

2013 Periodic Review Report: NYSDEC BCP Site No. C828115

Location:

Rochester Drug Cooperative Building
320 North Goodman Street
Rochester, New York

Prepared for:

The Gary and Marcia Stern Family Limited Partnership
320 North Goodman Street
Rochester, New York 14607

LaBella Project No. 211352

July 2013

2013 Periodic Review Report: NYSDEC BCP Site No. C828115

Location:

Rochester Drug Cooperative Building
320 North Goodman Street
Rochester, New York

Prepared for:

The Gary and Marcia Stern Family Limited Partnership
320 North Goodman Street
Rochester, New York 14607

LaBella Project No. 211352

July 2013

Table of Contents

	Page
1.0 INTRODUCTION.....	1
1.1 Environmental History.....	1
2.0 PURPOSE AND SCOPE OF WORK.....	2
3.0 ANNUAL MONITORING.....	3
3.1 Groundwater Monitoring.....	3
3.2 Sub-Slab Depressurization System Monitoring.....	4
3.3 Site Wide Inspection.....	4
3.4 Deviations from SMP.....	4
4.0 GROUNDWATER FLOW CONTOURS.....	4
5.0 SUMMARY OF GROUNDWATER MONITORING.....	5
6.0 SITE EVALUATION.....	5
7.0 INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION.....	6

FIGURES

Figure 1	Site Location Map
Figure 2	Site Area Map
Figure 3	Well Location Map
Figure 4	Sub-Slab Depressurization System Map
Figure 5	June 28, 2013 Groundwater Flow Contours

TABLES

Table 1	Groundwater Monitoring Results
----------------	--------------------------------

APPENDICES

Appendix A	Field Logs
Appendix B	Laboratory and Data Usability Summary Report
Appendix C	Graphs of Total VOCs Over Time
Appendix D	Institutional Controls/Engineering Controls Certification

1.0 INTRODUCTION

LaBella Associates, P.C. (LaBella) is pleased to submit this 2013 Periodic Review Report (PRR) for the property located at 320 North Goodman Street, City of Rochester, Monroe County, New York, herein after referred to as the “site”. The site is identified as New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site #C828115. A site Location Map is included as Figure 1.

The site is located in the County of Monroe, New York and is identified as Block 84 and Lot 1.0 on the City of Rochester Tax Map # 106. The site is situated on an approximately 2.7-acre area bounded by the CSX Goodman Street Yards and railroad tracks to the north and east, the Village Gate Square Mall to the south, and residential properties are located adjacent to the west of the Site, across North Goodman Street (see Figure 2).

LaBella was retained by The Gary and Marcia Stern Limited Family Partnership to assist in the monitoring and reporting requirements associated with the Site Management Plan (SMP) prepared for the site.

1.1 Environmental History

Previous environmental investigations at the site identified the nature and extent of contamination to be limited to petroleum contamination in soil, groundwater, and soil vapor. The apparent source of the petroleum impacts was four (4) petroleum underground storage tanks (USTs) that were formerly located in the eastern portion of the site. Two (2) additional USTs were reportedly removed by others in the early 1970s, and another UST was removed by others in 1998. There was no closure documentation for the tanks removed from the site.

There are two (2) NYSDEC Spills associated with the site (#9506933 and #0106407). Both spills have been closed by the NYSDEC, however, the investigation and remediation of the petroleum impacts were performed as part of the BCP project that are associated with NYSDEC Spill #0106407. The site was entered into the NYSDEC BCP on May 18, 2004.

A Remedial Investigation (RI) was conducted by GeoQuest Environmental, Inc. (GeoQuest) in September 2003 to complete the delineation of the horizontal and vertical extent of petroleum-impacted soil and groundwater at the site. This RI consisted of advancing seven (7) direct-push soil borings (designated MW-13 through MW-17 and B-18 and B-19) of which five (5) were converted into temporary groundwater monitoring wells (designated MW-13 through MW-17). GeoQuest’s RI concluded that:

- the source of the petroleum impacts at the 320 North Goodman Street Site emanated from on-site petroleum storage tanks that had previously been removed from the site;
- there were no current or reasonably foreseeable exposure pathways since the impacted area was to remain a parking lot; and,
- conditions at the site required remediation in order to meet the NYSDEC BCP requirements.

In April 2005, GeoQuest conducted an Interim Remedial Measure (IRM) Soil Removal program at the site. As part of the IRM, an ex-situ treatment biocell was constructed, on the easterly adjacent Village Gate Square property, to treat approximately 2,103 cubic yards of petroleum-impacted soil that was

excavated from the site. This petroleum-impacted soil was placed in a “biocell” for remediation over time. Subsequent to screening and sampling the biocell soils, NYSDEC approved, in 2009, grading of the biocell soils into an existing soil berm to the east of the on-site building and covered with one (1) foot of clean soil.

An active Sub-Slab Depressurization System (SSDS) was installed beneath the concrete slab of the on-site building in November 2006. The SSDS was designed to depressurize the subsurface immediately below the concrete floor slab, thus restricting soil vapor intrusion into the on-site building from beneath the floor slab. Additional sub-slab depressurization fans were installed in the on-site building in 2009. Subsequent testing of these monitoring points (i.e. radius of influence testing) indicated negative pressures beneath the floor slab throughout the on-site building.

A Final Engineering Report dated December 2009 by LaBella documented the remedial work. A Site Management Plan (SMP) dated December 2009 by LaBella provides the required monitoring and reporting for the Site. Based on the remedial work completed a certificate of completion was issued for the site in 2009.

2.0 PURPOSE AND SCOPE OF WORK

The purpose of this report is to present the monitoring work completed at the site since the last periodic review report. This work was completed in general accordance with the provisions identified in the SMP, with exceptions noted in Section 3.4. As required in the SMP, this report includes the following information:

- Identification, assessment and certification of all Engineering Controls/Institutional Controls (ECs/ICs) required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All inspection forms and other records generated for the site during the reporting period in electronic format (included in report);
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the site-specific RAWP;
 - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
 - The overall performance and effectiveness of the remedy.

3.0 ANNUAL MONITORING

The SMP indicated monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first two (2) years, via semi-annual sampling of four (4) existing groundwater monitoring wells (MW-14R, MW-15R, MW-16R and MW-17R), and the frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The groundwater monitoring program is summarized in the following table and was included in the SMP:

Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Groundwater Monitoring	Semi-annual	Groundwater	NYSDEC STARS-list VOCs using USEPA Method 8260
Soil Cover	Annual	Soil	None
SSDS	Monthly	Vapor/Air	None

* Monitoring of the performance of the remedy and overall reduction in contamination on-site were conducted for the first two (2) years, via semi-annual sampling of four (4) existing groundwater monitoring wells (MW-14R, MW-15R, MW-16R and MW-17R). The frequency thereafter will be determined by NYSDEC.

It should be noted that the actual monitoring completed varied from that in the SMP. A summary of the work completed is provided below. Section 3.4 discusses deviations from the SMP.

3.1 Groundwater Monitoring

One groundwater sample event was completed during the monitoring period. Specifically, on June 28, 2013, four groundwater monitoring wells designated MW-14R, MW-15R, MW-16R, and MW-17R (locations shown on Figure 3) were sampled. A copy of the groundwater sampling log for each well is included in Appendix A.

Static water levels (SWLs) were collected during the June 28, 2013 sampling event. SWL measurements were collected with a Heron Dipper-T Water Level Meter. The probe was decontaminated between each monitoring well to prevent cross-contamination. Figure 5 shows the locations of the monitoring wells from which water levels were collected and groundwater contours interpreted from the SWLs. Section 3.4 discussed groundwater flow direction.

Prior to sampling, a minimum of three well volumes were purged. The samples were collected using a designated polyethylene bailer. Groundwater sampling logs that include the in-field parameter measurements collected during the purging of the wells are included in the Groundwater Sampling Forms in Appendix 1.

Spectrum Laboratories in New Kingstown, Rhode Island analyzed the groundwater samples. Spectrum Laboratories is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. The samples were analyzed for NYSDEC Commissioner Policy 51

(CP-51) list VOCs using United States Environmental Protection Agency (USEPA) Method 8260B. In addition, all laboratory data from the groundwater monitoring event was reported in an Analytical Services Protocol (ASP) Category B Deliverables data package. A copy of the laboratory report is included in Appendix B. A Data Usability Summary Report (DUSR) was completed and is also included in Appendix B.

A Table summarizing the June 28, 2013 groundwater sampling events as well as historic groundwater results for the four wells included in the monitoring program are included as Table 1. Also included on Table 1 is a comparison to NYSDEC groundwater standards.

3.2 Sub-Slab Depressurization System Monitoring

The sub-slab depressurization system was monitored during the June 28, 2013 sampling event in order to verify proper operation of the system. There are six fans that operate the SSDS at the locations shown on Figure 4. At each fan location, the following inspections were made:

- the in-line U-tube manometer on the suction side of the piping system was observed to determine a pressure differential that would indicate the fan was operating properly.
- the piping condition was observed to determine if any portion of the piping required repair;
- labeling of the system was intact; and
- descriptions of actions taken to address any concerns of the SSDS (if applicable).

Based on the inspection, the SSDS appeared to be in good working order (e.g. each manometer indicated the SSDS was working, the fan was observed to be working, and the piping appeared in good condition). A copy of the inspection form and photographs of portions of the system are included in Appendix A.

3.3 Site Wide Inspection

A site wide inspection of the property was conducted on June 28, 2013 to assess the general condition of the site (e.g. commercial use, residential use, etc.) as well as the biocell soil cover and asphalt paved areas located over the remedial excavations. Based on the results of the general site conditions inspection, the site remains utilized for commercial use only, the biocell soil cover appears to be intact (i.e. no erosion observed), and the asphalt paved areas over the remedial excavations remain in good conditions. A copy of the site-wide inspection form including photographs of the site are included in Appendix A.

3.4 Deviations from SMP

Deviations from the SMP were not encountered during the reporting period with the following exceptions.

- The SSDS was inspected by LaBella during the reporting period, rather than the monthly inspections by the owner.
- One groundwater sampling event was completed rather than two events (semi-annual).

4.0 GROUNDWATER FLOW CONTOURS

SWL measurements collected one June 28, 2013 indicate that the surface of the uppermost water-bearing zone is present approximately 4.9 to 7.8-feet (ft) below the ground surface (bgs). The SWLs collected during the June 28, 2013 monitoring event was used to calculate groundwater elevations. All

groundwater elevations were made relative to a site-specific vertical datum.

Groundwater contours developed from SWL measurements collected on June 28, 2013 as shown on Figure 5 indicate that general groundwater flow at the site is from the south-southeast to the north-northeast. This groundwater flow is generally consistent with results included in the Final Engineering Report completed for the site.

