CONESTOGA-ROVERS
& ASSOCIATES

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2
Telephone: 519·884·0510 Facsimile: 519·884·0525
www.CRAworld.com

May 9, 2012 Reference No. 050138

Mr. Robert Corcoran, P.E.
NYSDEC-DER
Remedial Bureau A, Section C
625 Broadway, 11th floor
Albany, NY 12233-7015
(Email: rkcorcor@gw.dec.state.ny.us)

Dear Mr. Corcoran

Re: Progress Report – April 2012
HWD Site, Farmingdale, NY

Enclosed please find an electronic copy of the April 2012 Progress Report for the HWD site in Farmingdale, NY. As requested in your February 28, 2011 email to Dean Sommer, Rod Sutch and me, the monthly reports are henceforth to be transmitted to all parties via email (no hard copies).

This document is being submitted on behalf of the HWD Group in fulfillment of the requirement of Article III of Order on Consent Index # W1-0728-05-07. In accordance with the Order on Consent, as modified by your February 28, 2011 email, additional electronic copies of this monthly report have been distributed to:

Steven Bates – NYSDOH (Email: smb02@health.state.ny.us)
Sharon McLelland – NYSDOH (Email: spm03@health.state.ny.us)
Alali M. Tamuno, Esq – NYSDEC (Email: amtamuno@gw.dec.state.ny.us)

Should you have any questions or comments, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Jamie Puskas
JP/ck/25

Encl.
cc: Dean Sommer
John Uruskyj
Rod Sutch

HWD SITE
FARMINGDALE, NY
PROGRESS REPORT – April 2012

I Actions Taken In Compliance with Consent Order

- Submitted progress report for March 2012 to NYSDEC.
- Received NYSDEC approval for the shutdown of the SVE system and locations for soil confirmation samples on April 2, 2012.
- Resubmitted final corrected copy of the Site Management Plan (SMP) to NYSDEC on April 10, 2012. Copies were also sent to the NYSDOH and the Farmingdale Public Library.
- Continued preparation of the Draft Final Engineering Report.

II Data Received

- Validated groundwater data for post ISCO samples collected on March 12 - 15, 2012 are presented in Attachment A.

III Work Plans and Reports Submitted to NYSDEC

- Submitted progress report for March 2012 to NYSDEC.
- Submitted corrected final SMP to NYSDEC on April 10, 2012. [Note, a document production error was identified with the SMP submitted on March 21, 2012].

IV Actions Scheduled for Next Month

- Continue preparation of the Draft Final Engineering Report.
- Collect soil confirmation samples on May 16, 2012 at 12 locations approved by NYSDEC.
- Perform quarterly ASD system monitoring.

V Unresolved Delays and Corrective Actions

- None

VI Proposed Modifications to Work Plans

- No modifications to the work plans were proposed.

VII Citizen Participation Plan

- No Citizen Participation activities were undertaken or required during April 2012.

List of Attachments

Attachment A – Validated March 2012 Groundwater Data

ATTACHMENT A

VALIDATED MARCH 2012 GROUNDWATER DATA

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: Jamie Puskas

REF. NO.: 050138

FROM: Susan Scrocchi/bjw/11

DATE: May 7, 2012

CC: Robert Medsger

E-Mail and Hard Copy if Requested

RE: Analytical Results and QA/QC Review
Groundwater Sampling Event
Hazardous Waste Disposal Site
Farmingdale, New York

INTRODUCTION

The following details a quality assessment and validation of the analytical data resulting from the March 2012 collection of groundwater samples from the Hazardous Waste Disposal Site in Farmingdale, New York. The sample summary detailing sample identification, sample location, quality control (QC) samples and analytical parameters is presented in Table 1. Sample analysis was completed at H2M Labs, Inc. (H2M), in Melville, NY. Samples were analyzed by method SW-846 8260[1]. Summaries of the analytical results are presented in Table 2.

The QC criteria used to assess the data were established by the method and with the documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999.

