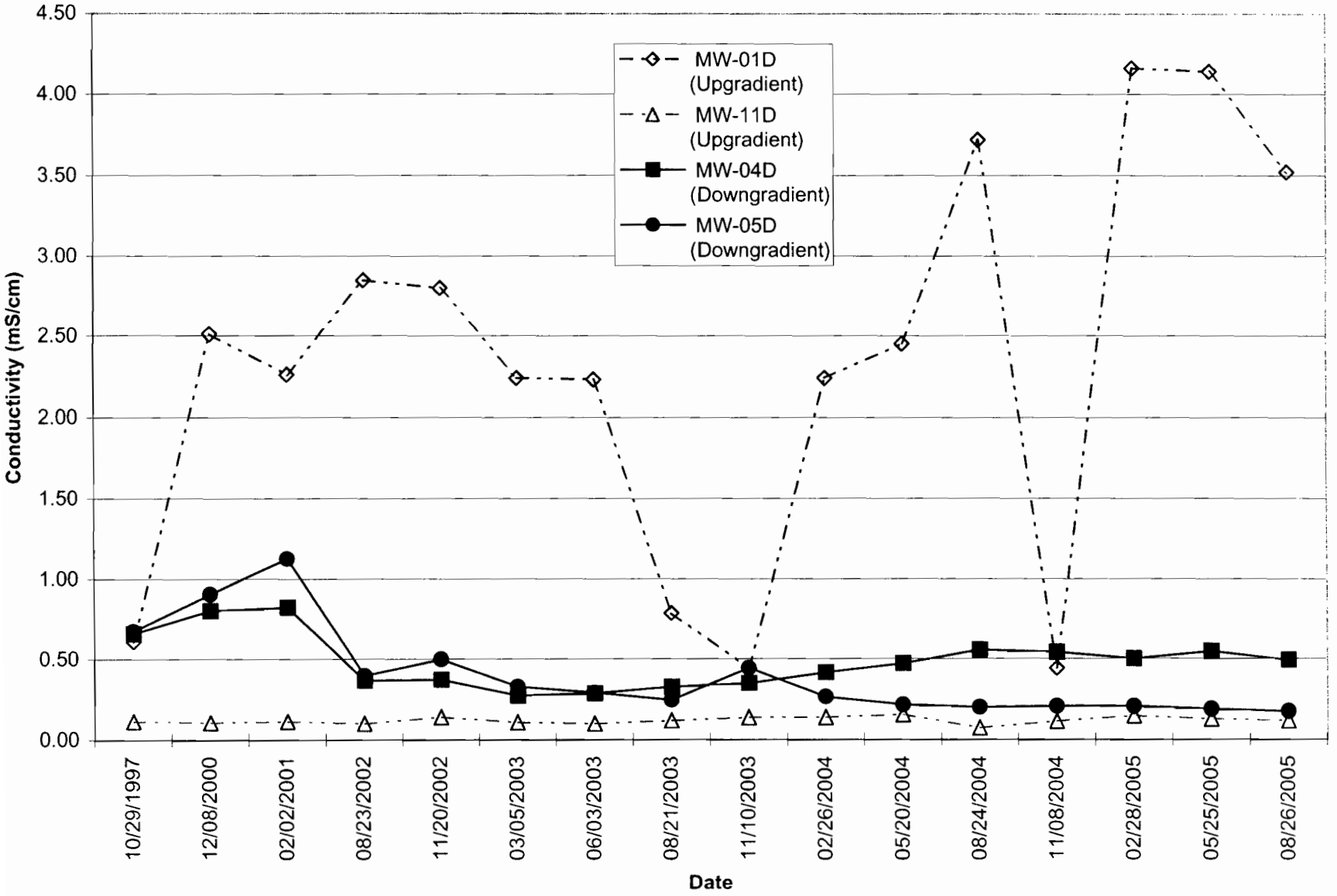


\public\JMilligan\Sonia3rdQ05\REPORT\GraphsiALKALINITY Chart 1

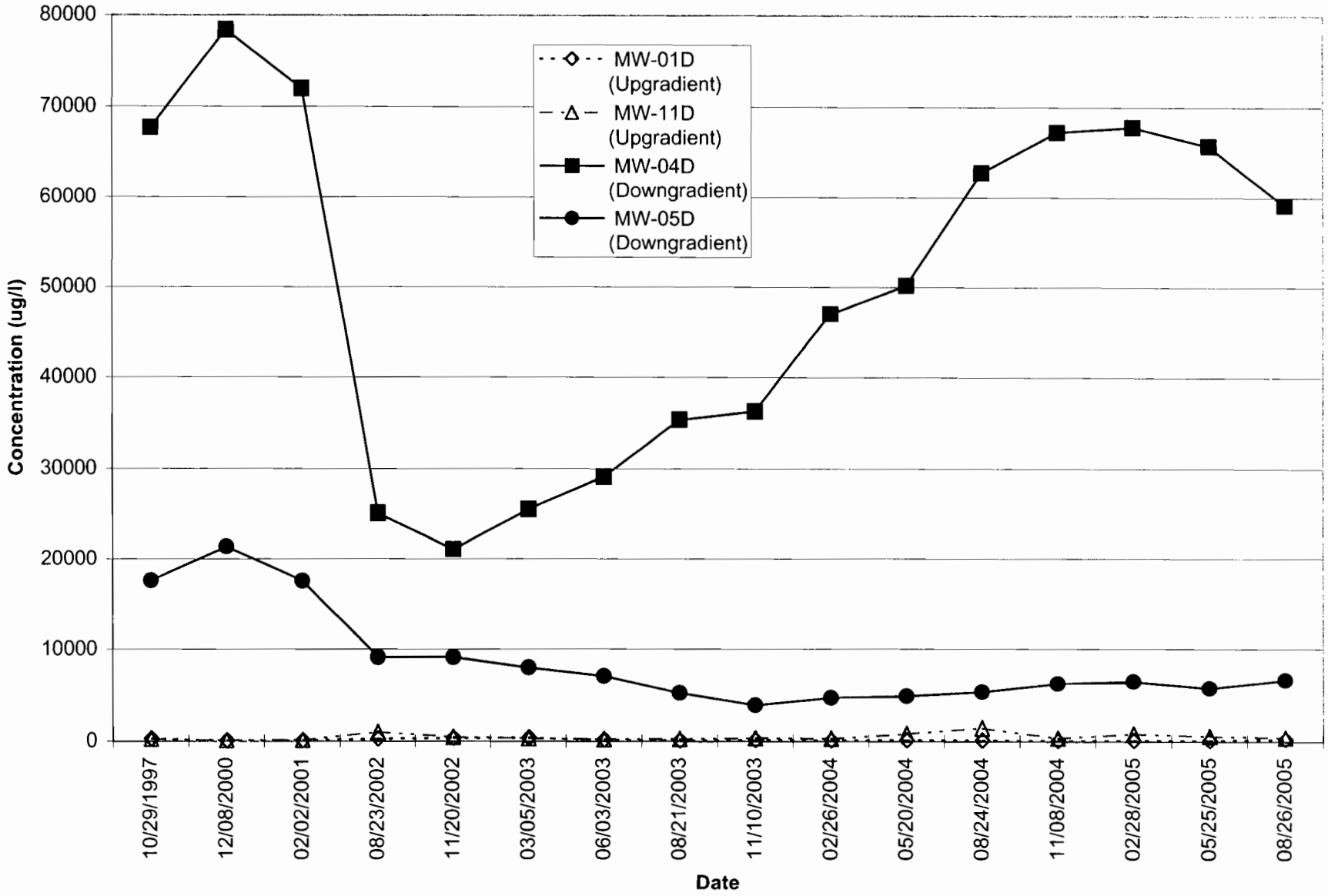
HISTORIC TOTAL DISSOLVED SOLID RESULTS IN SELECTED INTERMEDIATE WELLS



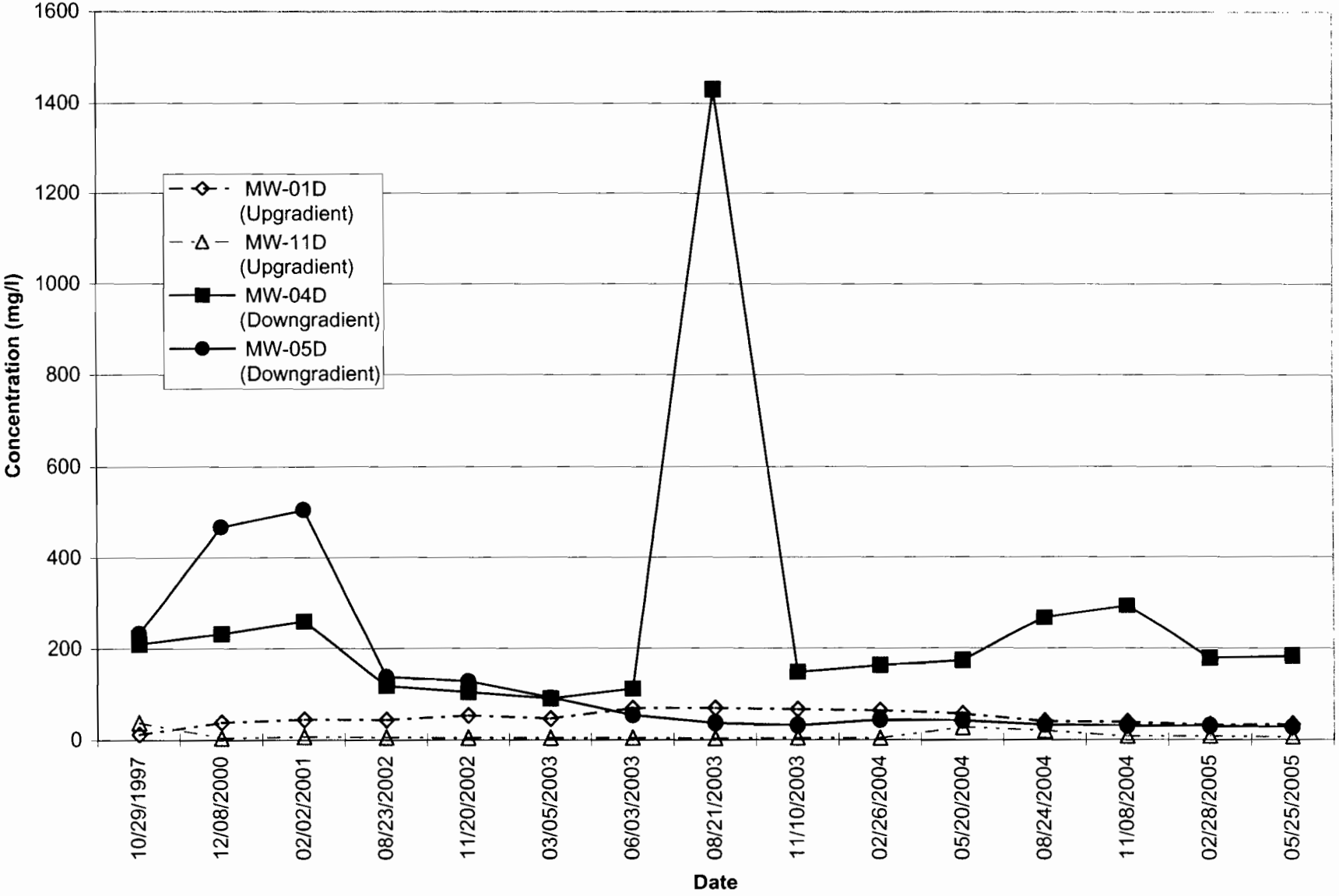
HISTORIC SPECIFIC CONDUCTIVITY RESULTS IN SELECTED DEEP WELLS



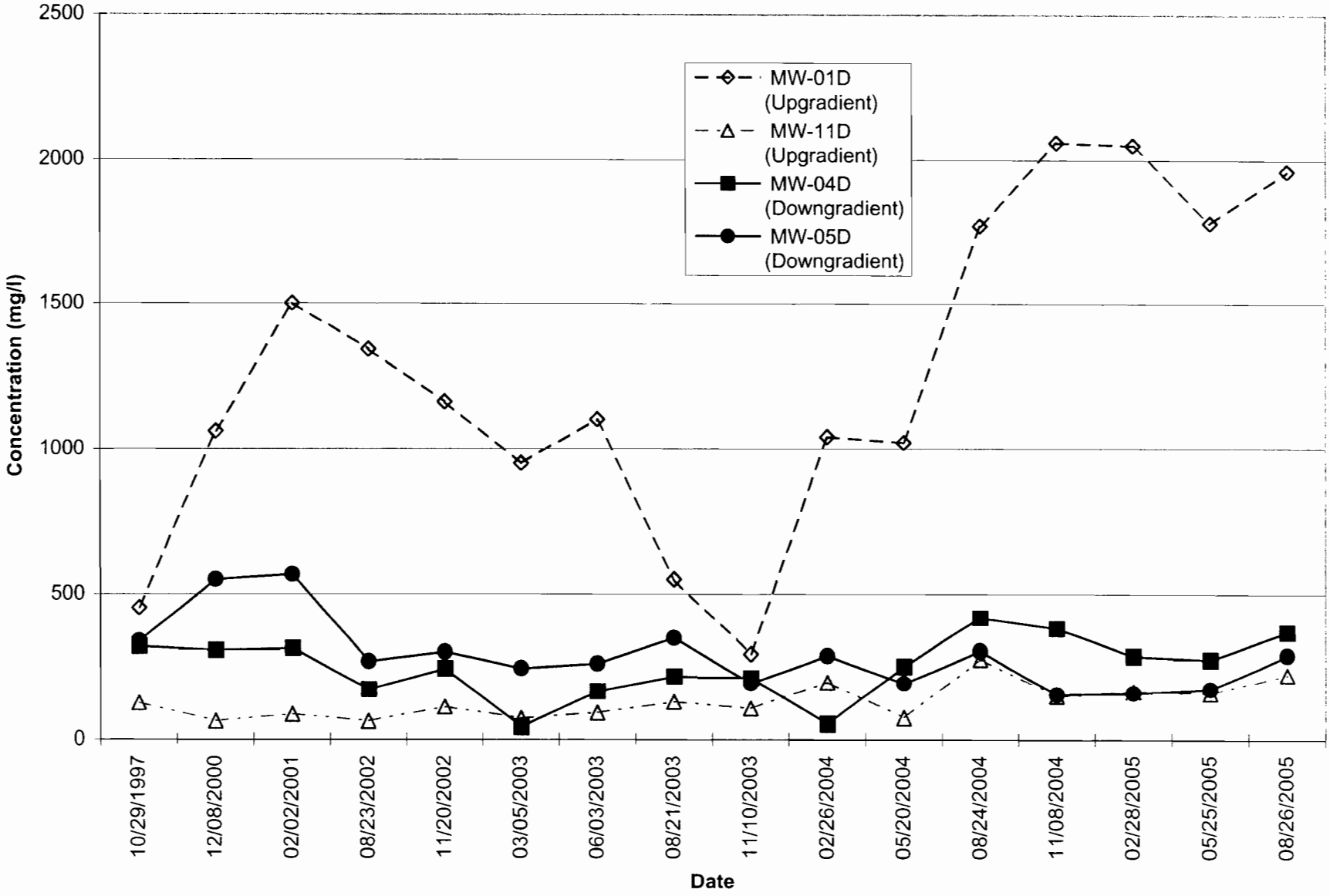
HISTORIC IRON + MANGANESE RESULTS IN SELECTED DEEP WELLS



HISTORIC ALKALINITY RESULTS IN SELECTED DEEP WELLS



HISTORIC TOTAL DISSOLVED SOLID RESULTS IN SELECTED DEEP WELLS



Appendix B

APPENDIX B-1

FIELD FORMS - FIELD OBSERVATION LOGS

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/24/05

SAMPLE ID: 2023-MW-01S (29)
WELL ID: MW-01S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1100	1155
	James Milligan	1100	1155

Depth of well (from top of casing) ..... 28.80 ft Time: _____
Initial static water level (from top of casing) ..... 15.55 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 13.25 ft. of water x 0.65 = 8.61 gallons

volume of water removed: 60 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.45	14.06	0.960	44.6	9.74	140
10	5.54	13.80	1.050	37	8.1	119
20	5.54	13.55	0.920	36	6.33	88
30	5.74	13.52	0.900	47.4	4.75	77
40	5.76	13.52	0.940	56.5	4.47	70
50	5.78	13.55	0.900	64.1	4.05	65
60	5.83	13.48	0.900	61.6	3.40	61
Sample	6.17	16.49	0.533	33.2	7.23	122

Sampling
Time of Sample Collection: 1145

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/24/05

SAMPLE ID: 2023-MW-01I (78)
WELL ID: MW-01I
SAMPLERS: Ben Kagan
James Milligan

	Time On-site:	Time Off-site:
Ben Kagan	1200	1222
James Milligan	1200	1222

Depth of well (from top of casing) ..... 78.63 ft Time: _____
Initial static water level (from top of casing) ..... 14.88 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 63.75 ft. of water x 0.65 = 41.44 gallons