5.0 SUMMARY OF GROUNDWATER MONITORING

Four groundwater monitoring wells designated MW-14R, MW-15R, MW-16R, and MW-17R (refer to Figure 3) were sampled on June 28, 2013. The results of the groundwater monitoring are summarized in Table 1 and are compared to the NYSDEC Part 703 groundwater standards. The results are summarized below:

- **MW-14R** – Four VOCs were detected above the laboratory method detection limit (MDL), and only one VOC, Isopropylbenzene was detected above the NYSDEC Part 703 Groundwater Standards. Isopropylbenzene was detected at a concentration of 5.6 parts per billion (ppb) which is above the NYSDEC Part 703 Groundwater Standard of 5 ppb.
- **MW-15R** – Three VOCs were detected above the MDL, and only one VOC, n-propylbenzene was detected above the NYSDEC Part 703 Groundwater Standards. The VOC n-Propylbenzene was detected at a concentration of 5.3 ppb which is above the NYSDEC Part 703 Groundwater Standard of 5 ppb.
- **MW-16R** – VOCs were not detected above the laboratory MDL.
- **MW-17R** – VOCs were not detected above the laboratory MDL.

Graphs of total VOC concentrations over time are included in Appendix C. As shown in Table 1 and illustrated on the graphs, the groundwater impacts have substantially decreased since the remedial work was completed. Specifically, petroleum constituents in well MW-14R, which indicated the highest concentrations historically of the wells included in the monitoring program, have declined to below the Part 703 Groundwater Standards with the exception of one compound which was only slightly above. The concentration of VOCs in MW-15R also have shown decreasing concentrations and the most recent event identified only one compound above the Part 703 Groundwater Standards. Furthermore, wells MW16R and MW-17R have not detected a VOC above the Part 703 Groundwater Standards since 2008 and 2007, respectively.

6.0 SITE EVALUATION

The monitoring work conducted on June 28, 2013 was completed in accordance with the SMP with the exceptions noted in Section 3.4. The groundwater flow direction appears similar to historical data. The analytical results from the June 28, 2013 groundwater sampling event indicate that petroleum related VOCs in groundwater are generally below the NYSDEC groundwater standards except for a single VOC detected in well MW-14R and well MW-15R. Historic sampling results suggest that the remedial work previously completed has effectively achieved progress toward meeting the remedial objectives for the site and that these objectives for groundwater have been substantially achieved.

It is recommended that the SSDS monitoring be continued; however, it is recommended to discontinue groundwater sampling based on the fact that the groundwater results are primarily below the NYSDEC Part 703 Groundwater Standards and that historical data suggests that chemical of concerns in groundwater are attenuating naturally.

7.0 INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION

The NYSDEC Institutional and Engineering Controls Certification Form is included in Appendix D.

J:\STERN FAMILY LIMITED PARTNERSHIP (GARY & MARCIA)\211352\REPORTS\PERIODIC REVIEW REPORT JULY 2013\RPT.2013.06.25.PERIODICREVIEWREPORT_320 NORTHGOODMANST.DOC

LaBELLA

LaBella Associates, P.C.

300 State Street

Rochester, New York 14614

Figures

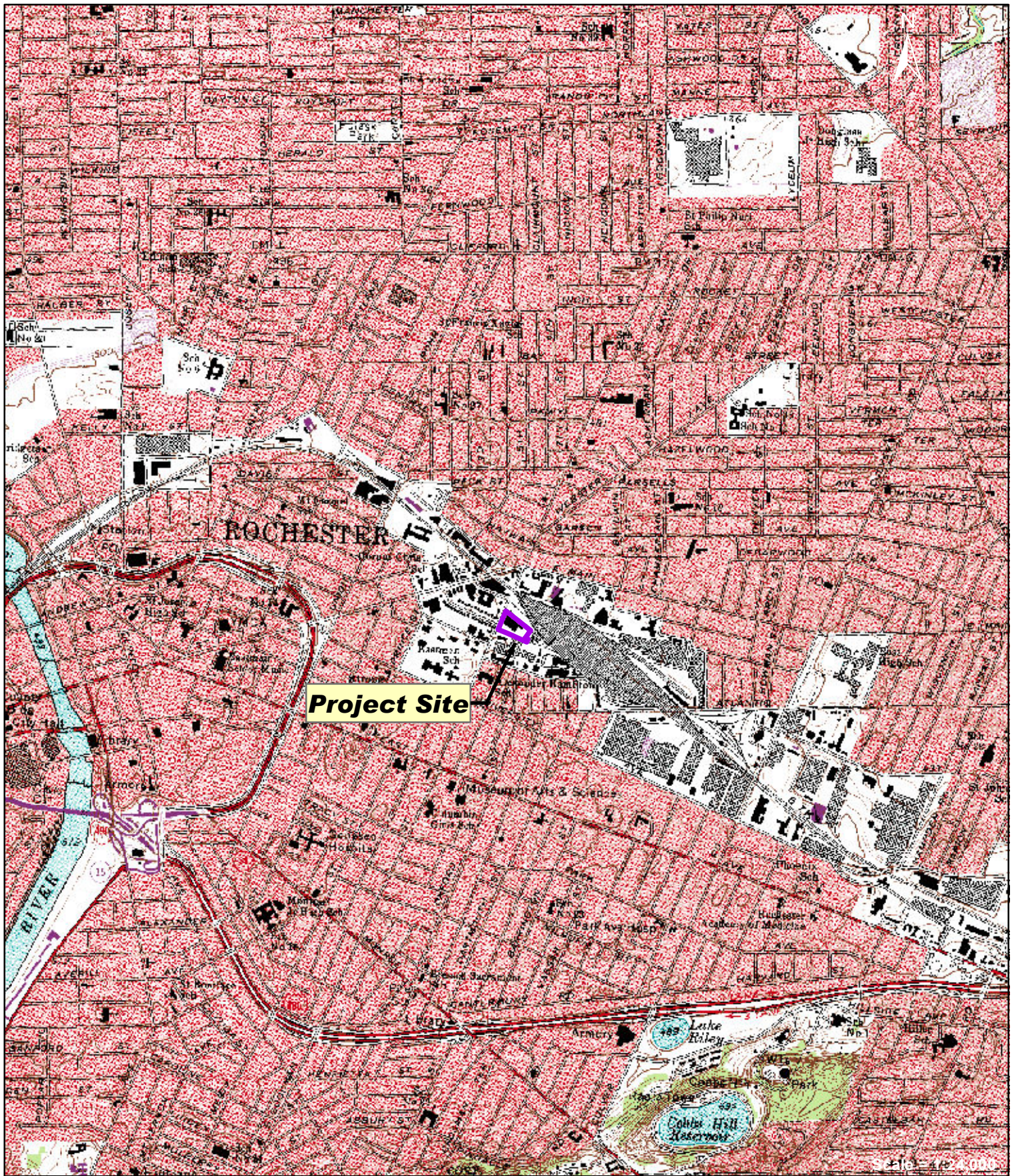


FIGURE 1

Site Location Map
 NYSDEC BCP Site #C828115
 Rochester Drug Cooperative Building
 320 North Goodman Street
 Rochester, New York

ABELLA
 Associates, P.C.

ROCHESTER, NY 14614
 P: (585) 454-6110
 F: (585) 454-3066
 www.abellapc.com
 ©1997-2011



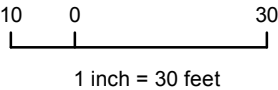
1 inch = 2,000 feet



Periodic Review Report
NYSDEC BCP Sitel #C828115
Rochester Drug Cooperative
Building
Rochester, New York

Client:
The Gary and Marcia Stern
Family Limited Partnership

Title:
Site Area Map

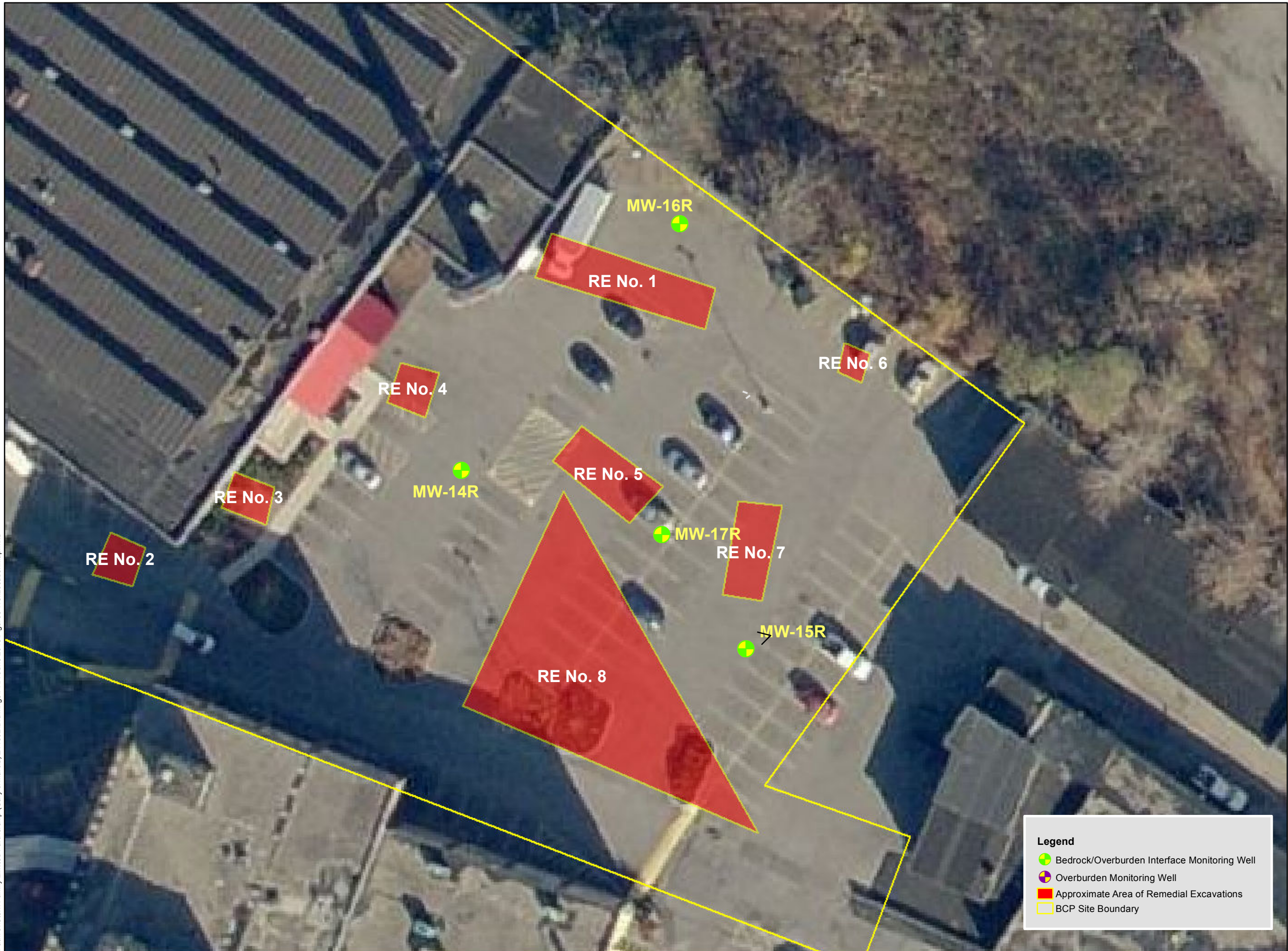


Legend

- Approximate Area of Remedial Excavations
- BCP Site Boundary

[211352]
[FIGURE 2]