These guidelines are collectively referred to as "Guidelines" in this memorandum.

SAMPLE QUANTITATION

The laboratory reported detected concentrations of volatile organic compounds below the laboratory's practical quantitation limit (PQL)/report limit (RL) but above the laboratory's method detection limit (MDL). The laboratory flagged these sample concentrations with a "J". These concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum.

1 "Test Methods for Solid Waste Physical/Chemical Methods", SW-846, 3rd Edition, September 1986 (with all subsequent revisions).

SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time periods and preservation requirements are summarized in the analytical methods. All sample extractions and/or analyses were performed within the specified holding times.

All samples were properly preserved and cooled to <6°C after collection.

GAS CHROMATOGRAPHY/MASS SPECTROMETER (GC/MS) – TUNING AND MASS CALIBRATION (INSTRUMENT PERFORMANCE CHECK) – VOLATILE ORGANIC COMPOUNDS (VOCS)

To ensure adequate mass resolution, identification, and to some degree, sensitivity; the performance of each GC/MS instrument was checked at the beginning of each 12-hour period using bromofluorobenzene (BFB). The resulting spectra must meet the criteria cited in the "Guidelines" before initiating an analysis sequence.

Instrument performance check data were reviewed. These tuning compounds were analyzed at the required frequency throughout the VOC analyses. The results of all instrument performance checks were within the acceptance criteria, indicating acceptable instrument performance.

GC/MS INITIAL CALIBRATION – VOCS

Initial calibration data are used to demonstrate that each instrument is capable of generating acceptable quantitative data. A five point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each over a specific concentration range.

Initial calibration criteria for organic analyses are evaluated against the following criteria:

i) Must meet a minimum mean relative response factor (RRF) of 0.05.

ii) The percent relative standard deviation (%RSD) values must not exceed 30.0 percent or a minimum coefficient of determination (R^2) of 0.99 if quadratic equation calibration curves are used.

Calibration standards were analyzed at the required frequency and the results met the above criteria for sensitivity and linearity.

GC/MS CONTINUING CALIBRATION – VOCS

To ensure that each instrument was capable of producing acceptable quantitative data over the analysis period, continuing calibration standards must be analyzed every 12 hours (24 hrs for TO-15). The following criteria are employed to evaluate the continuing calibration data:

i) Must meet a minimum mean RRF of 0.05.

ii) The percent difference (%D) between the mean initial calibration RRF and the continuing calibration RRF must not exceed 25 percent.

iii) The percent drift between the true value and the continuing calibration value must not exceed 25 percent.

Calibration standards were analyzed at the required frequency and all the results met the above criteria for instrument sensitivity. All analytes met the linearity criteria with the exceptions presented in Table 3.

METHOD BLANK SAMPLES

Method blank samples are prepared from a purified sample matrix and are processed concurrently with investigative samples to assess the presence and the magnitude of sample contamination introduced during sample analysis. Method blank samples are analyzed at a minimum frequency of one per analytical batch and target analytes should be non-detect.

Method blanks were analyzed at the recommended frequency and the results were non-detect with the exception of tetrachloroethene and acetone present at low levels. All associated sample results with similar concentrations were qualified as non-detect (see Table 4).

SURROGATE COMPOUNDS

Individual sample performance for organic analyses was monitored by assessing the results of surrogate compound percent recoveries. Surrogate percent recoveries are reviewed against the laboratory developed control limits provided in the analytical report.

All surrogate recoveries met the method criteria, demonstrating acceptable analytical efficiency for these analyses.

INTERNAL STANDARD (IS) SUMMARIES

To correct for variability in the GC/MS response and sensitivity, IS compounds are added to all samples. All results are calculated as a ratio of the compound and associated IS response. Overall instrument stability and performance for VOC analyses were monitored using IS peak area and retention time (RT) data. The IS peak areas and RTs of the samples are required to meet the following criteria:

i) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated continuing calibration standard IS area counts.

ii) The RT of the IS must not vary by more than plus or minus 30 seconds from the associated continuing calibration standard.