volume of water removed: 200 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.62	18.33	0.193	0	3.31	72
40	6.62	18.33	0.193	15.8	5.67	72
80	5.66	13.93	0.100	8.6	5.20	258
120	5.61	13.93	0.100	1.4	4.90	260
160	5.55	13.93	0.100	0	4.36	265
200	5.54	13.93	0.100	0	4.25	268
Sample	5.88	14.55	0.100	18.5	4.21	252

Sampling
Time of Sample Collection: 1220

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
____ VOCs 602 _____ 503 _____ Other _____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other NYSDEC PART 360 ROUTINE

Observations
Weather/Temperature: sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/24/05

SAMPLE ID: 2023-MW-01D (106)
WELL ID: MW-01D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kegan	1220	1300
	James Milligan	1220	1300

Depth of well (from top of casing) ..... 105.86 ft Time: _____
Initial static water level (from top of casing) ..... 12.19 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____	2 in. casing:	____	ft. of water x 0.16 =	____	gallons
Bailer	____	Pos. Displ.	____	3 in. casing:	____	ft. of water x 0.36 =	____	gallons
Submersible	X	Ded. Pump	____	4 in. casing:	91.73	ft. of water x 0.65 =	59.62	gallons

volume of water removed: 200 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.06	14.27	3.10	24.7	5.17	262
40	6.12	13.46	6.13	30.2	3.88	260
80	6.11	13.44	6.36	30.9	3.85	261
120	6.11	13.44	6.96	28.6	3.75	261
160	6.10	13.43	7.07	28.6	3.60	264
200	6.10	13.44	7.00	30.6	3.39	266
Sample	6.18	15.07	3.52	36.1	4.46	264

Sampling
Time of Sample Collection: 1245

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/24/05

SAMPLE ID: 2023-MW-02I (72)
WELL ID: MW-02I

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1330	1420
	James Milligan	1330	1420

Depth of well (from top of casing) ..... 72.13 ft Time: _____
Initial static water level (from top of casing) ..... 29.15 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 42.98 ft. of water x 0.65 = 27.93 gallons