Path: J:\Stern Family Limited Partnership (Gary & Marcia)\211352 Drawings\PRR June 2013\Figure3 WellLocationMap.mxd



Periodic Review Report
NYSDEC BCP Sitel #C828115
Rochester Drug Cooperative
Building
Rochester, New York

Client:
The Gary and Marcia Stern
Family Limited Partnership

Title:
Well Location Map



10 0 30
1 inch = 30 feet

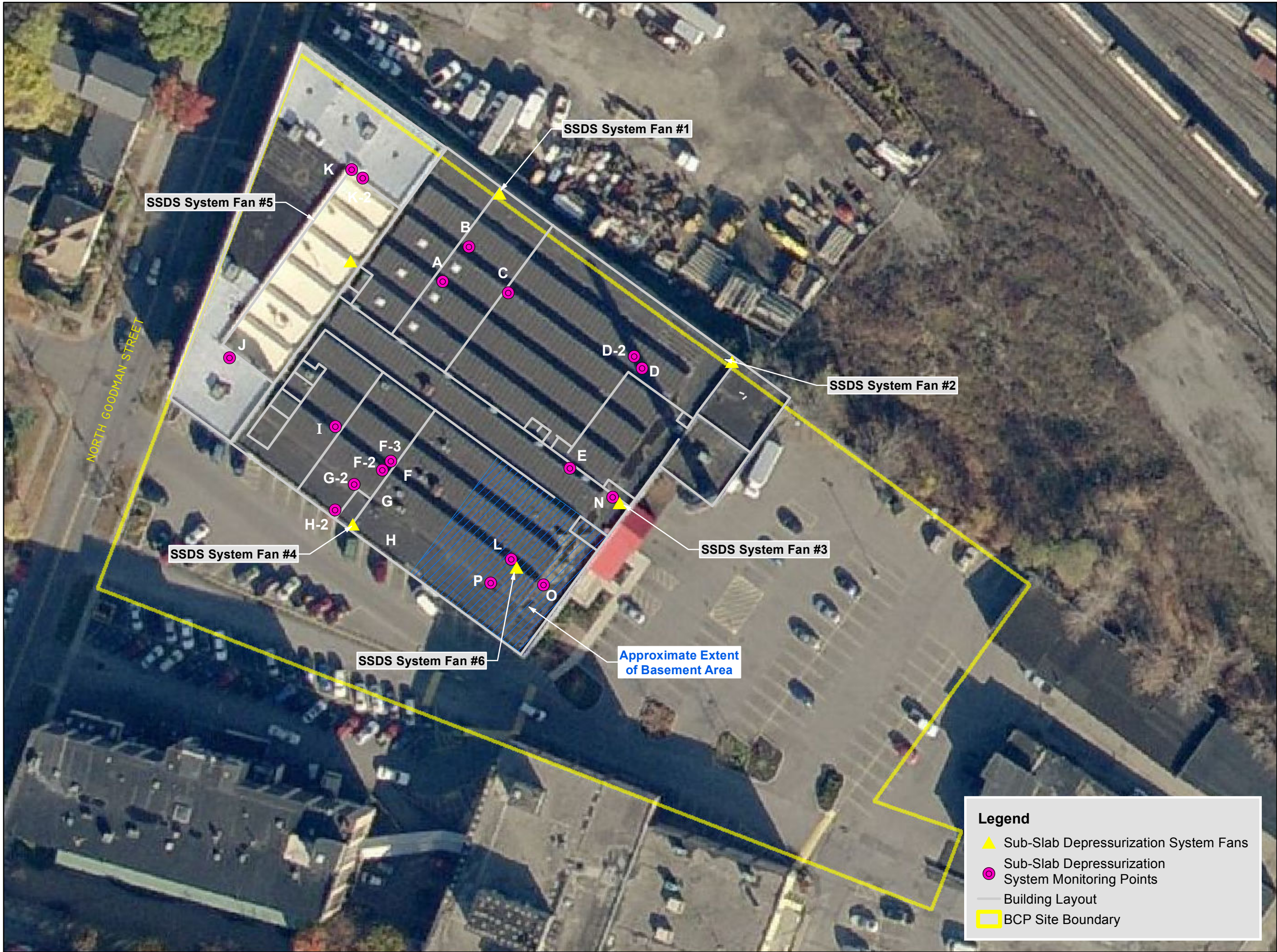
Legend

- Bedrock/Overburden Interface Monitoring Well
- Overburden Monitoring Well
- Approximate Area of Remedial Excavations
- BCP Site Boundary

[211352]

[FIGURE 3]

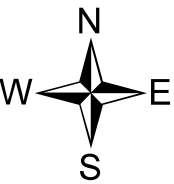
Path: J:\Stern Family Limited Partnership (Gary & Marcia)\211352\Drawings\PRR June 2013\Figure4 SSDS.mxd



Periodic Review Report
NYSDEC BCP Site #C828115
Rochester Drug Cooperative
Building
Rochester, New York

Client:
The Gary and Marcia Stern
Family Limited Partnership

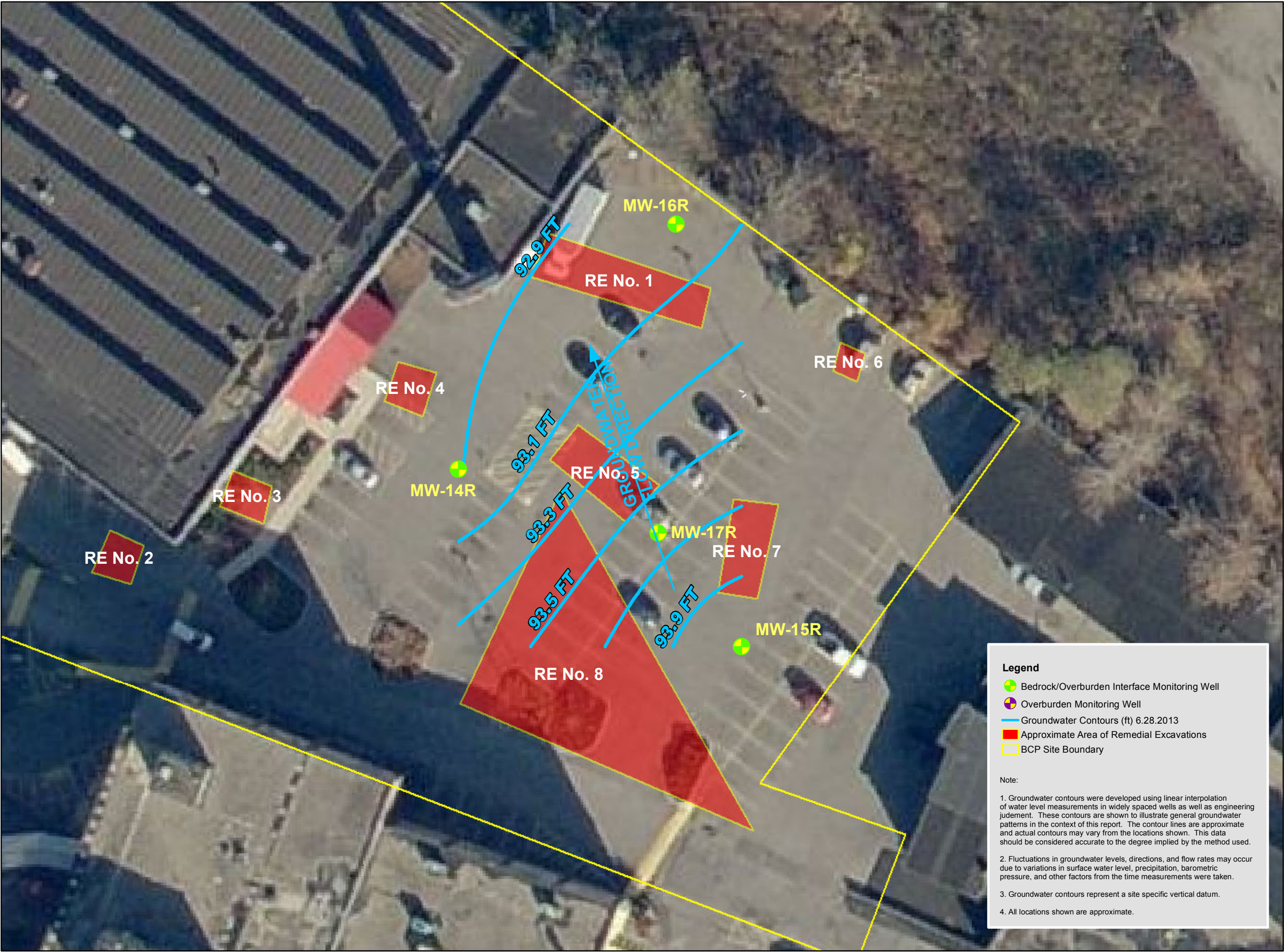
Title:
Site Area Map



10 0 50
1 inch = 50 feet

[211352]
[FIGURE 4]

Path: J:\Stern Family Limited Partnership (Gary & Marcia)\211352 Drawings\PRR June 2013\Figure5 GroundwaterContours.mxd



Legend

- Bedrock/Overburden Interface Monitoring Well
- Overburden Monitoring Well
- Groundwater Contours (ft) 6.28.2013
- Approximate Area of Remedial Excavations
- BCP Site Boundary

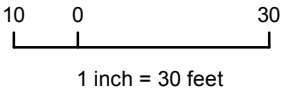
Note:

- Groundwater contours were developed using linear interpolation of water level measurements in widely spaced wells as well as engineering judgement. These contours are shown to illustrate general groundwater patterns in the context of this report. The contour lines are approximate and actual contours may vary from the locations shown. This data should be considered accurate to the degree implied by the method used.
- Fluctuations in groundwater levels, directions, and flow rates may occur due to variations in surface water level, precipitation, barometric pressure, and other factors from the time measurements were taken.
- Groundwater contours represent a site specific vertical datum.
- All locations shown are approximate.

Periodic Review Report
NYSDEC BCP Sitel #C828115
Rochester Drug Cooperative
Building
Rochester, New York

Client:
The Gary and Marcia Stern
Family Limited Partnership

Title:
June 28, 2013
Groundwater Contours



[211352]

[FIGURE 5]

LaBELLA

LaBella Associates, P.C.