A review of the internal standard data showed that the IS area counts and RT data were within the acceptance criteria for all samples.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

To assess the long term accuracy and precision of the analytical methods on various matrices, MS/MSD percent recoveries and relative percent differences (RPD) of the concentrations were determined. The organic MS/MSD percent recovery and RPD control limits are established by the laboratory.

A matrix spike/matrix spike duplicate was performed on sample GW-50138-031312-RR-007. All recoveries were acceptable indicating good analytical accuracy and precision.

LABORATORY CONTROL SAMPLE (LCS)

The LCS analysis serves as a monitor of the overall performance in all steps of the sample analysis and is analyzed with each sample batch. The LCS percent recoveries were evaluated against method and laboratory established control limits. Some LCS analyses were performed in duplicate to monitor laboratory precision.

All LCS percent recoveries were within the laboratory control limits indicating good analytical accuracy with the exception of a high recovery. The associated sample results were non-detect and would not have been impacted by the implied high bias.

FIELD QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

The field QA/QC consisted of one trip blank, one equipment blank, and one field duplicate set.

Trip Blanks

To monitor potential cross-contamination during sampling, transportation and/or storage, a trip blank was submitted to the laboratory for VOC analysis.

Tetrachloroethene was detected in the trip blank. All associated sample results with similar concentrations were qualified as non-detect (see Table 5).

Equipment Blanks

To monitor potential cross-contamination during sampling, transportation and/or storage, a trip blank was submitted to the laboratory for VOC analysis.

Tetrachloroethene was detected in the equipment blank. All associated positive sample results were previously qualified as non-detect due to method blanks and/or trip blanks and no further qualification of the data was required.

Field Duplicates

One set of field duplicates were submitted with this sample batch. All sample results outside estimated ranges of detection showed acceptable sampling and analytical precision.

TARGET COMPOUND IDENTIFICATION

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound RT and mass spectra (if applicable) were evaluated according to identification criteria established by the methods. The organic compounds reported adhered to the specified identification criteria.

TARGET COMPOUND QUANTITATION

The reported quantitation results and detection limits were checked to ensure results reported were accurate. No discrepancies were found between the raw data and the sample results reported by the laboratory.

SYSTEM PERFORMANCE

System performance between various quality control checks was evaluated to monitor for changes that may have caused the degradation of data quality. No technical problems or chromatographic anomalies were observed which would require qualification of the data.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications noted herein.

TABLE 1

SAMPLE AND ANALYSIS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

				Analysis/Parameters	
Sample I.D.	*Location I.D.*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*Volatile Organic Compounds*	*Comment*
GW-50138-031312-RR-001	MW-9	03/13/12	9:00	X	
GW-50138-031312-RR-002	MW-6	03/13/12	8:50	X	
GW-50138-031312-RR-003	MW-2D	03/13/12	9:55	X	
GW-50138-031312-RR-004	MW-2D	03/13/12	10:00	X	Field duplicate of GW-50138-031312-RR-003
GW-50138-031312-RR-005	MW-2	03/13/12	12:05	X	
GW-50138-031312-RR-006	MW-7	03/13/12	13:25	X	
GW-50138-031312-RR-007	MW-10	03/13/12	14:05	X	
GW-50138-031312-RR-008	MW-8	03/13/12	15:45	X	
GW-50138-031312-RR-009	MW-11	03/13/12	16:50	X	
GW-50138-031412-RR-010	MW-12S	03/14/12	9:30	X	
GW-50138-031412-RR-011	MW-12D	03/14/12	10:40	X	
GW-50138-031412-RR-012	MW-3D	03/14/12	11:50	X	
GW-50138-031412-RR-013	MW-1D	03/14/12	13:50	X	
GW-50138-031412-RR-014	MW-1	03/14/12	14:50	X	
GW-50138-031412-RR-015	MW-5	03/14/12	15:55	X	
GW-50138-031512-RR-016	MW-3	03/15/12	9:45	X	
GW-50138-031512-RR-017	MW-4	03/15/12	11:00	X	
GW-50138-031512-RR-018	W-2	03/15/12	12:30	X	
GW-50138-031512-RR-019	Rinse Blank	03/15/12	12:50	X	
TRIP BLANK	Trip Blank	03/15/12	-	X	