volume of water removed: 90 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	4.82	14.70	0.226	15.4	9.21	400
10	4.62	14.27	3.70	18.2	8.57	399
30	4.70	14.26	0.135	18.1	1.01	401
50	4.62	14.32	0.132	18.1	5.33	398
60	4.62	14.44	0.208	18.3	4.91	398
70	4.80	14.42	0.207	19.1	4.61	397
80	4.83	14.43	0.109	19.4	4.57	391
90	4.85	14.41	0.109	19.5	4.46	389
Sample	5.16	15.30	0.097	24.8	5.75	388

Sampling
Time of Sample Collection: 1420

Method:		Analyses:	
____	Stainless steel bailer	____	VOCs
____	Teflon bailer	____	SVOCs
____	Pos. Disp. Pump	____	Metals
X	Disposable bailer	____	PCB/Pest.
____	Dedicated pump	____	Physical
____	Other: _____	X	Other NYSDEC PART 360 Routine

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ No X describe _____
Sheen? yes ____ No X describe _____
Odor? yes ____ No X describe _____

Comments:
5 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/24/05

SAMPLE ID: 2023-MW-02D (116)
WELL ID: MW-02D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben kagan	1420	1455
	James Milligan	1420	1455

Depth of well (from top of casing) ..... 116 ft Time: _____
Initial static water level (from top of casing) ..... 29.27 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____	2 in. casing:	____	ft. of water x 0.16 =	____	gallons
Bailer	____	Pos. Displ.	____	3 in. casing:	____	ft. of water x 0.36 =	____	gallons
Submersible	X	Ded. Pump	____	4 in. casing:	86.73	ft. of water x 0.65 =	56.37	gallons

volume of water removed: 240 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.17	16.01	0.096	19.9	8.55	352
40	5.22	14.04	0.094	12.9	8.19	381
80	5.30	13.78	0.098	35.1	8.58	404
120	5.22	13.74	0.095	17.4	8.34	370
160	5.22	13.73	0.094	18.4	8.18	334
200	5.23	13.71	0.095	21.1	8.21	335
240	5.28	13.73	0.091	23.5	8.13	354
Sample	5.75	14.21	0.088	29.5	8.00	356