300 State Street

Rochester, New York 14614

Table

Table 1
Periodic Review Report
Summary of Detected Volatile Organic Compounds (VOCs) in Post-IRM Groundwater
320 North Goodman Street, Rochester, New York
Results Shown in micrograms per Liter (µg/L) or about parts per billion (ppb)

Well ID	NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standards and Guidance Values	MW-14R							
Sample Date		8/9/2006	11/27/2006	2/22/2007	9/12/2008	5/11/2011	10/28/2011	4/9/2012	6/28/2013
Benzene	1	1.2	1.2	1.6 J	0.72	ND<5.0	<1.0	ND<5.0	ND<5.0
sec-Butylbenzene	5	ND<5.0	ND<5.0	ND<25	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Ethylbenzene	5	35	60	150	10	ND<5.0	<1.0	ND<5.0	ND<5.0
Isopropylbenzene	5	32	27	42	9.4	2.2 J	<1.0	5.4	5.6
Naphthalene	10	ND<5.0	ND<5.0	ND<25	ND<5	ND<5.0	<1.0	2.1 J	ND<5.0
n-Propylbenzene	5	4.8	5.3	9.3 J	1.2 J	ND<5.0	<1.0	2.9 J	2.4 J
Toluene	5	450	300 D	640	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
1,2,4-Trimethylbenzene	5	2.9	2.9 J	6.4 J	1.2 J	ND<5.0	<1.0	1.5 J	1.1 J
1,3,5-Trimethylbenzene	5	ND<5.0	1.0 J	3.0 J	0.38 J	ND<5.0	<1.0	0.61 J	ND<5.0
m+p-Xylene	5	180	44	120	66	ND<5.0	<2.0	3.6 J	ND<5.0
o-Xylene	5	34	260	650	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
MTBE	10	ND<5.0	ND<5.0	ND<25	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Total VOCs	NS	739.9	701.4	1622.3	88.9	2.2 J	0.0	16.1	9.1 J

Notes:

NYSDEC STARS-list VOC analysis by United States Environmental Protection Agency (USEPA) Method 8021

Bold Type denotes a reported concentration that exceeds its respective NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standard or Guidance Value.

"ND <150" denotes that the constituent was Not Detected above the laboratory method detection limit shown.

"NS" indicates "Not Specified"

J = indicates an estimated value that is below the method detection limit.

D = indicates dilution of the sample or extract was performed

Table 1
Periodic Review Report
Summary of Detected Volatile Organic Compounds (VOCs) in Post-IRM Groundwater
320 North Goodman Street, Rochester, New York
Results Shown in micrograms per Liter (µg/L) or about parts per billion (ppb)

Well ID	NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standards and Guidance Values	MW-15R							
Sample Date		8/9/2006	11/27/2006	2/22/2007	9/12/2008	5/11/2011	10/28/2011	4/9/2012	6/28/2013
Benzene	1	2.9	ND <1.0	1.6	1.6	ND<5.0	ND<5.0	ND<5.0	ND<5.0
sec-Butylbenzene	5	1.3	1.1 J	0.51 J	0.9 J	ND<5.0	ND<5.0	0.99 J	1.4 J
Ethylbenzene	5	ND <5.0	ND <5.0	1.4 J	ND<5	ND<5.0	ND<5.0	ND<5.0	ND<5.0
Isopropylbenzene	5	9.1	7.4	3.9 J	6.2	12	5.4	6.6	4.7 J
Naphthalene	10	ND <5.0	ND <5.0	ND <5.0	0.51 J	1.2 J	<5.0	ND<5.0	ND<5.0
n-Propylbenzene	5	10	7.5	2.7 J	5.9	13	<5.0	8	5.3
Toluene	5	ND <5.0	ND <5.0	86	1.2 J	ND<5.0	<5.0	ND<5.0	ND<5.0
1,2,4-Trimethylbenzene	5	3.1	1.6 J	1.3 J	ND<5	ND<5.0	<5.0	0.59 J	ND<5.0
1,3,5-Trimethylbenzene	5	1.8	0.99 J	0.74 J	ND<5	ND<5.0	<5.0	ND<5.0	ND<5.0
m+p-Xylene	5	2.1	ND <5.0	26	0.46 J	ND<5.0	<10.0	ND<5.0	ND<5.0
o-Xylene	5	ND <5.0	ND <5.0	1.7 J	ND<5	ND<5.0	<5.0	ND<5.0	ND<5.0
MTBE	10	ND <5.0	ND <5.0	0.39 J	ND<5	ND<5.0	<5.0	ND<5.0	ND<5.0
Total VOCs	NS	30.3	18.59	125.9	16.77	26.2 J	5.40	16.2	11.4 J

Notes:

NYSDEC STARS-list VOC analysis by United States Environmental Protection Agency (USEPA) Method 8021

Bold Type denotes a reported concentration that exceeds its respective NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standard or Guidance Value.

"ND <150" denotes that the constituent was Not Detected above the laboratory method detection limit shown.

"NS" indicates "Not Specified"

J = indicates an estimated value that is below the method detection limit.

D = indicates dilution of the sample or extract was performed

Table 1
Periodic Review Report
Summary of Detected Volatile Organic Compounds (VOCs) in Post-IRM Groundwater
320 North Goodman Street, Rochester, New York
Results Shown in micrograms per Liter (µg/L) or about parts per billion (ppb)

Well ID	NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standards and Guidance Values	MW-16R						
		8/9/2006	11/27/2006	9/12/2008	5/11/2011	10/28/2011	4/9/2012	6/28/2013
Benzene	1	ND <1.0	ND <1.0	0.37 J	ND<5.0	<1.0	ND<5.0	ND<5.0
sec-Butylbenzene	5	ND <5.0	ND <5.0	0.65 J	ND<5.0	<1.0	ND<5.0	ND<5.0
Ethylbenzene	5	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	1.1 J	ND<5.0
Isopropylbenzene	5	ND <5.0	ND <5.0	12	ND<5.0	<1.0	0.96 J	ND<5.0
Naphthalene	10	1.1	ND <5.0	0.89 J	ND<5.0	<1.0	ND<5.0	ND<5.0
n-Propylbenzene	5	ND <5.0	ND <5.0	0.47 J	ND<5.0	<1.0	ND<5.0	ND<5.0
Toluene	5	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
1,2,4-Trimethylbenzene	5	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
1,3,5-Trimethylbenzene	5	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
m+p-Xylene	5	ND <5.0	ND <5.0	0.59 J	ND<5.0	<2.0	ND<5.0	ND<5.0
o-Xylene	5	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
MTBE	10	2.1	1.9 J	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Total VOCs	NS	3.2	1.9	14.97	0	0	2.06	0

Notes:

NYSDEC STARS-list VOC analysis by United States Environmental Protection Agency (USEPA) Method 8021

Bold Type denotes a reported concentration that exceeds its respective NYSDEC TOGS 1.1.1 and NYS Part 703

"ND <150" denotes that the constituent was Not Detected above the laboratory method detection limit shown.

"NS" indicates "Not Specified"

J = indicates an estimated value that is below the method detection limit.

D = indicates dilution of the sample or extract was performed

Table 1
Periodic Review Report
Summary of Detected Volatile Organic Compounds (VOCs) in Post-IRM Groundwater
320 North Goodman Street, Rochester, New York
Results Shown in micrograms per Liter (µg/L) or about parts per billion (ppb)

Well ID	NYSDEC TOGS 1.1.1 and NYS Part 703 Groundwater Standards and Guidance Values	MW-17R							
Sample Date		8/9/2006	11/27/2006	2/22/2007	9/12/2008	5/11/2011	10/28/2011	4/9/2012	6/28/2013
Benzene	1	ND <1.0	ND <1.0	3.1	0.88	ND<5.0	<1.0	ND<5.0	ND<5.0
sec-Butylbenzene	5	ND <5.0	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Ethylbenzene	5	ND <5.0	ND <5.0	6.4	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Isopropylbenzene	5	2.2	1.6 J	5.3	ND<5	1.0 J	<1.0	ND<5.0	ND<5.0
Naphthalene	10	ND <5.0	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
n-Propylbenzene	5	0.89	ND <5.0	1.1 J	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Toluene	5	ND <5.0	ND <5.0	160 D	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
1,2,4-Trimethylbenzene	5	ND <5.0	ND <5.0	1.4 J	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
1,3,5-Trimethylbenzene	5	ND <5.0	ND <5.0	0.50 J	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
m+p-Xylene	5	ND <5.0	ND <5.0	110	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
o-Xylene	5	ND <5.0	ND <5.0	8.2	ND<5	ND<5.0	<2.0	ND<5.0	ND<5.0
MTBE	10	ND <5.0	ND <5.0	ND <5.0	ND<5	ND<5.0	<1.0	ND<5.0	ND<5.0
Total VOCs	NS	3.09	1.6	296	0.88	1.0 J	0	0	0

Notes:

NYSDEC STARS-list VOC analysis by United States Environmental Protection Agency (USEPA) Method 8021

Bold Type denotes a reported concentration that exceeds its respective

"ND <150" denotes that the constituent was Not Detected above the laboratory method detection limit shown.

"NS" indicates "Not Specified"

J = indicates an estimated value that is below the method detection limit.

D = indicates dilution of the sample or extract was performed



LaBella Associates, P.C.

300 State Street
Rochester, New York 14614

Appendix A

Field Logs

Sub-Slab Depressurization System (SSDS) Inspection Form
Site Management Plan
320 North Goodman Street, City of Rochester, New York
NYSDEC Brownfield Cleanup Program Site No. C828115

300 State Street Rochester, New York 14614 ABELLA <small>Associates, P.C.</small>	Project Name: NYSDEC BCP Site No. C828115
	Location: 320 North Goodman Street, Rochester, New York
	Project No.: 211352
	Inspected By: M. Pelychaty
	Date of Inspection: June 28, 2013
Weather Conditions: overcast	

INSPECTION FINDINGS				
SSDS VENT FAN & GENERAL LOCATION	FAN OPERATING PROPERLY (YES/NO)	PIPING IN GOOD CONDITION (YES/NO)	MANOMETER INDICATES SYSTEM IS UNDER VACUUM (YES/NO)	COMMENTS AND/OR ACTIONS TAKEN
FAN #1 Northern Wall, Near Center of Building	Yes	Yes	Yes	Photo of manometer taken for report
FAN #2 Near Northeastern Corner of Building	Yes	Yes	Yes	↓
FAN #3 Eastern Wall	Yes	Yes	Yes	
FAN #4 Southern Wall	Yes	Yes	Yes	
FAN #5 Western Portion of Building, In Bathroom Utility Closet	Yes	Yes	Yes	
FAN #6 Partial Basement, Southeastern Portion of Building	Yes	Yes	Yes	



Facing west.



Facing east.