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-1*	*MW-1D*	*MW-2*	*MW-2D*	*MW-2D*
	Sample ID:	*GW-50138-031412-RR-014*	*GW-50138-031412-RR-013*	*GW-50138-031312-RR-005*	*GW-50138-031312-RR-003*	*GW-50138-031312-RR-004*
	Sample Date:	*3/14/2012*	*3/14/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*
						Duplicate
Parameter	*Units*					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5 U	5 U	5 U	5 U	5 U
2-Hexanone	µg/L	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5 U	5 U	5 U	5 U	5 U
Acetone	µg/L	5 U	5 U	5 U	5 U	5 U
Benzene	µg/L	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U	5 U
Bromomethane (Methyl bromide)	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Carbon disulfide	µg/L	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
Chloroform (Trichloromethane)	µg/L	5 U	5 U	5 U	5 U	5 U
Chloromethane (Methyl chloride)	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Cyclohexane	µg/L	5 U	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-1*	*MW-1D*	*MW-2*	*MW-2D*	*MW-2D*
	Sample ID:	*GW-50138-031412-RR-014*	*GW-50138-031412-RR-013*	*GW-50138-031312-RR-005*	*GW-50138-031312-RR-003*	*GW-50138-031312-RR-004*
	Sample Date:	*3/14/2012*	*3/14/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*
						Duplicate
Parameter	*Units*					
Volatile Organic Compounds (Cont'd.)						
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	µg/L	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	5 U	5 U	5 U	5 U	5 U
Isopropyl benzene	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl acetate	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl cyclohexane	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl tert butyl ether (MTBE)	µg/L	5 U	6	5 U	5	6
Methylene chloride	µg/L	5 U	5 U	5 U	5 U	5 U
Styrene	µg/L	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Toluene	µg/L	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane (CFC-11)	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Trifluorotrichloroethane (Freon 113)	µg/L	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	µg/L	2 U	2 U	2 U	2 U	2 U
Xylenes (total)	µg/L	5 U	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-3*	*MW-3D*	*MW-4*	*MW-5*	*MW-6*
	Sample ID:	*GW-50138-031512-RR-016*	*GW-50138-031412-RR-012*	*GW-50138-031512-RR-017*	*GW-50138-031412-RR-015*	*GW-50138-031312-RR-002*
	Sample Date:	*3/15/2012*	*3/14/2012*	*3/15/2012*	*3/14/2012*	*3/13/2012*
Parameter	*Units*					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	2 J	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	1 J	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	9	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	µg/L	4 J	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	13	5 U	5 U	5 U	5 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5 U	5 U	5 U	5 U	5 U
2-Hexanone	µg/L	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5 U	5 U	5 U	5 U	5 U
Acetone	µg/L	5 U	5 U	5 U	5 U	5 U
Benzene	µg/L	2 J	5 U	5 U	5 U	5 U
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U	5 U
Bromomethane (Methyl bromide)	µg/L	5 U	5 UJ	5 U	5 UJ	5 UJ
Carbon disulfide	µg/L	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	45	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
Chloroform (Trichloromethane)	µg/L	5 U	5 U	5 U	5 U	5 U
Chloromethane (Methyl chloride)	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Cyclohexane	µg/L	31	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-3*	*MW-3D*	*MW-4*	*MW-5*	*MW-6*
	Sample ID:	*GW-50138-031512-RR-016*	*GW-50138-031412-RR-012*	*GW-50138-031512-RR-017*	*GW-50138-031412-RR-015*	*GW-50138-031312-RR-002*
	Sample Date:	*3/15/2012*	*3/14/2012*	*3/15/2012*	*3/14/2012*	*3/13/2012*
Parameter	*Units*					
Volatile Organic Compounds (Cont'd.)						
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	µg/L	5 UJ	5 U	5 UJ	5 U	5 U