Sampling

Time of Sample Collection: 1445

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 Routine				

Observations

Weather/Temperature: sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-03S (32)
WELL ID: MW-03S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben kagan	1240	1320
	James Milligan	1240	1320

Depth of well (from top of casing) ..... 31.60 ft Time: _____
Initial static water level (from top of casing) ..... 22.13 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 9.47 ft. of water x 0.65 = 6.15 gallons

volume of water removed: 30 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.37	19.17	0.461	4.8	10.80	-37
4	6.44	19.13	0.481	8.8	9.01	-40
8	6.46	19.18	0.479	18.9	7.56	-41
12	6.56	19.13	0.481	12.6	6.61	-43
16	6.53	19.14	0.482	14.1	6.21	-43
20	6.57	19.16	0.601	12.0	5.63	-44
24	6.58	19.17	0.549	14.2	5.62	-45
28	6.60	19.18	0.546	17.4	5.45	-45
30	6.60	19.20	0.556	21.8	5.27	-45
Sample	6.70	19.46	0.471	37.1	6.66	-49

Sampling
Time of Sample Collection: 1310

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602	____	503	____	Other ____
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-04S (34)
WELL ID: MW-04S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben kagan	1100	1150
	James Milligan	1100	1150

Depth of well (from top of casing) ..... 33.70 ft Time: _____
Initial static water level (from top of casing) ..... 23.65 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 10.05 ft. of water x 0.65 = 6.53 gallons

volume of water removed: 36 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.83	17.53	0.678	20.1	9.26	13
4	5.86	16.43	2.26	18.4	8.09	14
12	6.09	16.14	32.2	24.6	4.77	-1
24	6.19	16.09	27.6	20.0	4.46	-10
32	6.22	16.07	8.72	20.6	4.43	-15
34	6.23	16.03	8.68	22.0	4.43	-16
36	6.23	16.03	8.59	30.1	3.79	-17
Sample	6.37	16.68	0.95	23.9	3.73	-21

Sampling
Time of Sample Collection: 1145
Method:

		Analyses:					
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____	
____	Teflon bailer	____	SVOCs				
____	Pos. Disp. Pump	____	Metals				
X	Disposable bailer	____	PCB/Pest.				
____	Dedicated pump	____	Physical				
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE			

Observations
Weather/Temperature:
Sample description: Sunny. 80 degrees F
Free Product? yes clear colorless no odor
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____
____ no X describe ____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-04I (71)
WELL ID: MW-04I

SAMPLERS:		Time On-site:	Time Off-site:
	Ben kagan	0840	0950
	James Milligan	0840	0950

Depth of well (from top of casing) ..... 71.30 ft Time: _____
Initial static water level (from top of casing) ..... 20.89 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____	2 in. casing:	____	ft. of water x 0.16 =	____	gallons
Bailer	____	Pos. Displ.	____	3 in. casing:	____	ft. of water x 0.36 =	____	gallons
Submersible	X	Ded. Pump	____	4 in. casing:	49.41	ft. of water x 0.65 =	32.11	gallons

volume of water removed: 160 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.15	16.66	0.545	47.1	11.29	-7
20	6.05	15.11	3.85	0.0	9.17	-11
40	6.11	15.10	4.83	0.0	7.87	-12
100	6.17	15.09	4.44	0.0	6.23	-16
120	6.16	15.09	4.41	0.0	6.03	-17
140	6.17	15.09	4.41	0.0	5.59	-18
160	6.18	15.09	4.38	0.0	5.33	-20
Sample	6.43	15.77	0.506	25.8	4.40	-28

Sampling
Time of Sample Collection: 0930

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 Routine				

Observations
Weather/Temperature: 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-04D (114)
WELL ID: MW-04D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben kegan	1000	1030
	James Milligan	1000	1030

Depth of well (from top of casing) ..... 114.10 ft Time: _____
Initial static water level (from top of casing) ..... 21.55 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 92.55 ft. of water x 0.65 = 60.16 gallons

volume of water removed:
320 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.31	16.10	28.2	40.9	4.30	-36
40	6.38	15.33	22.2	9.3	4.03	-54
80	6.49	14.34	15.6	6.2	3.74	-71
120	6.55	14.21	13.8	2.3	3.45	-75
160	6.55	14.21	10.8	5.2	3.35	-77
200	6.56	14.21	10.8	1.4	3.30	-78
240	6.54	14.21	1.10	1.0	3.18	-79
280	6.50	14.20	1.20	1.8	3.16	-80
320	6.56	14.22	1.18	1.1	2.82	-83
Sample	6.67	15.03	0.491	33.1	3.18	-77

Sampling
Time of Sample Collection: 1025

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 Routine				

Observations
Weather/Temperature: 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/29/05

SAMPLE ID: 2023-MW-05S (34)
WELL ID: MW-05S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0830	0930
	James Milligan	0830	0930

Depth of well (from top of casing) ..... 33.20 ft Time: _____
Initial static water level (from top of casing) ..... 22.46 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____	2 in. casing:	____	ft. of water x 0.16 =	____	gallons
Bailer	____	Pos. Displ.	____	3 in. casing:	____	ft. of water x 0.36 =	____	gallons
Submersible	X	Ded. Pump	____	4 in. casing:	10.74	ft. of water x 0.65 =	6.98	gallons

Well Volume Calculation:

volume of water removed: 40 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.46	18.60	0.580	43.4	7.30	-28
12	6.55	18.81	0.628	44.3	5.29	-35
20	6.54	18.83	0.657	50.2	4.98	-33
34	6.66	18.94	0.671	23.4	6.14	-37
36	6.64	18.95	0.671	22.8	5.84	-34
40	6.63	18.96	0.675	21.5	5.49	-30
Sample	6.58	18.87	0.772	28.0	4.57	-25

Sampling

Time of Sample Collection: 0920

Method:

		Analyses:							
____	Stainless steel bailer	____	VOCs	602	____	503	____	Other	____
____	Teflon bailer	____	SVOCs						
____	Pos. Disp. Pump	____	Metals						
X	Disposable bailer	____	PCB/Pest.						
____	Dedicated pump	____	Physical						
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE					

Observations

Weather/Temperature:
Sample description: Sunny. 80 degrees F
Free Product? yes ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____
____ no X describe ____

Comments:
2.0 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/29/05

SAMPLE ID: 2023-MW-5I (70)
WELL ID: MW-05I

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0740	0830
	James Milligan	0740	0830