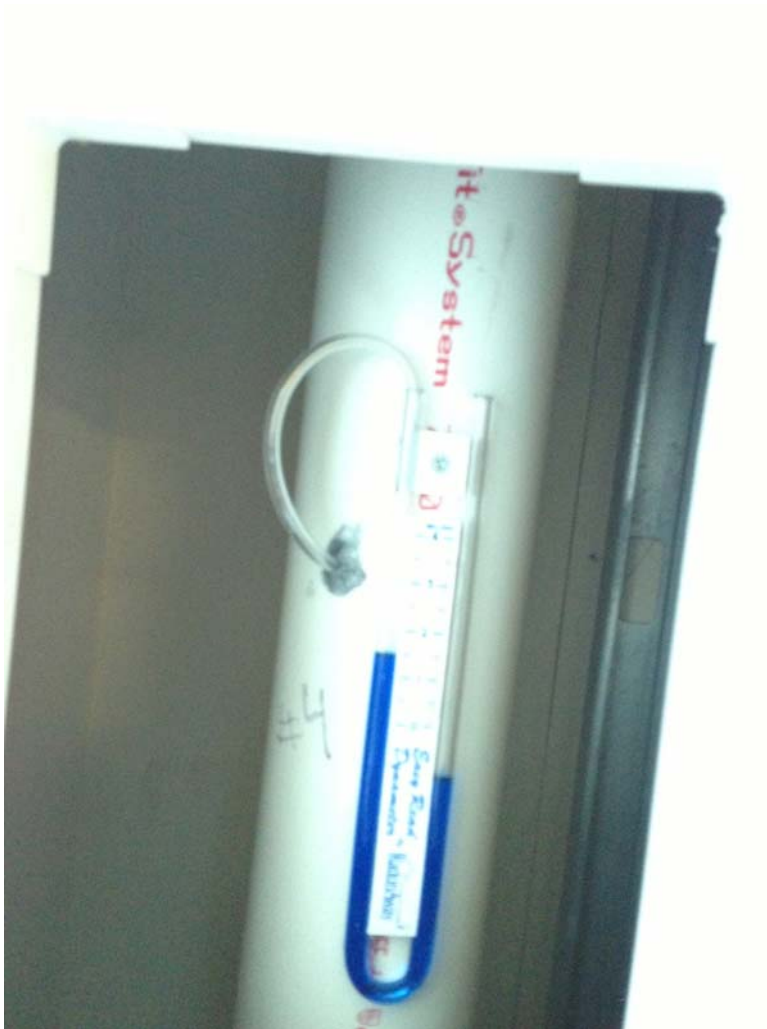
SSDS #1 manometer.



SSDS #2 manometer.



SSDS #3 manometer.



SSDS #4 manometer.



SSDS #5 manometer.



GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY

PH: (585) 454-6110

FAX: (585) 454-3066

WELL I.D. MW-15R

Project Name: 320 North Goodman Street

Project No.: 211352

Location: 320 North Goodman Street

Sampled By: M. Pelychaty

Date: June 28, 2013

Weather: Overcast

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch

Static Water Level: 4.92 -Feet

Depth of Well: 18.70 -Feet

Single Well Volume: ~2 -Gallons

PURGE & SAMPLING METHOD

☒ Bailer - Type: PVC - Dedicated

☐ Pump - Type: _____

Sampling Device: Dedicated Bailer

Pump Rate: _____

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	OPR (mV)		Comments
1215	2	7.11	15.4	2.44	-114		
1220	4.0	7.13	15.4	2.36	-118		
1225	6.0	7.16	15.6	2.57	-125		
1230	8.0	7.20	15.8	2.63	-126		

Total 7.00 Gallons Purged

Purge Start Time: 1215

Purge End Time: 1230

WELL SAMPLING

Sample I.D. MW-15R

Sample Time: 1230

No. of Containers: 2

Sample Preservation: HCl

Sampled ☒ VOCs - 8260B TCL + STARS

☐ STARS VOCs Only - Method 8260B

☐ Pesticides

For: ☐ SVOCs - 8270C STARS

☐ ~~Total~~ Dissolved TAL Metals

☐ PCBs

OBSERVATIONS:

Well Volume (1" well) = 0.0408-gal/ft.

Well Volume (4" well) = 0.65-gal/ft.

Well Volume (2" well) = 0.163-gal/ft.



GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY

PH: (585) 454-6110

FAX: (585) 454-3066

WELL I.D. MW-16R

Project Name: 320 North Goodman Street

Project No.: 211352

Location: 320 North Goodman Street

Sampled By: M. Pelychaty

Date: June 28, 2013

Weather: Overcast

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch

Static Water Level: 7.83 -Feet

Depth of Well: 18.0 -Feet

Single Well Volume: ~1 -Gallons

PURGE & SAMPLING METHOD

☒ Bailer - Type: _____

☐ Pump - Type: _____

Sampling Device: _____

Pump Rate: _____

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	OPR (mV)		Comments
1245	1.0	7.11	15.6	2.20	-125		
1250	2.0	7.13	16.1	2.52	-132		
1255	3.0	7.13	16.2	2.58	-135		
1300	4.0	7.16	16.1	2.59	-136		

Total 4.00 Gallons Purged Purge Start Time: 1245 Purge End Time: 1300

WELL SAMPLING

Sample I.D. MW-16R

Sample Time: 1300

No. of Containers: 2

Sample Preservation: HCl

Sampled ☒ VOCs - 8260B TCL + STARS

☐ STARS VOCs Only - Method 8260B

☐ Pesticides

For: ☐ SVOCs - 8270C STARS

☐ Total/Dissolved TAL Metals

☐ PCBs

OBSERVATIONS:

Well Volume (1" well) = 0.0408-gal/ft.	Well Volume (4" well) = 0.65-gal/ft.
Well Volume (2" well) = 0.163-gal/ft.	



300 STATE STREET, ROCHESTER, NY

PH: (585) 454-6110

FAX: (585) 454-3066

GROUNDWATER SAMPLING FORM

WELL I.D. MW-17R

Project Name: 320 North Goodman Street

Project No.: 211352

Location: 320 North Goodman Street

Sampled By: M. Pelychaty

Date: June 28, 2013

Weather: Overcast

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch

Static Water Level: 5.09 -Feet

Depth of Well: 19.5 -Feet

Single Well Volume: ~1.5 -Gallons

PURGE & SAMPLING METHOD

☒ Bailer - Type: PVC - Dedicated

☐ Pump - Type

Sampling Device: Dedicated Bailer

Pump Rate:

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	OPR (mV)		Comments
1310	1.5	7.05	15.0	2.29	-107		
1315	2.5	7.08	15.2	2.23	-115		
1320	3.5	7.10	15.4	2.20	-116		
1325	4.5	7.11	15.4	2.22	-119		
1330	5.0	7.11	15.6	2.22	-121		

Total 5.00 Gallons Purged

Purge Start Time: 1310

Purge End Time: 1330

WELL SAMPLING

Sample I.D. MW-17R

Sample Time: 1330

No. of Containers: 2

Sample Preservation: HCl

Sampled ☒ VOCs - 8260B TCL + STARS

☐ STARS VOCs Only - Method 8260B

☐ Pesticides

For: ☐ SVOCs - 8270C STARS

☐ Total/Dissolved TAL Metals

☐ PCBs

OBSERVATIONS:

Well Volume (1" well) = 0.0408-gal/ft.

Well Volume (4" well) = 0.65-gal/ft.

Well Volume (2" well) = 0.163-gal/ft.

LaBELLA

LaBella Associates, P.C.

300 State Street

Rochester, New York 14614

Appendix B

Laboratory Reports

Report Date:
16-Jul-13 10:30



☐ Final Report
☐ Re-Issued Report
☒ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M1079
Project : LaBella Stand By - 320 N. Goodman St.
Project #:

Attn: Dan Noll

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
M1079-01	MW-14R	Aqueous	28-Jun-13 12:00	02-Jul-13 08:40
M1079-02	MW-15R	Aqueous	28-Jun-13 12:30	02-Jul-13 08:40
M1079-03	MW-16R	Aqueous	28-Jun-13 13:00	02-Jul-13 08:40
M1079-04	MW-17R	Aqueous	28-Jun-13 13:30	02-Jul-13 08:40
M1079-05	FIELD BLANK	Aqueous	28-Jun-13 13:45	02-Jul-13 08:40
M1079-06	BLIND DUPLICATE	Aqueous	28-Jun-13 00:00	02-Jul-13 08:40
M1079-07	TRIP BLANK	Aqueous	28-Jun-13 00:00	02-Jul-13 08:40

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAP or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Data Summary Pack ***

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : LaBella Stand By

SDG : M1079

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-14R	M1079-01	SW8260_W				
MW-15R	M1079-02	SW8260_W				
MW-16R	M1079-03	SW8260_W				
MW-17R	M1079-04	SW8260_W				
FIELD BLANK	M1079-05	SW8260_W				
BLIND DUPLICATE	M1079-06	SW8260_W				
TRIP BLANK	M1079-07	SW8260_W				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Stand By

SDG : M1079

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M1079-01A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-01AMS	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-01AMSD	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-02A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-03A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-04A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-05A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-06A	AQ	6/28/2013	7/2/2013	NA	7/2/2013
M1079-07A	AQ	6/28/2013	7/2/2013	NA	7/2/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Stand By

SDG : M1079

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M1079-01A	AQ	SW8260_W	NA	LOW	1
M1079-01AMS	AQ	SW8260_W	NA	LOW	1
M1079-01AMSD	AQ	SW8260_W	NA	LOW	1
M1079-02A	AQ	SW8260_W	NA	LOW	1
M1079-03A	AQ	SW8260_W	NA	LOW	1
M1079-04A	AQ	SW8260_W	NA	LOW	1
M1079-05A	AQ	SW8260_W	NA	LOW	1
M1079-06A	AQ	SW8260_W	NA	LOW	1
M1079-07A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M1079

Client ID: LABELLA
 Project: LaBella Stand By
 WO Name: LaBella Stand By - 320 N. Goodman St.
 Location: LABELLA_STANDBY_CONTRACT.
 Case: HC Due: 07/12/13
 SDG: Fax Due: 07/09/13
 Report Level: ASP-B
 Special Program: ENVIROINSITE_1
 EDD: EQUIIS_4_NYSDEC

PO: 211352

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1079-01A	MW-14R	06/28/2013 12:00	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-02A	MW-15R	06/28/2013 12:30	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-03A	MW-16R	06/28/2013 13:00	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-04A	MW-17R	06/28/2013 13:30	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-05A	FIELD BLANK	06/28/2013 13:45	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-06A	BLIND DUPLICATE	06/28/2013 00:00	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA
M1079-07A	TRIP BLANK	06/28/2013 00:00	07/02/2013	Aqueous	SW8260_W	/ 2CVE+special+STARS_VOC+TICs for Cat B			Y	Y	VOA



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Stand By - 320 N. Goodman St.

Laboratory Workorder / SDG #: M1079

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA

Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spikes were performed on samples: MW-14R (M1079-01AMS) and MW-14R (M1079-01AMSD).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

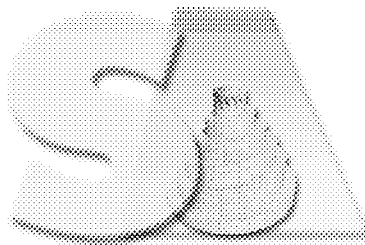
No manual integrations were performed on any sample or standard.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. L.', written over a horizontal line.