Ethylbenzene	µg/L	53	5 U	5 U	5 U	5 U
Isopropyl benzene	µg/L	29	5 U	5 U	5 U	5 U
Methyl acetate	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl cyclohexane	µg/L	16	5 U	5 U	5 U	5 U
Methyl tert butyl ether (MTBE)	µg/L	5 U	5 U	5 U	5 U	5 U
Methylene chloride	µg/L	5 U	5 U	5 U	5 U	5 U
Styrene	µg/L	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Toluene	µg/L	1 J	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane (CFC-11)	µg/L	5 U	5 UJ	5 U	5 UJ	5 UJ
Trifluorotrichloroethane (Freon 113)	µg/L	5 UJ	5 U	5 UJ	5 U	5 U
Vinyl chloride	µg/L	2 U	2 U	2 U	2 U	2 U
Xylenes (total)	µg/L	4 J	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-7*	*MW-8*	*MW-9*	*MW-10*	*MW-11*
	Sample ID:	*GW-50138-031312-RR-006*	*GW-50138-031312-RR-008*	*GW-50138-031312-RR-001*	*GW-50138-031312-RR-007*	*GW-50138-031312-RR-009*
	Sample Date:	*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*
Parameter	*Units*					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5 U	5 U	5 U	5 U	5 U
2-Hexanone	µg/L	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5 U	5 U	5 U	5 U	5 U
Acetone	µg/L	5 U	5 U	5 U	5 U	5 U
Benzene	µg/L	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U	5 U
Bromomethane (Methyl bromide)	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Carbon disulfide	µg/L	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U	5 U
Chloroform (Trichloromethane)	µg/L	5 U	5 U	5 U	5 U	5 U
Chloromethane (Methyl chloride)	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Cyclohexane	µg/L	5 U	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-7*	*MW-8*	*MW-9*	*MW-10*	*MW-11*
	Sample ID:	*GW-50138-031312-RR-006*	*GW-50138-031312-RR-008*	*GW-50138-031312-RR-001*	*GW-50138-031312-RR-007*	*GW-50138-031312-RR-009*
	Sample Date:	*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*
Parameter	*Units*					
Volatile Organic Compounds (Cont'd.)						
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	µg/L	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	5 U	5 U	5 U	5 U	5 U
Isopropyl benzene	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl acetate	µg/L	5 U	5 U	5 U	5 U	5 U
Methyl cyclohexane	µg/L	5 U	3 J	5 U	5 U	5 U
Methyl tert butyl ether (MTBE)	µg/L	5 U	5 U	5 U	5 U	5 U
Methylene chloride	µg/L	5 U	5 U	5 U	5 U	5 U
Styrene	µg/L	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Toluene	µg/L	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane (CFC-11)	µg/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Trifluorotrichloroethane (Freon 113)	µg/L	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	µg/L	2 U	2 U	2 U	2 U	2 U
Xylenes (total)	µg/L	5 U	5 U	5 U	5 U	5 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-12D*	*MW-12S*	*W-2*
	Sample ID:	*GW-50138-031412-RR-011*	*GW-50138-031412-RR-010*	*GW-50138-031512-RR-018*
	Sample Date:	*3/14/2012*	*3/14/2012*	*3/15/2012*
Parameter	*Units*			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	1 J	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U
1,2,4-Trichlorobenzene	µg/L	5 UJ	5 UJ	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	1 J
1,2-Dichloroethane	µg/L	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U
1,3-Dichlorobenzene	µg/L	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5 U	5 U	3 J
2-Hexanone	µg/L	5 U	5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5 U	5 U	5 U
Acetone	µg/L	5 U	5 U	16
Benzene	µg/L	5 U	5 U	9
Bromodichloromethane	µg/L	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U
Bromomethane (Methyl bromide)	µg/L	5 UJ	5 UJ	5 U
Carbon disulfide	µg/L	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	87
Chloroethane	µg/L	5 U	5 U	11
Chloroform (Trichloromethane)	µg/L	5 U	5 U	5 U
Chloromethane (Methyl chloride)	µg/L	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	6	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U
Cyclohexane	µg/L	5 U	5 U	9