Depth of well (from top of casing) ..... 70.20 ft Time: _____
Initial static water level (from top of casing) ..... 22.43 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 47.77 ft. of water x 0.65 = 31.05 gallons

volume of water removed: 240 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.39	17.68	0.408	70.2	9.93	102
20	5.70	16.43	0.418	60.8	9.67	34
60	5.91	15.89	0.418	49.7	9.32	-11
120	5.96	15.60	0.428	48.3	7.97	-11
200	6.46	15.37	0.409	26.5	9.37	-33
220	6.48	15.36	0.410	31.2	9.06	-36
240	6.50	15.35	0.410	31.0	8.96	-39
Sample	6.74	15.85	0.408	35.4	8.96	-36

Sampling
Time of Sample Collection: 0820

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-5D (116)
WELL ID: MW-05D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1340	1415
	James Milligan	1340	1415

Depth of well (from top of casing) ..... 115.7 ft Time: _____
Initial static water level (from top of casing) ..... 22.90 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 92.80 ft. of water x 0.65 = 60.32 gallons

volume of water removed:
360 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.69	16.99	0.153	3.8	9.36	227
40	6.71	16.58	0.151	3.0	8.94	233
120	6.66	15.31	0.151	8.3	7.61	254
160	6.74	14.70	0.182	9.0	7.50	263
200	6.76	14.40	0.189	8.2	7.15	272
240	6.74	14.20	0.188	7.7	6.84	272
280	6.67	14.10	0.198	12.8	7.14	288
320	6.67	14.07	0.201	10.1	6.79	287
360	6.70	14.07	0.203	8.6	6.67	288
Sample	6.49	19.32	0.170	0	8.75	291

Sampling
Time of Sample Collection: 1410

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
____ VOCs 602 _____ 503 _____ Other _____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other NYSDEC PART 360 ROUTINE

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
20 GPM Blind Duplicate #2

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-06S (37)
WELL ID: MW-06S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1300	1335
	James Milligan	1300	1335

Depth of well (from top of casing) ..... 37.90 ft Time: ____
Initial static water level (from top of casing) ..... 26.39 ft Time: ____

Purging Method

Airlift	____	Centrifugal	____	2 in. casing:	____	ft. of water x 0.16 =	____	gallons
Bailer	____	Pos. Displ.	____	3 in. casing:	____	ft. of water x 0.36 =	____	gallons
Submersible	X	Ded. Pump	____	4 in. casing:	11.51	ft. of water x 0.65 =	7.48	gallons

volume of water removed: 28 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.70	20.98	0.513	75.7	9.23	1
4	5.73	20.27	0.522	60.4	7.69	2
8	5.74	20.15	0.524	40.9	5.80	-4
12	5.84	20.13	0.528	25.1	5.00	-7
16	5.87	20.12	0.530	6.1	4.58	-11
20	5.94	20.11	0.536	8.9	4.21	-15
24	5.95	20.10	0.535	4.2	4.09	-17
28	6.02	20.09	0.539	0	3.86	-22
Sample	6.48	20.44	0.500	0	4.28	-40

Sampling
Time of Sample Collection: 1330

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-06I (76)
WELL ID: MW-06I
SAMPLERS: Ben Kagan
James Milligan

	Time On-site:	Time Off-site:
Ben Kagan	1330	1425
James Milligan	1330	1425

Depth of well (from top of casing) ..... 76.40 ft Time: _____
Initial static water level (from top of casing) ..... 26.46 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 49.94 ft. of water x 0.65 = 32.46 gallons

volume of water removed: 112 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.41	20.26	0.170	0	5.69	19
16	6.22	17.30	0.136	0	4.09	111
32	6.11	16.28	0.164	0	3.26	88
48	6.07	16.28	0.164	0	3.08	84
64	6.09	16.27	0.163	0	3.04	84
80	6.08	16.26	0.164	0	2.92	81
96	6.09	16.29	0.165	5.5	2.72	79
112	6.10	16.30	0.169	11.0	2.54	77
Sample	6.36	16.92	0.160	17.0	3.41	67

Sampling
Time of Sample Collection: 1420

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	x	Other	NYSDEC PART 360 Routine				

Observations
Weather/Temperature: 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ No X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
4 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/26/05

SAMPLE ID: 2023-MW-06D (117)
WELL ID: MW-06D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0800	0840
	James Milligan	0800	0840

Depth of well (from top of casing) ..... 117.1 ft Time: _____
Initial static water level (from top of casing) ..... 26.98 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 90.12 ft. of water x 0.65 = 58.58 gallons

volume of water removed:
280 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	4.39	17.85	0.092	22.3	10.14	247
40	4.61	15.44	0.095	20.8	8.74	180
80	4.66	14.83	0.097	12.9	8.15	172
120	4.73	14.74	0.096	1.8	7.30	160
160	4.83	14.73	0.094	0.0	6.15	153
200	4.89	14.72	0.095	0.8	5.71	151
240	4.92	14.72	0.094	0.1	5.48	149
280	4.93	14.73	0.094	0.1	5.38	148
Sample	5.99	15.80	0.090	4.4	5.02	129

Sampling
Time of Sample Collection: 0835

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 Routine				

Observations
Weather/Temperature: 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-11S (19)
WELL ID: MW-11S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0955	1025
	James Milligan	0955	1025

Depth of well (from top of casing) ..... 19.60 ft Time:
Initial static water level (from top of casing) ..... 8.72 ft Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible	X	Ded. Pump	

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 10.88 ft. of water x 0.65 = 7.07 gallons

volume of water removed: 32 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.91	20.28	0.450	434	9.33	415
8	6.34	18.74	0.453	130	5.41	407
16	6.41	18.65	0.442	30.1	4.93	400
24	6.49	18.64	0.437	40.2	4.32	367
28	6.49	18.65	0.437	39.9	4.30	366
32	6.50	18.65	0.436	46.7	4.14	354
Sample	6.54	18.83	0.436	35.2	3.75	343

Sampling
Time of Sample Collection: 1020

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-11I (71)
WELL ID: MW-11I

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1020	1045
	James Milligan	1020	1045

Depth of well (from top of casing) ..... 71.30 ft Time:
Initial static water level (from top of casing) ..... 8.22 ft Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible	X	Ded. Pump	

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 63.08 ft. of water x 0.65 = 41.00 gallons

volume of water removed:
180 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	6.37	17.73	0.114	14.3	3.78	358
40	6.10	14.04	0.104	25.4	3.50	360
80	6.07	14.00	0.108	12.1	3.36	358
120	5.90	13.99	0.107	7.8	3.17	358
140	5.89	13.99	0.107	5.8	3.15	358
160	5.87	13.99	0.107	6.8	3.12	358
180	5.86	13.99	0.107	7.9	3.12	357
Sample	5.95	14.60	0.108	8.5	3.10	356

Sampling
Time of Sample Collection: 1045

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

Comments:
20 GPM
Blind Duplicate #1.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-11D (94)
WELL ID: MW-11D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	1020	1040
	James Milligan	1020	1040