Signed: _____

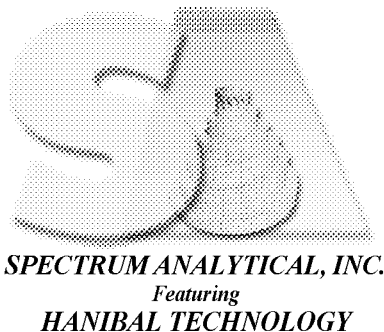
Date: _____ 7/12/2013 _____



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2686.D

Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013

% Moisture: not dec. Date Analyzed: 07/02/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.6	
103-65-1	n-Propylbenzene	2.4	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	1.1	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2687.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	4.7	J
103-65-1	n-Propylbenzene	5.3	
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	1.4	J
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	0.53	J
91-20-3	Naphthalene	0.90	J

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2688.D

Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013

% Moisture: not dec. Date Analyzed: 07/02/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2689.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

FIELD BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-05A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2690.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BLIND DUPLICATE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-06A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2691.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	4.5	J
103-65-1	n-Propylbenzene	1.7	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	0.76	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-07A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2678.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72553

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72553

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2674.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 07/02/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-72553

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72553
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2672.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	49	
71-43-2	Benzene	48	
108-88-3	Toluene	49	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	150	
98-82-8	Isopropylbenzene	48	
103-65-1	n-Propylbenzene	48	
108-67-8	1,3,5-Trimethylbenzene	49	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	49	
104-51-8	n-Butylbenzene	50	
91-20-3	Naphthalene	50	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14RMS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-01AMS
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2683.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	48	
71-43-2	Benzene	48	
108-88-3	Toluene	48	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	97	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
98-82-8	Isopropylbenzene	51	
103-65-1	n-Propylbenzene	50	
108-67-8	1,3,5-Trimethylbenzene	48	
98-06-6	tert-Butylbenzene	54	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	46	
99-87-6	4-Isopropyltoluene	46	
104-51-8	n-Butylbenzene	46	
91-20-3	Naphthalene	49	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14RMSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-01AMSD
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2684.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	48	
71-43-2	Benzene	48	
108-88-3	Toluene	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
98-82-8	Isopropylbenzene	53	
103-65-1	n-Propylbenzene	51	
108-67-8	1,3,5-Trimethylbenzene	49	
98-06-6	tert-Butylbenzene	56	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	47	
104-51-8	n-Butylbenzene	47	
91-20-3	Naphthalene	51	

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
 Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-72553	104	96	100	97				0
02	MB-72553	100	97	99	99				0
03	TRIP BLANK	100	102	101	99				0
04	MW-14RMS	100	105	98	97				0
05	MW-14RMSD	101	97	100	99				0
06	MW-14R	99	98	97	97				0
07	MW-15R	101	97	104	97				0
08	MW-16R	99	103	99	95				0
09	MW-17R	101	97	98	97				0
10	FIELD BLANK	101	96	98	97				0
11	BLIND DUPLICATE	100	97	100	99				0

VDMC1	(DBFM) Dibromofluoromethane	<u>QC LIMITS</u> (85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values
 * Values outside of contract required QC limits

som13.06.03.A

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: M1079

Mod. Ref No.:

SDG No.: SM1079

Matrix Spike - EPA Sample No.: MW-14R

Level: (TRACE or LOW) LOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Methyl tert-butyl ether	50.0000	0.0000	48.0699	96		65-125
Benzene	50.0000	0.0000	47.7405	95		80-120
Toluene	50.0000	0.0000	48.1727	96		75-120
Ethylbenzene	50.0000	0.0000	47.0745	94		75-125
m,p-Xylene	100.0000	0.0000	96.5978	97		75-130
o-Xylene	50.0000	0.0000	47.2804	95		80-120
Xylene (Total)	150.0000	0.0000	143.8783	96		81-121
Isopropylbenzene	50.0000	5.6431	51.2613	91		75-125
n-Propylbenzene	50.0000	2.3729	50.4513	96		70-130
1,3,5-Trimethylbenzene	50.0000	0.0000	47.5759	95		75-130
tert-Butylbenzene	50.0000	0.0000	53.6111	107		70-130
1,2,4-Trimethylbenzene	50.0000	1.1397	48.3698	94		75-130
sec-Butylbenzene	50.0000	0.0000	46.0700	92		70-125
4-Isopropyltoluene	50.0000	0.0000	45.9041	92		75-130
n-Butylbenzene	50.0000	0.0000	45.7339	91		70-135
Naphthalene	50.0000	0.0000	48.5752	97		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD #	QC LIMITS	
						RPD	REC.
Methyl tert-butyl ether	50.0000	48.4846	97		1	0-40	65-125
Benzene	50.0000	48.3836	97		1	0-40	80-120
Toluene	50.0000	49.5085	99		3	0-40	75-120
Ethylbenzene	50.0000	49.3038	99		5	0-40	75-125
m,p-Xylene	100.0000	101.0381	101		4	0-40	75-130
o-Xylene	50.0000	48.9447	98		3	0-40	80-120
Xylene (Total)	150.0000	149.9828	100		4	0-40	81-121
Isopropylbenzene	50.0000	53.4776	96		5	0-40	75-125
n-Propylbenzene	50.0000	51.3863	98		2	0-40	70-130
1,3,5-Trimethylbenzene	50.0000	48.9201	98		3	0-40	75-130
tert-Butylbenzene	50.0000	56.2987	113		5	0-40	70-130
1,2,4-Trimethylbenzene	50.0000	49.2507	96		2	0-40	75-130
sec-Butylbenzene	50.0000	46.8761	94		2	0-40	70-125
4-Isopropyltoluene	50.0000	46.6589	93		2	0-40	75-130
n-Butylbenzene	50.0000	46.6438	93		2	0-40	70-135
Naphthalene	50.0000	50.9089	102		5	0-40	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 0 out of 32 outside limits

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix Spike - EPA Sample No.: MW-14R Level: (TRACE or LOW) LOW

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-72553

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Lab Sample ID: LCS-72553 LCS Lot No.: _____
Date Extracted: 07/02/2013 Date Analyzed (1): 07/02/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Methyl tert-butyl ether	50.0000	0.0000	48.5407	97		65 - 125
Benzene	50.0000	0.0000	48.4462	97		80 - 120
Toluene	50.0000	0.0000	48.9167	98		75 - 120
Ethylbenzene	50.0000	0.0000	47.2686	95		75 - 125
m,p-Xylene	100.0000	0.0000	98.3902	98		75 - 130
o-Xylene	50.0000	0.0000	47.9707	96		80 - 120
Xylene (Total)	150.0000	0.0000	146.3609	98		81 - 121
Isopropylbenzene	50.0000	0.0000	48.0010	96		75 - 125
n-Propylbenzene	50.0000	0.0000	48.0883	96		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	49.0197	98		75 - 130
tert-Butylbenzene	50.0000	0.0000	50.7587	102		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.9020	98		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.7031	97		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.7166	97		75 - 130
n-Butylbenzene	50.0000	0.0000	50.0162	100		70 - 135
Naphthalene	50.0000	0.0000	49.9503	100		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-72553

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Lab File ID: V1M2674.D Lab Sample ID: MB-72553
Instrument ID: V1
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 07/02/2013
Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:49
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-72553	LCS-72553	V1M2672.D	10:01
02	TRIP BLANK	M1079-07A	V1M2678.D	12:28
03	MW-14RMS	M1079-01AMS	V1M2683.D	14:52
04	MW-14RMSD	M1079-01AMSD	V1M2684.D	15:16
05	MW-14R	M1079-01A	V1M2686.D	16:03
06	MW-15R	M1079-02A	V1M2687.D	16:27
07	MW-16R	M1079-03A	V1M2688.D	16:51
08	MW-17R	M1079-04A	V1M2689.D	17:15
09	FIELD BLANK	M1079-05A	V1M2690.D	17:39
10	BLIND DUPLICATE	M1079-06A	V1M2691.D	18:02

COMMENTS:

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 07/01/2013 07/01/2013
 EPA Sample No.(VSTD#####): VSTD050E1 Date Analyzed: 07/02/2013
 Lab File ID (Standard): V1M2671.D Time Analyzed: 9:37
 Instrument ID: V1 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	535547	4.592	352376	7.478	169629	10.029
UPPER LIMIT	1071094	5.092	704752	7.978	339258	10.529
LOWER LIMIT	267774	4.092	176188	6.978	84815	9.529
SAMPLE NO.						
01 LCS-72553	466389	4.596	333460	7.481	155552	10.033
02 MB-72553	437659	4.596	311791	7.482	142897	10.033
03 TRIP BLANK	478135	4.599	336470	7.475	153788	10.036
04 MW-14RMS	472917	4.592	340483	7.477	158079	10.038
05 MW-14RMSD	464777	4.596	323550	7.482	153702	10.033
06 MW-14R	454860	4.596	328678	7.481	150738	10.033
07 MW-15R	453562	4.596	322191	7.472	147088	10.043
08 MW-16R	463914	4.601	333821	7.477	154601	10.038
09 MW-17R	468819	4.605	336390	7.481	154589	10.033
10 FIELD BLANK	471596	4.599	335474	7.485	152120	10.036
11 BLIND DUPLICATE	471820	4.586	333495	7.472	153038	10.032

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of
internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of
internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles)
minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles)
minutes of internal standard RT

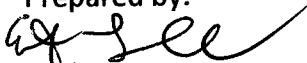
Column used to flag values outside contract required QC limits with an asterisk.

Data Usability Summary Report (DUSR)

Stern Family
Labella Project #211352

Spectrum Analytical, Inc., North Kingstown, RI
Sample Delivery Group #M1079
July 22, 2013

Prepared by:

A handwritten signature in black ink, appearing to read 'E. Lee' or 'Ethan Lee', with a long horizontal stroke extending to the right.

Ethan Lee

LaBella Associates, P.C.
300 State St
Rochester, NY 14614

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004).

And method protocol criteria were applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Performed
				VOC ⁽¹⁾
MW-14R	M1079-01	AQ	6/28/13	X
MW-15R	M1079-02	AQ	6/28/13	X
MW-16R	M1079-03	AQ	6/28/13	X
MW-17R	M1079-04	AQ	6/28/13	X
FIELD BLANK	M1079-05	AQ	6/28/13	X
BLIND DUPLICATE	M1079-06	AQ	6/28/13	X
TRIP BLANK	M1079-07	AQ	6/28/13	X

(1) VOC analyses were performed using USEPA Method SW846 8260B.

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed:

- Sample Data Reporting Format
- Preservation and Holding Time Compliance
- GC/MS Instrument Performance Check
- Initial Calibration Verification (ICV)
- Continuing Calibration Verification (CCV)
- Blank Sample Analysis
- System Monitoring/Surrogate Compound Recoveries
- Laboratory Control Sample (LCS) Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
- Internal Standards
- Target Compound Identification
- Compound Quantitation
- Data Qualifiers
- Summary

Volatile Organic Compounds (VOCs)

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Preservation and Holding Time Compliance

Maximum allowable holding times for each parameter were measured from the time of sample collection to the time of sample preparation or analysis for each project sample. All project samples were found to be properly preserved or analyzed within the USEPA recommended maximum holding time, without exception. No qualification of the data is recommended.

Gas Chromatography/Mass Spectrometry (GC/MS) Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Verification (ICV)

Initial calibration checks for the instruments used in the analysis of project samples fell within the method specific criteria without exception. No qualification of the data is recommended.

Continuing Calibration Verification (CCV)

Continuing calibration checks for the instruments used in the analysis of project samples fell within the method specific criteria without exception. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for the common laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane), or 5 times (5X) the amount for other target compounds.

Target compounds were not identified in associated blank samples at a concentration above the MDL for organic parameter analyses without exception. No qualification of the data is recommended.

System Monitoring/Surrogate Compound Recoveries

System monitoring/surrogate compound recoveries were within the laboratory specific criteria for the analysis of the project samples without exception. No qualification of the data is recommended.

Laboratory Control Sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

LCS and MS/MSD recoveries were within the method specific criteria without exception. No qualification of the data is recommended.

Internal Standards (IS)

The calculated response of each IS compound fell within the QA/QC criteria without exception. No qualification of the data is recommended.

Compound Quantitation

Compound quantitation is performed to ensure that reported quantitation results are accurate. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit (RL) but above the method detection limit (MDL), and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with USEPA guidance. The "J" qualifier, which indicates an estimated value because the result was between the RL and MDL, was carried forward.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2686.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	5.6	
103-65-1	n-Propylbenzene	2.4	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	1.1	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

EL
7/24/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2687.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
1634-04-4	Methyl tert-butyl ether		5.0	U
71-43-2	Benzene		5.0	U
108-88-3	Toluene		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
98-82-8	Isopropylbenzene		4.7	J
103-65-1	n-Propylbenzene		5.3	
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		1.4	J
99-87-6	4-Isopropyltoluene		5.0	U
104-51-8	n-Butylbenzene		0.53	J
91-20-3	Naphthalene		0.90	J

EL
7/24/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2688.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
1634-04-4	Methyl tert-butyl ether		5.0	U
71-43-2	Benzene		5.0	U
108-88-3	Toluene		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
98-82-8	Isopropylbenzene		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
99-87-6	4-Isopropyltoluene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
91-20-3	Naphthalene		5.0	U

EL
7/24/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2689.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
1634-04-4	Methyl tert-butyl ether		5.0	U
71-43-2	Benzene		5.0	U
108-88-3	Toluene		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
98-82-8	Isopropylbenzene		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
99-87-6	4-Isopropyltoluene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
91-20-3	Naphthalene		5.0	U

EL
7/22/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

FIELD BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-05A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2690.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
1634-04-4	Methyl tert-butyl ether		5.0	U
71-43-2	Benzene		5.0	U
108-88-3	Toluene		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
98-82-8	Isopropylbenzene		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
99-87-6	4-Isopropyltoluene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
91-20-3	Naphthalene		5.0	U

EL
7/22/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BLIND DUPLICATE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-06A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2691.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
1634-04-4	Methyl tert-butyl ether	5.0	U
71-43-2	Benzene	5.0	U
108-88-3	Toluene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
98-82-8	Isopropylbenzene	4.5	J
103-65-1	n-Propylbenzene	1.7	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	0.76	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
91-20-3	Naphthalene	5.0	U

EL
7/22/13

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: M1079 Mod. Ref No.: _____ SDG No.: SM1079
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1079-07A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M2678.D
Level: (TRACE/LOW/MED) LOW Date Received: 07/02/2013
% Moisture: not dec. Date Analyzed: 07/02/2013
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
1634-04-4	Methyl tert-butyl ether		5.0	U
71-43-2	Benzene		5.0	U
108-88-3	Toluene		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
98-82-8	Isopropylbenzene		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
99-87-6	4-Isopropyltoluene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
91-20-3	Naphthalene		5.0	U

EL
7/24/13

LaBELLA

LaBella Associates, P.C.

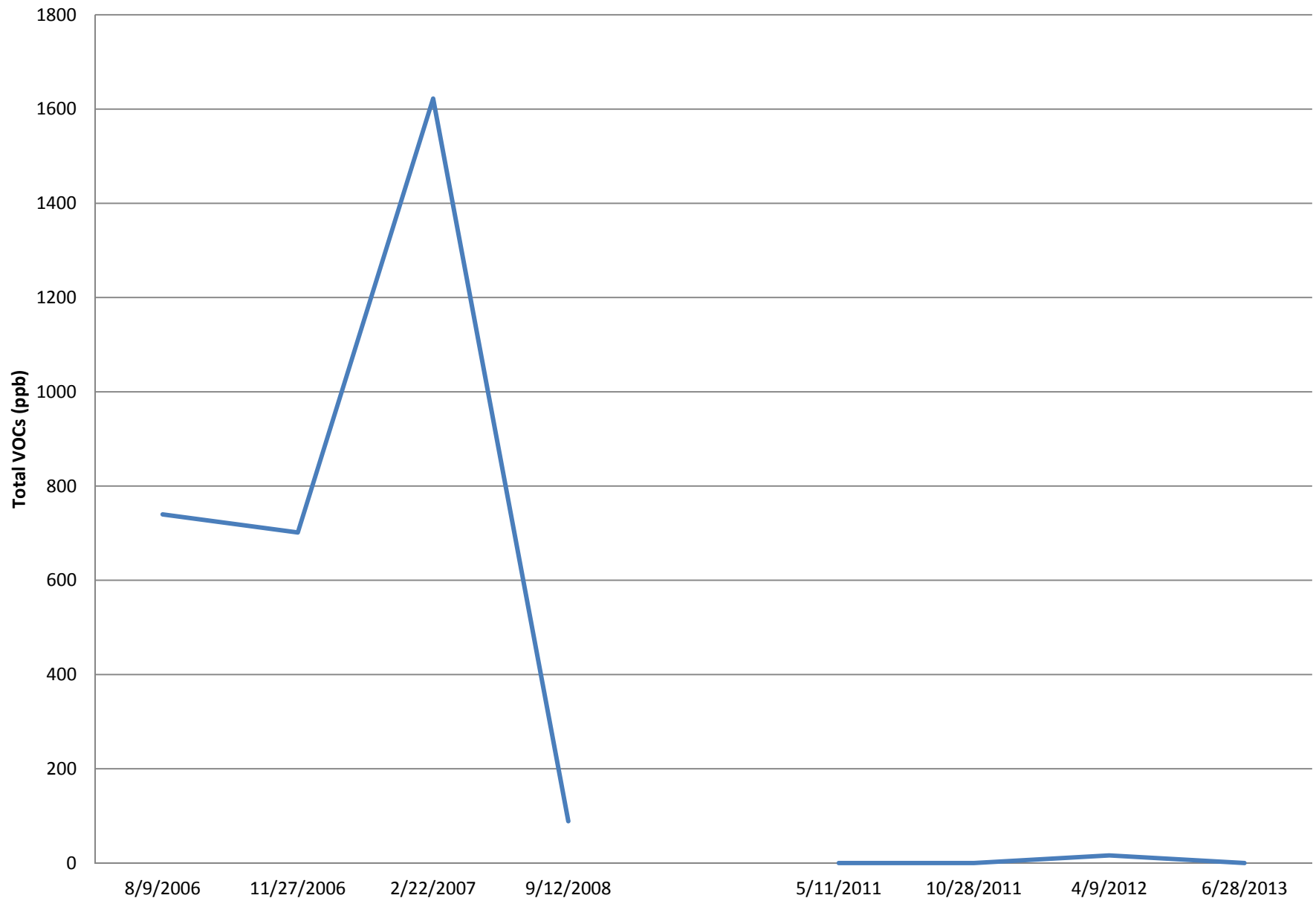
300 State Street

Rochester, New York 14614

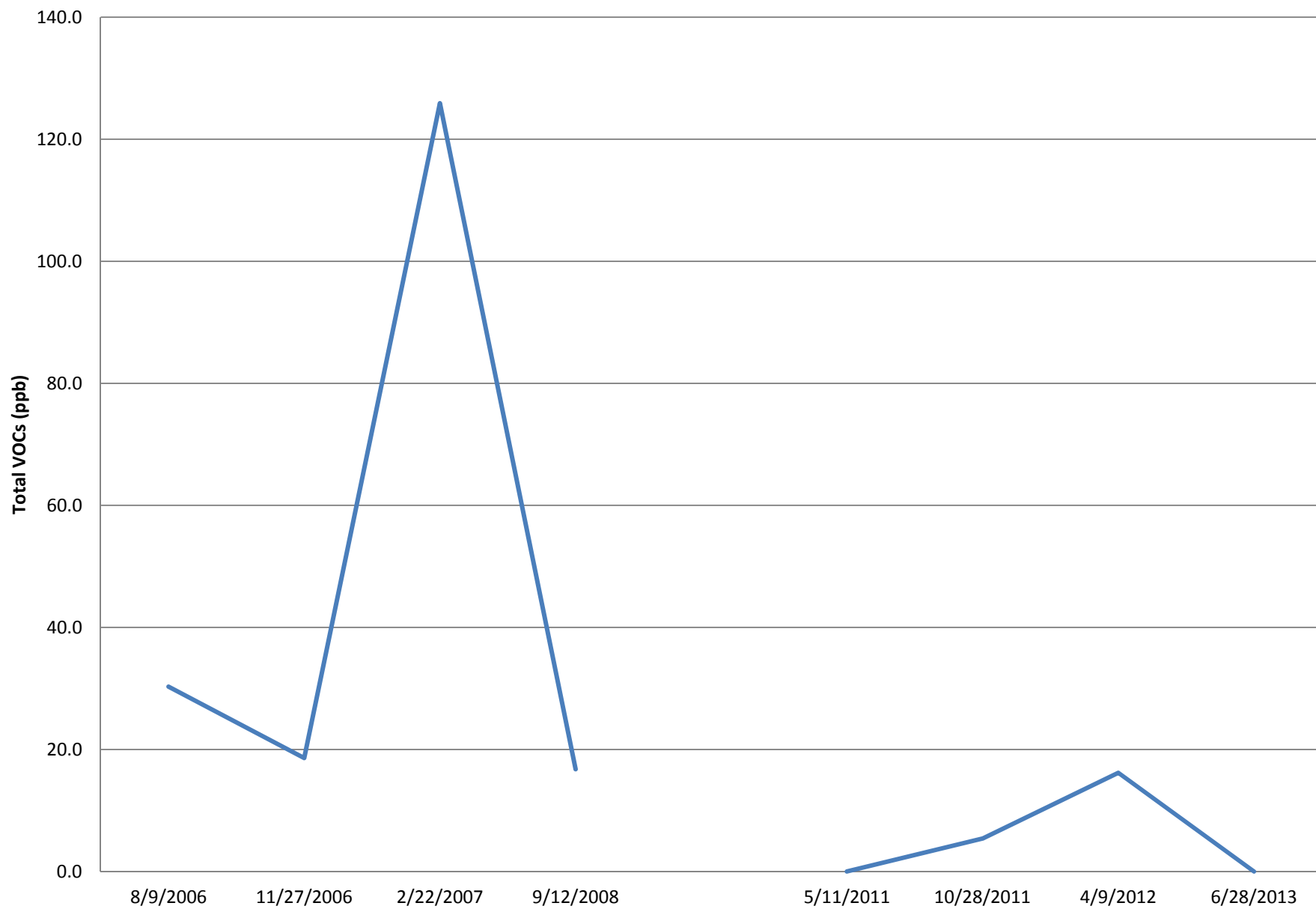
Appendix C

Graph of Total VOCs Over Time

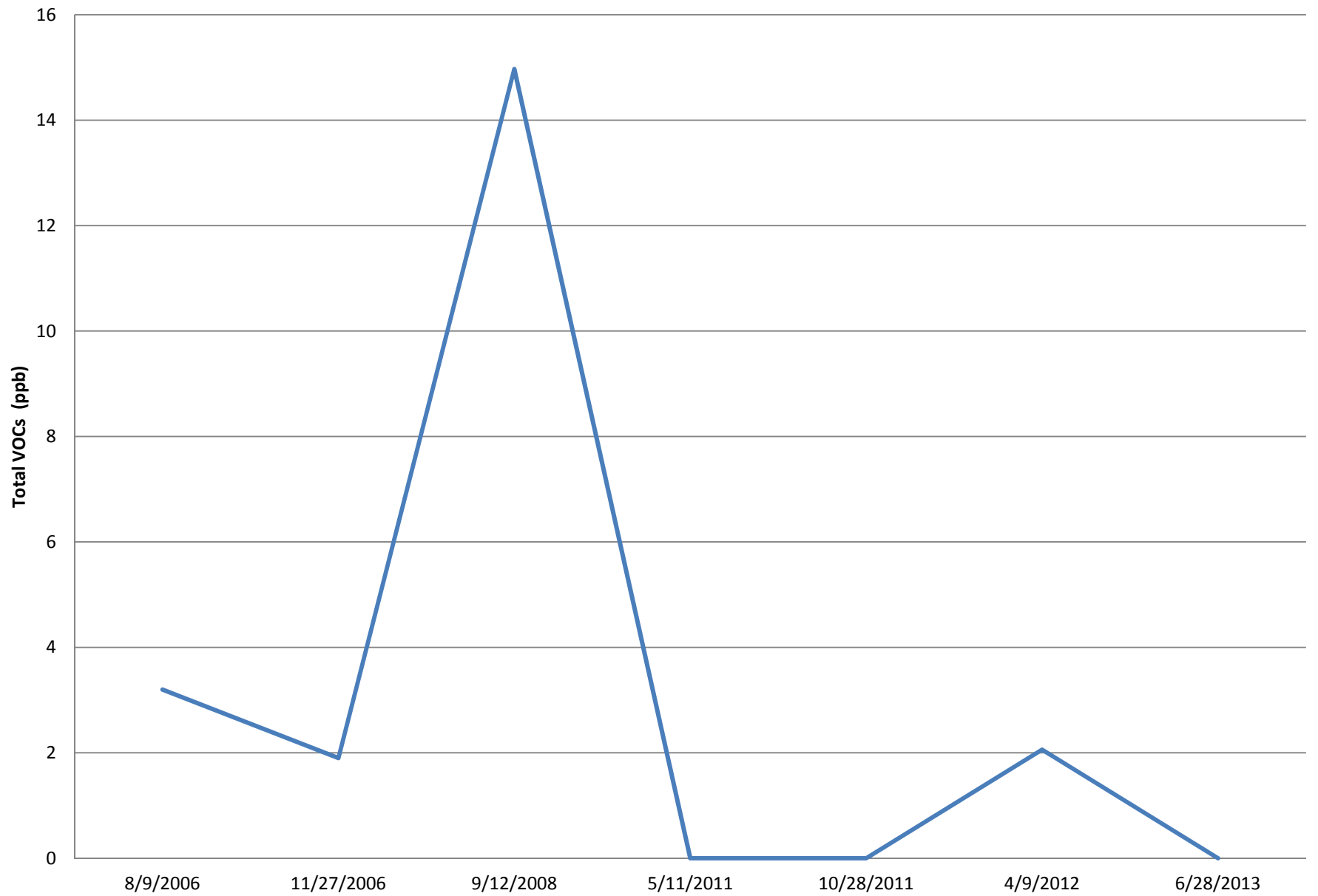
Well: MW-14R



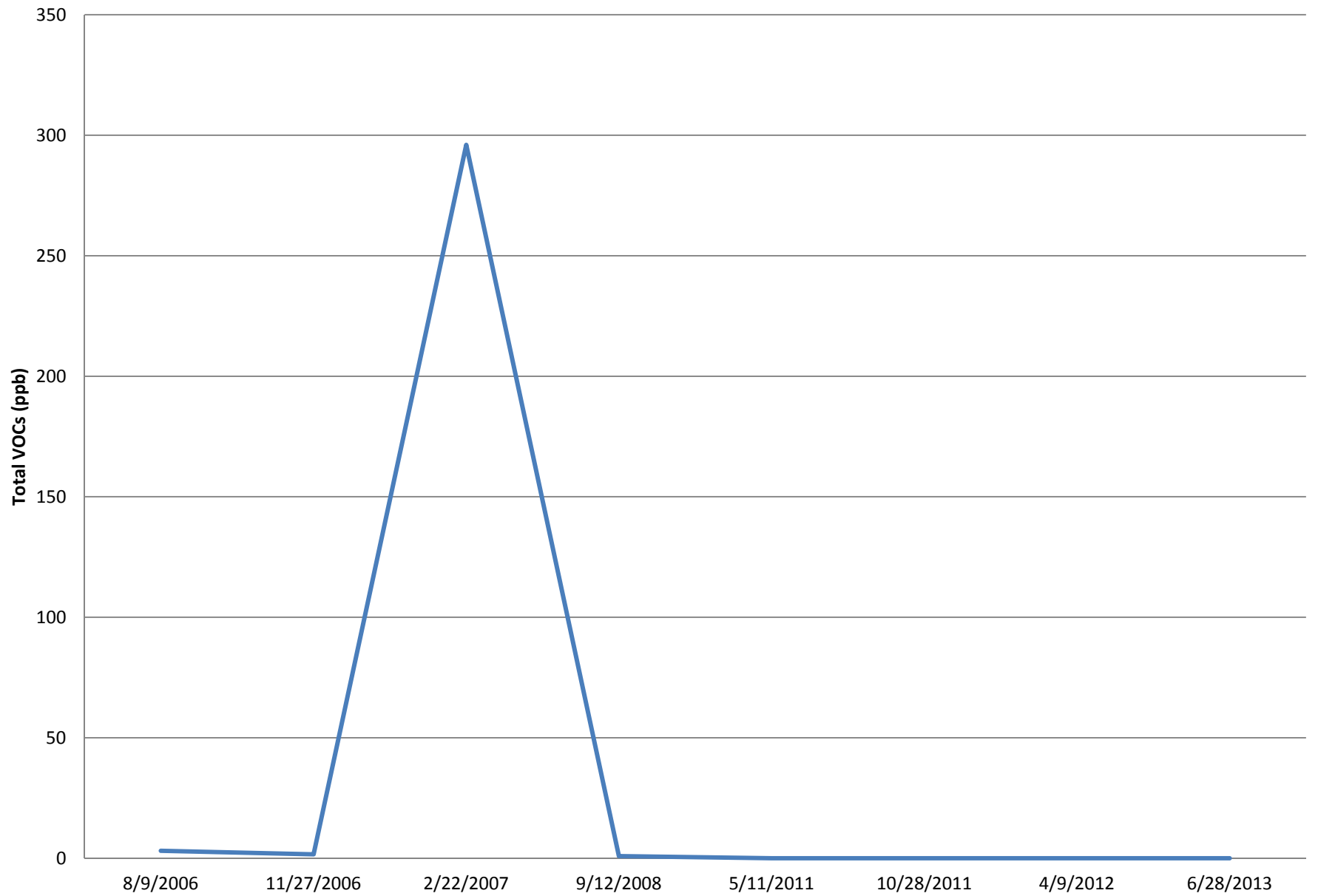
Well: MW-15R



Well: MW-16R



Well: MW-17R



LaBELLA

LaBella Associates, P.C.

300 State Street

Rochester, New York 14614

Appendix D

Institutional Controls/Engineering Controls Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1	
Site No.	C828115		
Site Name Rochester Drug Cooperative Building			
Site Address: 320 N. Goodman Street		Zip Code: 14607	
City/Town: Rochester			
County: Monroe			
Site Acreage: 2.7			
Reporting Period: May 15, 2011 to May 15, 2012			
		YES	NO
1. Is the information above correct?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5. Is the site currently undergoing development?		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Box 2	
	YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	
A Corrective Measures Work Plan must be submitted along with this form to address these issues.	
_____ Signature of Owner, Remedial Party or Designated Representative	_____ Date

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C828115**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control

106.84-01-01

Gary and Marcia Stern Fam. Ltd Partnersh

Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
O&M Plan
Site Management Plan
Soil Management Plan

Box 4**Description of Engineering Controls**ParcelEngineering Control

106.84-01-01

Cover System
Vapor Mitigation

Engineering Control Details for Site No. C828115**Parcel: 106.84-01-01**

- Compliance with the environmental easement and the SMP;

- All asphalt surfaces and the on-site building are considered a cover system to prevent direct contact with residual contamination in soil and must be maintained;

- The SSDS must be monitored and operate on a continuous basis;

- Any future building must be evaluated for soil vapor intrusion;

- Groundwater quality must be monitored on a regular basis;

- Groundwater use as a potable source is prohibited;

- The Site is restricted to commercial and/or industrial uses; and

- Periodic certification that all institutional and engineering controls are in place and that the SMP is being implemented.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO



2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO



**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

[NOTE MONITORING DEVIATIONS
IDENTIFIED IN PRR ENGINEER'S REPORT]

IC CERTIFICATIONS
SITE NO. C828115

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I GARY STERN at 274 N. Goodman ST.
print name print business address

am certifying as GARY & MARCIA STERN Family Limited (Owner or Remedial Party)
Partnership

for the Site named in the Site Details Section of this form.

Gary Stern
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

July 31, 2013
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I DAN NOLL at LaBella Associates, 300 State St
print name print business address Rochester NY

am certifying as a Professional Engineer for the GARY & MARCIA STERN FAMILY LIMITED
(Owner or Remedial Party) PARTNERSHIP

[Signature]

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification



Stamp
(Required for PE)

7/31/2013
Date