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

	Sample Location:	*MW-12D*	*MW-12S*	*W-2*
	Sample ID:	*GW-50138-031412-RR-011*	*GW-50138-031412-RR-010*	*GW-50138-031512-RR-018*
	Sample Date:	*3/14/2012*	*3/14/2012*	*3/15/2012*
Parameter	*Units*			
Volatile Organic Compounds (Cont'd.)				
Dibromochloromethane	µg/L	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	µg/L	5 U	5 U	5 UJ
Ethylbenzene	µg/L	5 U	5 U	62
Isopropyl benzene	µg/L	5 U	2 J	380
Methyl acetate	µg/L	5 U	5 U	5 U
Methyl cyclohexane	µg/L	5 U	12	9
Methyl tert butyl ether (MTBE)	µg/L	1 J	5 U	5 U
Methylene chloride	µg/L	5 U	5 U	5 U
Styrene	µg/L	5 U	5 U	5 U
Tetrachloroethene	µg/L	5 U	5 U	5 U
Toluene	µg/L	5 U	5 U	2 J
trans-1,2-Dichloroethene	µg/L	5 U	5 U	1 J
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	3 J	5 U
Trichlorofluoromethane (CFC-11)	µg/L	5 UJ	5 UJ	5 U
Trifluorotrichloroethane (Freon 113)	µg/L	5 U	5 U	5 UJ
Vinyl chloride	µg/L	2 U	2	2 U
Xylenes (total)	µg/L	5 U	5 U	4 J

Notes:

J - Estimated.
U - Non-detect at associated value.
UJ - Not detected, estimated reporting limit.

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

Parameter	*Calibration Date*	*Compound*	*%D*	*Associated Sample ID*	*Qualified Sample Results*	*Units*
VOCs	3/20/12	1,2,4-Trichlorobenzene	38	GW-50138-031312-RR-007	5 UJ	µg/L
				GW-50138-031312-RR-001	5 UJ	µg/L
				GW-50138-031312-RR-002	5 UJ	µg/L
				GW-50138-031312-RR-003	5 UJ	µg/L
				GW-50138-031312-RR-004	5 UJ	µg/L
				GW-50138-031312-RR-005	5 UJ	µg/L
				GW-50138-031312-RR-006	5 UJ	µg/L
				GW-50138-031312-RR-008	5 UJ	µg/L
				GW-50138-031312-RR-009	5 UJ	µg/L
				GW-50138-031412-RR-010	5 UJ	µg/L
				GW-50138-031412-RR-011	5 UJ	µg/L
				GW-50138-031412-RR-012	5 UJ	µg/L
				GW-50138-031412-RR-013	5 UJ	µg/L
				GW-50138-031412-RR-014	5 UJ	µg/L
				GW-50138-031412-RR-015	5 UJ	µg/L
VOCs	3/28/12	1,2,4-Trichlorobenzene	27	GW-50138-031512-RR-016	5 UJ	µg/L
				GW-50138-031512-RR-017	5 UJ	µg/L
				GW-50138-031512-RR-018	5 UJ	µg/L
				GW-50138-031512-RR-019	5 UJ	µg/L
VOCs	3/20/12	Bromomethane (Methyl bromide)	28	GW-50138-031312-RR-007	5 UJ	µg/L
				GW-50138-031312-RR-001	5 UJ	µg/L
				GW-50138-031312-RR-002	5 UJ	µg/L
				GW-50138-031312-RR-003	5 UJ	µg/L
				GW-50138-031312-RR-004	5 UJ	µg/L
				GW-50138-031312-RR-005	5 UJ	µg/L

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

Parameter	*Calibration Date*	*Compound*	*%D*	*Associated Sample ID*	*Qualified Sample Results*	*Units*
VOCs	3/20/12	Bromomethane (Methyl bromide)	28	GW-50138-031312-RR-006	5 UJ	µg/L
				GW-50138-031312-RR-008	5 UJ	µg/L
				GW-50138-031312-RR-009	5 UJ	µg/L
				GW-50138-031412-RR-010	5 UJ	µg/L
				GW-50138-031412-RR-011	5 UJ	µg/L
				GW-50138-031412-RR-012	5 UJ	µg/L
				GW-50138-031412-RR-013	5 UJ	µg/L
				GW-50138-031412-RR-014	5 UJ	µg/L
				GW-50138-031412-RR-015	5 UJ	µg/L
VOCs	3/28/12	Dichlorodifluoromethane (CFC-12)	50	GW-50138-031512-RR-016	5 UJ	µg/L
				GW-50138-031512-RR-017	5 UJ	µg/L
				GW-50138-031512-RR-018	5 UJ	µg/L
				GW-50138-031512-RR-019	5 UJ	µg/L
VOCs	3/20/12	Trichlorofluoromethane (CFC-11)	38	GW-50138-031312-RR-007	5 UJ	µg/L
				GW-50138-031312-RR-001	5 UJ	µg/L
				GW-50138-031312-RR-002	5 UJ	µg/L
				GW-50138-031312-RR-003	5 UJ	µg/L
				GW-50138-031312-RR-004	5 UJ	µg/L
				GW-50138-031312-RR-005	5 UJ	µg/L
				GW-50138-031312-RR-006	5 UJ	µg/L
				GW-50138-031312-RR-008	5 UJ	µg/L
				GW-50138-031312-RR-009	5 UJ	µg/L
				GW-50138-031412-RR-010	5 UJ	µg/L
				GW-50138-031412-RR-011	5 UJ	µg/L
				GW-50138-031412-RR-012	5 UJ	µg/L

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

Parameter	*Calibration Date*	*Compound*	*%D*	*Associated Sample ID*	*Qualified Sample Results*	*Units*
VOCs	3/20/12	Trichlorofluoromethane (CFC-11)	38	GW-50138-031412-RR-013	5 UJ	µg/L
				GW-50138-031412-RR-014	5 UJ	µg/L
				GW-50138-031412-RR-015	5 UJ	µg/L
VOCs	3/28/12	Trifluorotrichloroethane (Freon 113)	30	GW-50138-031512-RR-016	5 UJ	µg/L
				GW-50138-031512-RR-017	5 UJ	µg/L
				GW-50138-031512-RR-018	5 UJ	µg/L
				GW-50138-031512-RR-019	5 UJ	µg/L

Notes:

%D Percent Difference
VOCs Volatile Organic Compounds
UJ Not detected, estimated reporting limit.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

Parameter	*Analysis Date*	*Analyte*	*Blank Result*	*Sample ID*	*Qualified Sample Result*
VOCs	3/28/12	Tetrachloroethene	2J	GW-50138-031512-RR-016	5 U
				GW-50138-031512-RR-017	5 U
				GW-50138-031512-RR-018	5 U
				GW-50138-031512-RR-019	5 U

Notes:

VOCs Volatile Organic Compounds
J Estimated.
U Not detected.

TABLE 5

QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANK
GROUNDWATER SAMPLING EVENT
HAZARDOUS WASTE DISPOSAL SITE
FARMINGDALE, NEW YORK
MARCH 2012

Parameter	*Analyte*	*Blank Result*	*Associated Sample ID*	*Qualified Sample Result*	*Units*
VOCs	Tetrachloroethene	2J	GW-50138-031412-RR-014	5 U	µg/L

Notes:

VOCs	Volatile Organic Compounds
J	Estimated.
U	Not detected.