Depth of well (from top of casing) ..... 94.20 ft Time: _____
Initial static water level (from top of casing) ..... 7.97 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 86.23 ft. of water x 0.65 = 56.05 gallons

volume of water removed: 240 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.31	13.49	0.119	401	7.60	361
40	5.15	13.42	0.121	330	7.37	378
80	5.05	13.41	0.115	132.3	7.19	361
120	4.84	13.42	0.113	73.1	7.06	378
160	4.81	13.42	0.113	45.4	7.02	384
200	4.83	13.41	0.113	36.6	6.95	389
240	4.82	13.41	0.113	29.8	6.93	389
Sample	5.17	14.70	0.114	9.6	9.16	429

Sampling
Time of Sample Collection: 1125

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-12S (19)
WELL ID: MW-12S

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0800	0830
	James Milligan	0800	0830

Depth of well (from top of casing) ..... 18.40 ft Time: _____
Initial static water level (from top of casing) ..... 7.88ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 10.52 ft. of water x 0.65 = 6.84 gallons

volume of water removed:
32 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.28	17.81	0.321	102	9.46	391
4	5.41	17.79	0.322	56.2	8.86	383
8	5.52	17.86	0.320	24.2	7.40	349
12	5.61	17.88	0.318	19.3	6.41	321
16	5.69	17.90	0.311	26.0	5.76	300
20	5.75	17.90	0.307	47.0	5.47	288
24	5.82	17.90	0.305	40.0	5.28	279
28	5.90	17.89	0.310	38.0	5.20	277
32	5.89	17.90	0.130	43.2	5.14	282
Sample	5.78	18.00	0.315	42.1	5.81	280

Sampling
Time of Sample Collection: 0825

Method:		Analyses:						
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE				

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
2 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-12I (70)
WELL ID: MW-12I
SAMPLERS: Ben Kagan
James Milligan

	Time On-site:	Time Off-site:
Ben Kagan	0830	0855
James Milligan	0830	0855

Depth of well (from top of casing) ..... 69.90 ft Time: ____
Initial static water level (from top of casing) ..... 8.00 ft Time: ____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 61.90 ft. of water x 0.65 = 40.23 gallons

volume of water removed: 180 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	5.63	14.57	0.056	10.7	8.98	356
40	4.65	14.27	0.081	10.6	6.63	393
80	4.53	14.28	0.082	8.5	5.16	389
120	4.49	14.28	0.082	10.8	4.85	388
160	4.49	14.28	0.082	10.5	4.59	388
180	4.50	14.28	0.082	13.7	4.52	390
Sample	4.89	15.19	0.083	10.1	4.47	376

Sampling
Time of Sample Collection: 0850

Method:		Analyses:					
____	Stainless steel bailer	____	VOCs	602 ____	503 ____	Other ____	
____	Teflon bailer	____	SVOCs				
____	Pos. Disp. Pump	____	Metals				
X	Disposable bailer	____	PCB/Pest.				
____	Dedicated pump	____	Physical				
____	Other: ____	X	Other	NYSDEC PART 360 ROUTINE			

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X Describe ____
Sheen? yes ____ no X Describe ____
Odor? yes ____ no X Describe ____

Comments:
20 GPM

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Sonia Road Landfill DATE 8/25/05

SAMPLE ID: 2023-MW-12D (98)
WELL ID: MW-12D

SAMPLERS:		Time On-site:	Time Off-site:
	Ben Kagan	0850	0940
	James Milligan	0850	0940

Depth of well (from top of casing) ..... 98.00 ft Time: _____
Initial static water level (from top of casing) ..... 7.71 ft Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 90.29 ft. of water x 0.65 = 58.70 gallons

volume of water removed: 280 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	4.89	14.39	0.029	0	7.51	401
40	5.00	14.04	0.042	10.6	8.61	426
80	5.01	13.87	0.046	4.7	8.89	443
120	5.04	13.86	0.045	7.7	9.05	458
160	5.13	13.87	0.046	10.7	9.03	462
200	5.06	13.86	0.045	9.8	9.04	472
240	5.07	13.85	0.045	9.7	9.03	471
280	5.06	13.85	0.044	13.4	9.03	475
Sample	5.67	15.79	0.042	6.5	8.46	450

Sampling
Time of Sample Collection: 0920

Method:		Analyses:	
____	Stainless steel bailer	____	VOCs
____	Teflon bailer	____	SVOCs
____	Pos. Disp. Pump	____	Metals
X	Disposable bailer	____	PCB/Pest.
____	Dedicated pump	____	Physical
____	Other: _____	X	Other NYSDEC PART 360 ROUTINE

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Sunny. 80 degrees F
Sample description: clear colorless no odor
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
20 GPM MS/MSD #1

APPENDIX B-2

FIELD FORMS - DAILY EQUIPMENT CALIBRATION LOGS

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: 8/24/05

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill

Project Number: 2023-13A

Calibrated by: Jim.Milligan/Ben Kagan.

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horiba water meter U-22	Buffer 4.0 solution	7 am	Cal ok
Serial # 928021015	Autocal		
Solinist Water level Meter	Battery test	7:30 am	Ok
Serial # 1355			
Neotronics multigas meter	factory calibrated 3/22/05	-	Ok
serial # 105703501			
MiniRae 2000 PID	100 ppm isobutylene	7 am	Cal ok
Serial # 110 – 011334			

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: 8/25/05

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill

Project Number: 2023-13A

Calibrated by: Jim Milligan/Ben Kagan.

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horiba water meter U-22	Buffer 4.0 solution	7 am	Cal ok
Serial # 928021015	Autocal		
Solinist Water level Meter	Battery test	7 am	Ok
Serial # 1355			

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: 8/26/05

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill

Project Number: 2023-13A

Calibrated by: Jim Milligan/Ben Kagan

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horiba water meter U-22	Buffer 4.0 solution	7 am	Cal ok
Serial # 928021015	Autocal		
Solinist Water level Meter	Battery test	7 am	Ok
Serial # 1355			

H:\JMilligan\Sonia 3rdQ 05\Field Forms\equipment cal2.doc

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Date: 8/29/05

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill

Project Number: 2023-13A

Calibrated by: Jim Milligan/Ben Kagan

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horiba water meter U-22	Buffer 4.0 solution	7 am	Cal ok
Serial # 928021015	Autocal		
Solinist Water level Meter	Battery test	7 am	Ok
Serial # 1355			

H:\JMilligan\Sonia 3rdQ 05\Field Forms\equipment cal3.doc

Appendix C

APPENDIX C

CHAIN-OF-CUSTODY FORMS

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (516) 694-3040 Fax: (516) 420-8436

12638

EXTERNAL CHAIN OF CUSTODY

CLIENT: LRS

H2M SDG NO:

PROJECT NAME/NUMBER
Sonia Rd. Landfill
Part 360 Routine 2023-13A

SAMPLERS: (signature)/Client
Jim Milligan / DtB
Ben Regan

DELIVERABLES:
B5-70-D

TURNAROUND TIME: 21 Days

NOTES:
* = COD, NH_3, NO_3, Phenols, TKN
** = BOD5, Br, Cl, SO_4, TALK, TDS

Project Contact: Kelly Robins
Phone Number: (516) 364-9890

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC TOC VOA	ORGANIC BNA	ORGANIC Pest/PCB	*	Hardness	**	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
			Sample Container Description →		40ml Vial - H_2SO_4			250ml glass - H_2SO_4	250ml Plastic - HNO_3	1 Liter Plastic	1 Liter Plastic - HNO_3			
8/24/05	1145	GW	2023-MW-01S (29)	8	3			1	1	2	1			
8/24/05	1220	GW	2023-MW-01I (78)	8	3			1	1	2	1			
8/24/05	1245	GW	2023-MW-01D (106)	8	3			1	1	2	1			
8/24/05	1420	GW	2023-MW-02I (72)	8	3			1	1	2	1			
8/24/05	1345	GW	2023-MW-02D (116)	8	3			1	1	2	1			
8/24/05	1540	GW	2023-MW-07I (74)	8	3			1	1	2	1			
			Samples Held to 8/25/05 on chain # 12639											

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8/24	16:20		8.24.05	16:20
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered___ Airbill# _____
2. Ambient or chilled
3. Received in good condition: Y or N
4. Properly preserved: Y or N
5. Samples returned to lab___ Hrs from collection.

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (516) 694-3040 Fax: (516) 420-8436

12639

EXTERNAL CHAIN OF CUSTODY

CLIENT: IRS

H2M SDG NO:

PROJECT NAME/NUMBER
Sonin Road Landfill
Part 360 Routine 2023-13A

SAMPLERS: (signature)/Client
Jim Milling
Ben Keagen / DtB

DELIVERABLES:
BS-70-D

TURNAROUND TIME: 21 Days

NOTES:
* = COD, NH_3, NO_3, Phenols, TKN
** = BOD5, Br, Cl, SO_4, TAlk, TDS

Project Contact: Kelli Robins
Phone Number: (516) 364-9897

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: 40ml Vial - H_2SO_4			250ml glass - H_2SO_4	250ml plastic - HNO_3	1 Liter plastic		1 Liter Plastic HNO_3		LAB I.D. NO.	REMARKS:
					ANALYSIS REQUESTED: ORGANIC: TOC VOC	BNA	Pest PCB	*	Hardness	**		INORG.: Metals	CN		
8/25/05	0825	GW	2023-MW-12S (19)	8	3			1	1	2		1			
8/25/05	1540	GW	2023-MW-07I (74)	8	3			1	1	2		1			Held From 8/24/05 Chain # 12638 (6)
8/25/05	0850	GW	2023-MW-12I (70)	8	3			1	1	2		1			
8/25/05	0920	GW	2023-MW-12D (98)	8	3			1	1	2		1			
8/25/05	0920	GW	2023-MW-12D (98) MS	8	3			1	1	2		1			
8/25/05	0920	GW	2023-MW-12D (98) MSD	8	3			1	1	2		1			
8/25/05	1020	GW	2023-MW-11S (19)	8	3			1	1	2		1			
8/25	1045	GW	2023-MW-11I (71)	8	3			1	1	2		1			
8/25	0000	GW	2023-Blind Duplicate #1	8	3			1	1	2		1			
8/25	1125	GW	2023-MW-11D (94)	8	3			1	1	2		1			
8/25	1330	GW	2023-MW-06S (37)	8	3			1	1	2		1			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8/25	1525		8/25/05	15:25
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ___ Airbill# _____
2. Ambient or chilled
3. Received in good condition: Y or N
4. Properly preserved: Y or N
5. Samples returned to lab ___ Hrs from collection.

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (516) 694-3040 Fax: (516) 420-8436

12640

EXTERNAL CHAIN OF CUSTODY

CLIENT: IRS

H2M SDG NO:

PROJECT NAME/NUMBER: Sonia Road Landfill
Part 360 Routine 2023-13A

SAMPLERS: (signature)/Client: Jim Millin / Ben Hegan / DtB

DELIVERABLES: BS-70-D

TURNAROUND TIME: 21 Days

NOTES:
* = COD, NH_3, NO_3, Phenols, TKN
** = BOD5, BS, CL, SO_4, TALK, TDS

Project Contact: Kelli Robins

Phone Number: (516) 364-9890

Sample Container Description: 40 ml Vial H_2SO_4; 250ml Glass H_2SO_4; 250ml Plastic - HNO_3; 1 Liter Plastic; 1 Liter Plastic - HNO_3

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: TOC VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	*	Hardness	**		INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
8/25	1420	GW	2023-MW-06I (76)	8	3			1	1	2		1			
⊛ 8/25	1345	GW	2023-MW-02D (116)	8	3			1	1	2		1		⊛	Held from 8/24/05 Chain 12638

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	8/25	15:25	[signature]	8.25.05	15:25
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered___ Airbill# _____
2. Ambient or chilled
3. Received in good condition: Y or N
4. Properly preserved: Y or N
5. Samples returned to lab ___ Hrs from collection.

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

H2M LABS, INC.

12641

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (516) 694-3040 Fax: (516) 420-8436

CLIENT: IRS

H2M SDG NO:

PROJECT NAME/NUMBER
Sonia Road LandFill
Part 360 Routine 2023 - 13A

SAMPLERS: (signature)/Client
J.M Milligan
Ben Krayer / DtB

DELIVERABLES:
B5 - 70-D

TURNAROUND TIME: 21 Days

NOTES:
*= COD, NH_3, NO_3, Phenols, TKN
**= BOD5, Br, Cl, SO_4, TAlk, TDS

Project Contact: Kelly Robins
Phone Number: (516) 314-9840

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description	ANALYSIS REQUESTED: ORGANIC TOC VOA	ORGANIC BNA	ORGANIC Pest/PCB	*	Hardness	*	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS
					→	Vial - H_2SO_4			250ml glass - H_2SO_4	250ml plastic - HNO_3	1 Liter Plastic	1 Liter Plastic H_2SO_4			
8/26/25	0800	AQ	2023 - Field Blank #1	8		3			1	1	2	1			
8/26/25	0835	GW	2023 - MW - 06D (117)	8		3			1	1	2	1			
8/26/25	0930	GW	2023 - MW - 04I (71)	8		3			1	1	2	1			
8/26/25	1025	GW	2023 - MW - 04D (114)	8		3			1	1	2	1			
8/26/25	1145	GW	2023 - MW - 04S (34)	8		3			1	1	2	1			
8/26/25	1310	GW	2023 - MW - 03S (32)	8		3			1	1	2	1			
8/26/25	1410	GW	2023 - MW - 05D (116)	8		3			1	1	2	1			
8/26/25	0000	GW	2023 - Blind Duplicate #2	8		3			1	1	2	1			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8/26/25	15:15		8.26.25	15:15
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ___ Airbill# _____
2. Ambient or chilled
3. Received in good condition: Y or N
4. Properly preserved: Y or N
5. Samples returned to lab ___ Hrs from collection.

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

H2M LABS, INC.

12642

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (516) 694-3040 Fax: (516) 420-8436

CLIENT: IRS

H2M SDG NO:

PROJECT NAME/NUMBER: Sonny Road Landfill Part 360 Routine 2023-13A

SAMPLERS: (signature)/Client: Jim Milligan, Ben Keagan / D+B

DELIVERABLES: B5-70-D

TURNAROUND TIME: 21 Days

NOTES: * = OD, NH_3, NO3, Phenol 5, TKN
** = BOD5, Br, Cl, SO4, TALK, TDS

Project Contact: Keith Rosno

Phone Number: (516) 314-9890

Sample Container Description → 4 on 1 Vial - H_2SO_4; 250ml glass - H_2SO_4; 2 50ml Plastic - HO_3; 1 Liter Plastic; 1 Liter Plastic HO_3

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: TOC ~~VOA~~	BNA	Pest/PCB	*	Hardness	**		INORG.: Metal	CN	LAB I.D. NO.	REMARKS:
8/29/05	0820	GW	2023-MW-05I (70)	8	3			1	1	2		1			
8/29/05	0820	GW	2023-MW-05I (70) MS	8	3			1	1	2		1			
8/29/05	0820	GW	2023-MW-05I (70) MSD	8	3			1	1	2		1			
8/29/05	0920	GW	2023-MW-05S (34)	8	3			1	1	2		1			
8/29/05	0950	AQ	2023-Field Blank #2	8	3			1	1	2		1			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	8/29/05		[signature]	8/29/05	11:15
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered___ Airbill# _____
2. Ambient or chilled
3. Received in good condition: Y or N
4. Properly preserved: Y or N
5. Samples returned to lab ___ Hrs from collection.

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

Appendix D

APPENDIX D

DATA VALIDATION FORMS

DATA VALIDATION – ORGANICS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella R Petrella 9/29/05 Date of Review: 9/29/05

I. Data Deliverable Requirements

A. Legible	Yes
B. Paginated	Yes
C. Arranged in order	Yes
D. Consistent dates	Yes
E. Case Narrative	Yes
F. Chain-of-Custody Record	Yes
G. Sample Data Complete	Yes
H. Standard Date Complete	Yes
I. Raw QC Data Complete	Yes

Comments: IRS039 & IRS040

22 wells, 2 FB, 2 MS/MSD and 2 duplicates were collected and analyzed for Routine parameters

Blind dup#1 is a duplicate of MW-11I and Blind dup#2 is a duplicate of MW-05D

The results for the samples and blind duplicates were comparable.

The raw data was reviewed and no problems were found with the sample results

All QC for the wet chemistry parameters were within QC limits.

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

I. Holding times

Sample	Date Received	Date Digested	Date Analyzed	Holding Time Exceeded?
MW-01D	8/24/05		9/05	No
MW-01I	8/24/05		9/05	No
MW-01S	8/24/05		9/05	No
MW-02I	8/24/05		9/05	No
BLIND DUP#1	8/25/05		9/05	No
MW-02D	8/25/05		9/05	No
MW-06I	8/25/05		9/05	No
MW-06S	8/25/05		9/05	No
MW-07I	8/25/05		9/05	No
MW-11D	8/25/05		9/05	No
MW-12D	8/25/05		9/05	No
MW-11I	8/25/05		9/05	No
MW-11S	8/25/05		9/05	No
MW-12D*	8/25/05		9/05	No
MW-12I	8/25/05		9/05	No
MW-12S	8/25/05		9/05	No
BLIND DUP#2	8/26/05		9/05	No
MW-03S	8/26/05		9/05	No
MW-04D	8/26/05		9/05	No
MW-04I	8/26/05		9/05	No
MW-04S	8/26/05		9/05	No
MW-05D	8/26/05		9/05	No
MW-06D	8/26/05		9/05	No
FB#1	8/26/05		9/05	No
MW-05I*	8/29/05		9/05	No
MW-05S	8/29/05		9/05	No
FB#2	8/29/05		9/05	No

* Sample utilized as the spike and duplicate

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

Associated Samples: _____

II. Initial Calibration

1. Were all initial instrument calibrations performed?

   Yes

   Comments:

_____

_____

_____

2. Were the initial calibration verification standards analyzed at the contract specified frequency?

   Yes

   Comments:

_____

_____

_____

3. Were the initial calibration results within the control limits listed below?

   For tin and mercury: 80-120% of the true value
   For all other metals: 90-110% of the true value

   Yes

   If "No", note analytes _____

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

Associated Samples: _____

III. Continuing Calibration

1. Were the continuing calibration verification standards analyzed at the contract specified frequency?

   Yes

   Comments:

_____

_____

_____

2. Were the continuing calibration results within the control limits listed below?

   For tin and mercury: 80-120% of the true value
   For all other metals: 90-110% of the true value

   Yes

   If "No", note analytes _____

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

IV. Blank Summary

A. Method Blanks

1. Was a method blank prepared and analyzed at the contract specified frequency?

   Yes

2. Were all the analytes below the CRDL in the method blank?

   Yes

Comments:

B. Calibration Blanks

1. Were all initial and continuing calibration blanks analyzed at the contract specified frequency/

   Yes

2. Were all the analytes below the CRDL in all the calibration blanks?

   Yes

Comments:

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

MW-5I, MW-12D

V. Duplicate Analysis

1. Was a duplicate prepared and analyzed at the contract specified frequency?

   Yes

   Comments:

2. Were control limits for the relative percent differences (RPD) met for each analyte?

   Yes

   Comments:

For sample values >5 times the CRDL, the RPD control limit is ±20%.

For sample values >5 times the CRDL, the RPD control limit is ±CRDL.

If sample results were outside of the control limits, all data associated with that duplicate sample should have been flagged with a "*".

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

MW-5I, MW-12D

VI. Matrix Spike Analysis

1. Was a matrix spike prepared and analyzed at the contract specified frequency?

   Yes

   Comments:

2. Were the matrix spike recoveries within the contract specified control limits (75-125%)?

   Yes

   If "No", note analytes _____

   Data should have been flagged with "N" for analytes out of control limits. If the sample concentration exceeds the spike concentration by a factor of four or more, no flag is required.

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

VII. ICP Interference Check Sample Summary

1. Was the ICP serial dilution analyzed at the contract specified frequency?

   Yes

   Comments:

2. Were the serial dilution differences within the contract specified limits of ±w 10%?

   Yes

   Comments:

3. Was the ICP CRDL check standard analyzed at the contract specified frequency for the analytes required?

   Yes

   Comments:

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

VII. ICP Interference Check Sample Summary (continued):

4. Was the ICP interference check sample analyzed at the contract specified frequency:

   Yes

   Comments:

5. Were the ICP interference check sample results within the control limit of ±w-20% of the mean value?

   Yes

   If "No", not analytes

DATA VALIDATION – METALS

Site Name: Sonia Rd Landfill Laboratory Name: H2M

Reviewer: R.Petrella Date of Review: 9/29/05

VIII. Laboratory Control Sample Analysis

1. Was a laboratory control sample analyzed at the contract required frequency?

   Yes

   Comments:

2. Were the percent recoveries within the control limits of 80-120% (except for Ag and Sb) for each analyte?

   Yes

   Comments: