

January 3, 2016

Groundwater and Surface Water Sampling Event September 2015 Report

Prepared for:
Syracusa Sand and Gravel Inc.

Site:
Modock Rd. Springs/DSL Sand & Gravel Inc. Site
Town of Victor, Ontario County, NY
NYSDEC Site No. 8-35-013



MarksEngineering

152 Yellow Mills Rd.
Palmyra, NY 14522

TABLE OF CONTENTS

1.0 Introduction	1
2.0 Site Description and History	1
3.0 Scope of work.....	1
3.1 Sampling of Groundwater Monitoring Wells and Surface Water.....	2
3.1.1 Purpose and Objectives	2
3.1.2 Methodology and Procedures	2
3.1.3 Collection and Analysis of Laboratory Samples	2
3.1.4 Reporting of Results.....	3
3.2 Handling of Sampling-Related Waste.....	3
4.0 Results	3
4.1. Groundwater Sampling Results	3
4.2. Surface Water Sampling Results	4
5.0 Evaluation of Results and Conclusions	4
6.0 References.....	4

LIST OF FIGURES

- 1) Site and Sample Location Map

LIST OF TABLES

- 1) Summary of Detected Groundwater Constituents
- 2) Summary of Detected Surface Water Constituents
- 3) Summary of Historic Data and Trends

LIST OF APPENDICES

- A) Field Measurements Form
- B) Chain of Custody Forms

LIST OF EXHIBITS

- A) NYSDEC Request for Sampling (via e-mail May 20, 2015)
- B) Laboratory Reports

1.0 INTRODUCTION

In accordance with our proposal dated August 17, 2015, **Marks Engineering, P.C.** (Marks Engineering), conducted a groundwater and surface water sample event in September of 2015 at the Modock Rd. Springs/DLS Sand & Gravel, Inc. Site located in the Town of Victor, Ontario County, New York (herein referred to as the “Site”). A Site Location Map is presented as **Figure 1**.

The Site is a New York State Department of Environmental Conservation (NYSDEC) Class 2 Inactive Hazardous Waste Site (Site No. 8-35-013). The scope of work presented herein is consistent with the NYSDEC request for sampling, provided by e-mail on May 20, 2015 (attached), and the NYSDEC Record of Decision (ROD) for the Site.

The objective of the September 2015 groundwater and surface water sample event, the findings of which are discussed in this Report, is part of the ROD’s long-term plume management monitoring program to evaluate plume stability and the natural reduction of the chlorinated volatile organic compound (CVOC) contamination over time. This sample event included 10 monitoring wells and one surface water location as requested in the NYSDEC’s May 20, 2015 e-mail.

This Report provides a summary of the groundwater and surface water sample event and is organized as follows:

- **Site Description and History** (Section 2) – presents a high level summary of the history and description of the Site
- **Scope of Work** (Section 3) – provides details on the scope of work and procedures that were used during the sample event
- **Results** (Section 4) – presents the field observations, findings and analytical results for laboratory samples collected during the sample event
- **Evaluation of Results and Conclusions** (Section 5) – presents an evaluation of the results and data

2.0 SITE DESCRIPTION AND HISTORY

The Site is comprised of a 173-acre parcel, currently operating as an active sand and gravel mine operated by Syracuse Sand and Gravel Inc. (Syracusa). The Site was acquired by Syracuse in 1953. Prior to Syracuse’s ownership the property was used for agricultural purposes. The Site operated under the name of D.L.S. Sand and Gravel until 1973 when the corporate name was changed to Syracuse Sand and Gravel. From 1966 to 1971, a portion of the property was leased to Rochester Block, Inc. (NYSDEC, 2010).

A series of investigations at the Site have been conducted starting in approximately 1995. The data from the investigations generally shows that CVOCs, including trichloroethene (TCE), 1,1,1-trichloroethane (TCA), and 1,1-dichloroethene (1,1-DCE), were likely released on the property in the 1960s or 1970s and have contributed to both on-site and off-site CVOC contamination in groundwater (NYSDEC, 2010). The soil into which the CVOCs were first released; however, no longer exists on the Site. On the basis of the investigations, in 2001, the Department listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York. After subsequent Site characterization, feasibility study and remedial alternatives analysis the ROD for the Site was issued in 2010.

The ROD selected the following remedy for the Site: (a) an environmental easement to restrict the future use of groundwater at the Site; (b) a Site Management Plan (SMP) which will require long-term plume management monitoring, maintenance of the Sub Slab Depressurization Systems (SSDSs) in several residences, long-term monitoring of soil vapor intrusion in residences requiring monitoring and periodic review reporting to the NYSDEC; and (c) a contingency for the implementation of a zero valent iron treatment injection to reduce contaminant mass in the area of highest groundwater CVOC concentrations if the results of the plume management monitoring demonstrate that the CVOC groundwater concentrations are not continuing to decline.

3.0 SCOPE OF WORK

This section provides details on the scope of work and procedures that were used during implementation of the groundwater and surface water sample event. The primary components of the scope of work were as follows:

- Installation of 10 passive diffusion sampling bags (PDBs) at the 10 groundwater monitoring wells requested by the NYSDEC (MW-4, MW-10, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-23, MW-24s and SS&G MW-3)

- Collection of 10 groundwater samples for laboratory analysis for Target Compound List (TCL) VOCs in accordance with USEPA Method 8260, including CVOCs
- Collection of one surface water sample (SC-1) from Modock Road Springs for laboratory analysis for TCL VOCs in accordance with USEPA Method 8260, including CVOCs
- Collection of Quality Assurance/ Quality Control (QA/QC) samples including one trip blank and one blind field duplicate for TCL VOCs in accordance with USEPA Method 8260, including CVOCs.

3.1 Sampling of Groundwater Monitoring Wells and Surface Water

3.1.1 Purpose and Objectives

The September 2015 groundwater and surface water sample event, the findings of which are discussed in this Report, is part of the ROD's long-term plume management monitoring program. The objective of the plume monitoring program is to evaluate plume stability and the natural reduction of the Site's chlorinated volatile organic compound (CVOC) contamination over time.

3.1.2 Methodology and Procedures

A total of 10 PDBs were installed in 10 groundwater monitoring wells (MW-4, MW-10, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-23, MW-24s and SS&G MW-3) at the Site on August 20, 2015. The locations of the monitoring wells are depicted on **Figure 1**.

Prior to the installation of each PDB the depth to water and depth to bottom of each well was gauged using a decontaminated water level probe. The field measurements were used to calculate the standing water column in each well. New nitrile gloves were donned by field personnel prior to the handling and installation of each PDB. PDBs were installed at the center of the standing water column or the midpoint of the screen (whichever was less) using new nylon twine and a stainless steel bottom weight. The weight was suspended from the bottom of the PDB with an appropriate length of string, the PDB and weight were slowly lowered to the bottom of the well (*i.e.*, the weight was felt to hit bottom and the suspension string affixed to the top of the PDB slacked) and the suspension string was secured at the surface at the top of the well casing. Field measurements were recorded on a field log included as **Appendix A**.

Upon completion of installation of each PDB, the water level probe was decontaminated by wiping the tape with a rag and using an Alconox®/potable water wash and a separate potable water rinse. Decontamination water associated with sampling activities was discharged to the ground surface adjacent to SS&G MW-3 upon completion of work. It is noted that the Alconox wash and rinse was not initially used during installation of PDBs at MW-4, MW-10 and MW-23.

A surface water sample (SC-1) was collected directly from the Modock Road Spring using a disposable polyethylene bailer. It is noted that the sample was collected prior to and on the west side of the corrugated steel drainage pipe that runs beneath the access road/foot path and subsequently discharges on the east side of the access road/footpath into a marsh area. Historically, however, upon discussions with the NYSDEC it was communicated that the SC-1 sample has been collected from the outlet of the culvert on the east side of the access road/foot path, as such, it is understood that future SC-1 samples shall be collected from the outlet of the culvert on the east side of the access road/foot path for consistency.

3.1.3 Collection and Analysis of Laboratory Samples

The PDBs were retrieved on September 8, 2015. One groundwater sample was collected for laboratory analysis from each monitoring well (MW-4, MW-10, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-23, MW-24s and SS&G MW-3). A blind laboratory duplicate (DUP090815) was collected at MW-17s. Samples were collected by retrieving each PDB from the respective well and placing the PDB on a new sheet of polyethylene sheeting. A corner of the PDB was cut with a pair of decontaminated scissors and the contents of the PDB were collected in appropriate laboratory-supplied sample containers. Samples were placed in a plastic cooler pre-chilled with ice and submitted under appropriate chain of custody protocols to ALS Environmental (ALS) located in Rochester, New York, for laboratory analysis for TCL VOCs in accordance with USEPA Method 8260.

The surface water sample (SC-1) was also collected in laboratory supplied glassware and submitted to ALS for TCL VOC 8260 analysis under the same chain of custody as the groundwater samples.

In the absence of a formal Quality Assurance Project Plan (QAPP), it was understood that the appropriate chain of custody protocols for collection of samples were to be complied with and a prequalified NYSDOH Environmental Laboratory Analytical

Program (ELAP)-certified laboratory would perform analysis of samples. Copies of the chain of custody forms are presented as **Appendix B**.

3.1.4 Reporting of Results

The laboratory report was provided in a results only, standard quality control (QC) format. At the request of the NYSDEC, the laboratory results were also provided in an electronic data deliverable (EDD) format. The EDD was submitted to the NYSDEC on December 17, 2015 and upload to the NYSDEC database on December 18, 2015. A copy of the laboratory reports are presented as **Exhibit A**.

3.2 Handling of Sampling-Related Waste

The groundwater and surface water sampling activities implemented at the Site produced sampling-related waste media including the following:

- Decontamination wash water, collected in 5 gallon pails, resulting from decontamination of equipment and sampling tools
- General refuse (i.e., paper towels, used personal protective equipment [PPE], etc.).
- The sampling related waste was disposed of as follows:
- Used decontamination water associated with decontamination of equipment and sampling tools was discharged to the ground surface of the Site adjacent to SS&G MW-3 at the completion of work.
- Used PPE and other general refuse was placed in trash bags and disposed of in the Syracuse's solid waste dumpster for disposal at a sanitary landfill.

4.0 RESULTS

During the September 2015 groundwater and surface water sampling event, one surface water sample (SC-1) and 10 groundwater samples were collected for laboratory analysis from 10 groundwater monitoring wells (MW-4, MW-10, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-23, MW-24s and SS&G MW-3). The groundwater and surface water sample analytical results were compared to the following NYSDEC standards, criteria and/or guidance values (SCGVs):

- Class GA groundwater and Class A surface water standards and guidance values referenced in Table 1 of the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled Ambient Water Quality Standard and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1) dated June 1998 (as amended January 1999, April 2000 and June 2004).

4.1. Groundwater Sampling Results

As presented in **Table 1** below, detectable concentrations of three CVOCs (TCE, TCA and 1,1-DCE) were found in groundwater samples collected at the Site at eight of the monitoring wells (MW-4, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-24s and SS&G MW-3); no other VOCs were detected.

Table 1 – Summary of Detected Groundwater Constituents

	Trichloroethene (TCE)	NYSDEC	1,1,1-Trichloroethane (TCA)	NYSDEC	1,1-Dichloroethene (1,1-DCE)	NYSDEC
MW-04	82 ug/l	5 ug/l	17 ug/l	5 ug/l	ND	5 ug/l
MW-13	32 ug/l	5 ug/l	7.8 ug/l	5 ug/l	ND	5 ug/l
MW-14	120 ug/l	5 ug/l	25 ug/l	5 ug/l	ND	5 ug/l
MW-15	ND	5 ug/l	19 ug/l	5 ug/l	ND	5 ug/l
MW-16	250 ug/l	5 ug/l	42 ug/l	5 ug/l	9.3 ug/l	5 ug/l
MW-17s	480 ug/l	5 ug/l	43 ug/l	5 ug/l	8.3 ug/l	5 ug/l
MW-24s	110 ug/l	5 ug/l	27 ug/l	5 ug/l	6.8 ug/l	5 ug/l
SS&G MW-3	13 ug/l	5 ug/l	9.1 ug/l	5 ug/l	ND	5 ug/l

Notes: **Bold** = constituent was detected
 Shaded = constituent was detected above NYSDEC SCGV
 ND = Non detect
 NYSDEC = TOGS 1.1.1 Class GA groundwater SCGV
 ug/l = milligrams per liter (parts per billion [ppb])

4.2. Surface Water Sampling Results

As presented in **Table 2** below, detectable concentrations of two CVOCs (TCE and TCA) were found in the surface water sample (SC-1) collected at the Site; no other VOCs were detected.

Table 2 – Summary of Detected Surface Water Constituents

	Trichloroethene (TCE)	NYSDEC	1,1,1-Trichloroethane (TCA)	NYSDEC	1,1-Dichloroethene (1,1-DCE)	NYSDEC
SC-1	50 ug/l	5 ug/l	12 ug/l	5 ug/l	ND	0.7 ug/l

Notes: **Bold** = constituent was detected
 Shaded = constituent was detected above NYSDEC SCGV
 ND = Non detect
 NYSDEC = TOGS 1.1.1 Class A surface water SCGV
 ug/l = milligrams per liter (parts per billion [ppb])

5.0 EVALUATION OF RESULTS AND CONCLUSIONS

The September 2015 groundwater and surface water sample event, the findings of which are discussed in this Report, is part of the ROD's long-term plume management monitoring program. The objective of the plume monitoring program is to evaluate plume stability and the natural reduction of the Site's chlorinated volatile organic compound (CVOC) contamination over time.

As presented in **Table 1** and **Table 2**, the laboratory results for VOC analysis of the groundwater samples collected at 10 on-Site wells (MW-4, MW-10, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-23, MW-24s and SS&G MW-3) indicate detections of CVOCs (*i.e.*, trichloroethene [TCE], 1,1,1-trichloroethane [TCA] and/or 1,1-dichloroethane) at eight wells (MW-04, MW-13, MW-14, MW-15, MW-16, MW-17s, MW-24s and SS&G MW-3) and the surface water sample location (SC-1). The detected concentrations of CVOCs were above the respective NYSDEC Class GA groundwater SCGV or in the case of the surface water sample (SC-1) above the respective NYSDEC Class A surface water SCGV.

The objective of the ROD's plume monitoring program is to evaluate plume stability and the natural reduction of CVOCs over time; therefore, a comparison of the September 2015 analytical data to the analytical data from historic sampling events, dating back as far as 1995, is presented on **Table 3**. As illustrated on **Table 3**, the data trend for the ten wells that were sampled as part of this monitoring event is decreasing concentrations of CVOC contaminants, with approximate percent reductions ranging from 49%-100%. The surface water concentrations of CVOC contaminants also continue to decline, showing contaminant reductions ranging from 55-81%. The data shows that the concentrations of the CVOCs in the plume are continuing to decline; indicating that natural attenuation of contaminants continues to occur, and satisfying the objectives of the remedy (long term plume management and monitored natural attenuation) selected for the Site in the ROD.

6.0 REFERENCES

NYSDEC, 1998, *Ambient Water Quality Standard and Guidance Values and Groundwater Effluent Limitations* - TOGS 1.1.1 (as amended January 1999, April 2000 and June 2004), Albany, New York

NYSDEC, 2010, *Record of Decision*, Modock Road Springs/DLS Sand and Gravel, Inc. Site Town of Victor, Ontario County, New York Site Number 8-35-013, January 2010



Figures






J:\Market\GIS\20150915 Modock Road Springs\01 Site Plan.mxd

FIGURE 1
SITE AND SAMPLE LOCATION MAP

September 2015 Groundwater Sample Event
Modock Road Springs
DLS Sand and Gravel, Inc
Site (HW 8-35-013)

LEGEND

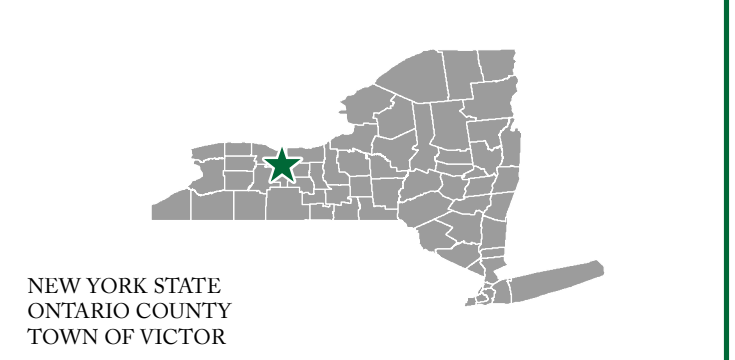
-  Monitoring Well Location
-  Surface Water Sample
-  Site Boundary

Notes:

- 1) Well locations were created using Northing/Easting data.
- 2) Aerial imagery is from 5/31/2013.
- 3) Mapping prepared by Fisher Associates.



REGIONAL MAP










J:\Market\GIS\20150915 Modock Road Springs\02 Groundwater Map.mxd



FIGURE 2
GROUNDWATER CONTOUR MAP

September 2015 Groundwater Sample Event
Modock Road Springs
DLS Sand and Gravel, Inc
Site (HW 8-35-013)

LEGEND

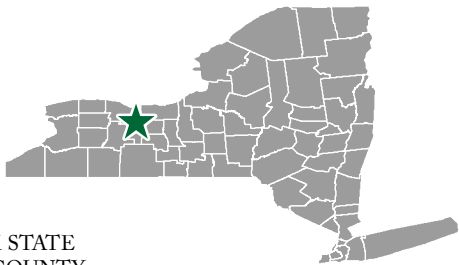
-  Monitoring Well Location
-  Surface Water Sample
-  Groundwater Flow Direction
-  Groundwater Elevation (ft. amsl)
-  Site Boundary

Notes:

- 1) Well locations were created using Northing/Easting data.
- 2) Aerial imagery is from 5/31/2013.
- 3) Monitoring well water levels were recorded on 8/20/2015.
- 4) Mapping prepared by Fisher Associates.



REGIONAL MAP



NEW YORK STATE
ONTARIO COUNTY
TOWN OF VICTOR





Table 3 – Summary of Historic Data & Trends

Table 3 - Historic Data and Trends
Modock Rd. Springs/DSL Sand Gravel Inc. Site (NYSEC Site No. 8-35-013)

MW-1	8/11/1995	8/25/1995	8/7/1996	4/24/1997	7/29/1997	4/30/1998	5/23/2001	% Difference
TCE	240	210	320	250	220	200	180	-25
TCA	120	100	180	130	120	110	80	-33.333333
DCE	7.2	0	9	0	8.1	12	11	52.7777778
TCVOCs	367.2	310	509	380	348.1	322	271	-26.198257

MW-4	8/11/1995	8/25/1995	8/7/1996	4/24/1997	7/29/1997	4/30/1998	11/9/1999	5/23/2001	11/18/2004	11/17/2006	6/6/2007	6/30/2008	5/6/2009	9/21/2009	8/10/2010	10/30/2011	9/8/2015	% Difference	Data Trend ¹
TCE	160	160	200	240	200	180	140	150	200	130	100	120	100	120	120	20.7	82	-49	Down
TCA	110	96	150	140	110	74	85	72	79	41	36	40	34	35	34	14.3	17	-85	Down
DCE	6.9	5.1	7	5.6	7.7	7.4	9.7	11	10	6	5	5	4	6.5	6.2	0	0	-100	Down
TCVOCs	276.9	261.1	357	385.6	317.7	261.4	234.7	233	289	177	141	165	138	161.5	160.2	35	99	-64	Down

MW-5	8/11/1995	8/25/1995	8/7/1996	11/17/2006	6/6/2007	6/30/2008	5/6/2009	% Difference
TCE	20	21	38	12	6	8	8	-60
TCA	17	12	16	9	2	4	3	-82.352941
DCE	0	0.52	0	2	0	0	0	na
TCVOCs	37	33.52	54	23	8	12	11	-70.27027

MW-10	11/9/1999	11/17/2006	6/6/2007	6/30/2008	8/10/2010	10/30/2011	9/8/2015	% Difference	Data Trend ¹
TCE	0	0	1	0	0.7	20.8	0	#DIV/0!	Same
TCA	3.2	2	3	3	2.9	0	0	-100	Down
DCE	0	0	0	0	0	0	0	#DIV/0!	Same
TCVOCs	3.2	2	4	3	3.6	20.8	0	-100	Down

MW-13	11/10/2000	5/23/2001	10/31/2003	11/17/2006	6/6/2007	6/30/2008	5/5/2009	9/21/2009	8/10/2010	10/31/2011	12/28/2011	9/8/2015	% Difference	Data Trend ¹
TCE	610	450	340	180	150	150	150	150	150	31.8	104	32	-95	Down
TCA	540	400	260	180	150	180	170	130	120	37.8	71.9	7.8	-99	Down
DCE	66	58	31	31	20	24	23	23	20	0	11.2	0	-100	Down
TCVOCs	1216	908	631	391	320	354	343	303	290	69.6	187.1	39.8	-97	Down

MW-14	11/10/2000	5/23/2001	10/31/2003	11/18/2004	3/2/2005	9/15/2006	11/17/2006	6/6/2007	6/30/2008	5/5/2009	9/21/2009	8/10/2010	10/31/2011	9/8/2015	% Difference	Data Trend ¹
TCE	11000	3300	1000	950	1400	2600	470	1100	410	450	550	150	166	120	-99	Down
TCA	4600	880	210	200	280	360	150	250	120	110	100	31	41.4	25	-99	Down
DCE	570	120	32	28	54	45	23	38	16	14	17	5.3	5.06	0	-100	Down
TCVOCs	16170	4300	1242	1178	1734	3005	643	1388	546	574	667	186.3	212.46	145	-99	Down

MW-15	6/6/2007	6/30/2008	5/5/2009	8/10/2010	10/30/2011	9/8/2015	% Difference	Data Trend ¹
TCE	1.8	0	1	2.7	19.1	0	-100	Down
TCA	60	57	65	45	12.8	19	-68	Down
DCE	11	21	10	8.7	0	0	-100	Down
TCVOCs	72.8	78	76	56.4	31.9	19	-74	Down

MW-16	6/6/2007	6/30/2008	5/5/2009	8/10/2010	10/30/2011	12/28/2011	9/8/2015	% Difference	Data Trend ¹
TCE	350	340	520	450	51.6	464	250	-29	Down
TCA	98	120	150	86	53	82.6	42	-57	Down
DCE	19	21	25	0	2.41	17.2	9.3	-51	Down
TCVOCs	467	481	695	536	107.01	563.8	301.3	-35	Down

NOTES: ¹ Although included in the table for completeness, 2011 data is disregarded due to QA/QC concerns and not included in overall trend analysis.

Table 3 - Historic Data and Trends
Modock Rd. Springs/DSL Sand Gravel Inc. Site (NYSEC Site No. 8-35-013)

MW-17S	6/6/2007	6/30/2008	5/5/2009	8/10/2010	10/31/2011	12/28/2011	9/8/2015	% Difference	Data Trend ¹
TCE	850	2300	3700	2700	77.3	1220	480	-44	Down
TCA	81	330	410	250	65.6	102	43	-47	Down
DCE	26	55	120	62	2.74	21.5	8.3	-68	Down
TCVOCs	957	2685	4230	3012	145.64	1343.5	531.3	-44	Down

MW-23	8/20/2008	5/5/2009	8/10/2010	10/31/2011	9/8/2015	% Difference	Data Trend ¹
TCE	3	47	3.6	21.6	0	-100	Down
TCA	1	13	2.6	6.7	0	-100	Down
DCE	0	2	0	0	0	#DIV/0!	Same
TCVOCs	4	62	6.2	28.3	0	-100	Down

MW-24S	8/20/2008	5/5/2009	8/10/2010	10/31/2011	9/8/2015	% Difference	Data Trend ¹
TCE	210	190	150	24.1	110	-48	Down
TCA	62	64	46	20.4	27	-56	Down
DCE	9	9	10	0	6.8	-24	Down
TCVOCs	281	263	206	44.5	143.8	-49	Down

SS&G MW-3	4/24/2001	6/6/2007	6/30/2008	5/6/2009	9/21/2009	8/10/2010	11/1/2011	9/8/2015	% Difference	Data Trend ¹
TCE	327	28	18	24	25	16	6.39	13	-96	Down
TCA	224	45	29	40	30	19	16	9.1	-96	Down
DCE	52.9	6	0	5	5.4	3.8	0	0	-100	Down
TCVOCs	603.9	79	47	69	60.4	38.8	22.39	22.1	-96	Down

SS&G MW-5	4/24/2001	6/6/2007	6/30/2008	5/6/2009	% Difference
TCE	741	450	94	150	-79.757085
TCA	0	2	0	1	na
DCE	0	0	0	0	na
TCVOCs	741	452	94	151	-79.622132

SC-1	25-Aug-1995	9-May-2000	17-Nov-2006	15-Feb-2007	9-May-2007	6-Jun-2007	4-Oct-2007	25-Apr-2008	5/14/2008	6/30/2008	9/21/2009	8/10/2010	10/31/2011	3/19/2012	11/14/2012	9/8/2015	% Difference	Data Trend ¹
TCE	110	110	73	100	84	88	110	88	84	77	91	77	56.3	76	57	50	-55	Down
TCA	64	52	27	35	30	36	33	42	32	31	24	23	15.1	21	16	12	-81	Down
DCE	0	7.4	4	6	4	4	5.3	6	5	4	3.2	4.1	2.17	3.1	0	0	#DIV/0!	Same
TOTAL VOCs	174	169.4	104	141	118	128	148.3	136	121	112	118.2	104.1	73.57	100.1	73	62	-64	Down

-58.04597701

NOTES: ¹ Although included in the table for completeness, 2011 data is disregarded due to QA/QC concerns and not included in overall trend analysis.

0.27j



Appendix A

Field Measurements Form

Modock Road Springs/DLS Sand Gravel Inc., Site
 NYSDC Site No. 8-35-013
 Passive Diffusion Bag Groundwater Sampling Event
 August/Sept 2015

Well ID	Top of PVC Elevation (ft. amsl)	Field Measurements				Elevations						Distance from PDB _{top} to Groundwater (ft.)	PDP Deploy Date	PDP Deploy Time	PDP Recovery Date	PDP Recovery Time	
		Depth to Groundwater (ft. BTGC)	Measured Total Depth (ft. BTGC)	Standing Water Column (ft.)	FT FROM BOTTOM Water Column Center (ft. BTGC)	PDB _{top} (from bottom of well)	PDB _{bottom} (from bottom of well)	Groundwater Elevation (ft. amsl)	Measured Total Depth (ft. amsl)	Water Column Center Elevation (ft. amsl)	PDB _{top} Elevation (ft. amsl)						PDB _{bottom} Elevation (ft. amsl)
MW-4	876.61	59.96	51.05	11.15	43.175	6'	4'						8/20/15	10:40A			
MW-10	791.44	77.12	90.57	10.65	5.325	6.325	4.325						8/20/15	11:50A			
MW-13	781.20	65.34	74.77	9.63	4.815	5.815	3.815						8/20/15	13:45			
MW-14	759.17	55.09	64.24	9.15	4.575	5.575	3.575						8/20/15	14:10			
MW-15	788.44	60.10	70.04	9.94	4.97	5.97	3.97						8/20/15	13:25			
MW-16	754.95	65.58	70.49	4.91	2.455	3.455	1.455						8/20/15	14:25			
MW-17S	760.09	58.39	68.25	9.86	4.93	5.93	3.93						8/20/15	15:00			
MW-23	692.17	57.01	46.06	9.65	4.825	5.825	3.825						8/20/15	11:20A			
MW-24S	722.31	64.58	74.00	9.42	4.71	5.71	3.71						8/20/15	12:00P			
SS&G MW-3	805.43	70.07*	75.03	1.94	2.47	3.47	1.47						8/20/15	15:35			

*=15 FT SCREEN

Notes: MW-04 SOFT BOTTOM PDB = 2 FT
 Weather: 80s, BREEZY HUMID, OCC. SHOWERS
 HEAVY RAINS @ 15:35

SS&G MW-3: TOP OF PVC BECOMES MEASUREMENTS FROM HIGHEST POINT OF PVC
 BOTTOM IS HARD. NO FLUG

MW-23: RELATIVELY FIRM BOTTOM.

MW-24S: NOT A SOFT BOTTOM

MW-15: SOFT BOTTOM

MW-13: SOFT BOTTOM

MW-14: NO CAP/FLUG ON PVC. NO PROTECTIVE CASING LID EITHER. APPROX 4" CASING LID FROM MW-13 (MW-13 LEFT w/ FLUG IN 2" PVC)

MW-14 HAS GOOD (FIRM) BOTTOM-SOLID.

MW-16 HARD BOTTOM

MW-17S HARD BOTTOM

FIELD MEASUREMENTS/READINGS BY JEREMY WOLF, MARKS ENGINEERING
 FIELD NOTES RECORDED BY J. HANCOCK NYSDC.

8/20/15
 13:45

Modock Road Springs/DLS Sand Gravel Inc., Site
 NYSDEC Site No. 8-35-013
 Passive Diffusion Bag Groundwater Sampling Event
 August/Sept 2015

Well ID	Top of PVC Elevation (ft. amsl)	Field Measurements							Elevations					PDP Deploy Date	PDP Deploy Time	PDP Recovery Date	PDP Recovery Time
		Depth to Groundwater (ft. BTOC)	Measured Total Depth (ft. BTOC)	Standing Water Column (ft.)	Water Column Center (ft. from bottom of well)	Target PDB _{top} (from bottom of well)	Target PDB _{bottom} (from bottom of well)	Distance from PDB _{top} to Groundwater (ft.)	Groundwater Elevation (ft. amsl)	Measured Total Depth (ft. amsl)	Water Column Center Elevation (ft. amsl)	PDB _{top} Elevation (ft. amsl)	PDB _{bottom} Elevation (ft. amsl)				
MW-4	676.61	39.90	51.05	11.15	5.575	6	4	5.15	636.71					8/22/2015	10:40	9/8/2015	935
MW-10*	731.44	79.92	90.57	10.65	5.325	6.325	4.325	4.33	651.52					8/22/2015	11:50	9/8/2015	1030
MW-13	781.20	65.34	74.97	9.63	4.815	5.815	3.815	3.82	715.86					8/22/2015	13:45	9/8/2015	1120
MW-14*	759.17	55.09	64.24	9.15	4.575	5.575	3.575	3.58	704.08					8/22/2015	14:10	9/8/2015	1136
MW-15	786.44	60.10	70.04	9.94	4.97	5.97	3.97	3.97	726.34					8/22/2015	13:25	9/8/2015	1107
MW-16	754.95	65.58	70.49	4.91	2.455	3.455	1.455	1.46	689.37					8/22/2015	14:25	9/8/2015	1207
MW-17S	760.09	58.39	68.25	9.86	4.93	5.93	3.93	3.93	701.70					8/22/2015	15:00	9/8/2015	1150
MW-23	692.17	37.01	46.66	9.65	4.825	5.825	3.825	3.83	655.16					8/22/2015	11:20	9/8/2015	1012
MW-24S	722.31	64.58	74.00	9.42	4.71	5.71	3.71	3.71	657.73					8/22/2015	12:00	9/8/2015	1045
SS&G MW-3	805.43	70.09	75.03	4.94	2.47	3.47	1.47	1.47	735.34					8/22/2015	15:35	9/8/2015	1235

Weather: 8/20/15 - 80s, Breezy, Humid, Occasional Showers, Heavy Rain at 15:35; 9/8/15 Warm humid, 90's with slight breeze at times

Notes: MW-04: Soft Bottom
 MW-23: Relatively firm bottom
 MW-24S: Hard bottom
 MW-15: Firm Bottom
 MW-13: Soft Bottom
 MW-14: No cap or JPlug on PVC. No protective casing lid either. Borrowed 4" steel casing lid from MW-13 (MW-13 left w/ Jplug in 2" PVC)
 MW-16: Hard Bottom
 MW-17S: Hard Bottom
 SS&G MW-3: Top of PVC broken. Measurements recorded from highest point of PVC. Bottom is hard. No Jplug on well. Well capped with a plastic bag.

Collected Blind Laboratory Dup @ MW-17s Sample ID: DUP090815, Time: 1600



Appendix B

Laboratory Chain of Custody Forms

Project Name NYSDEC Site No 8-35-013		Project Number 15-027		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																			
Project Manager Jeremy Wolf		Report CC		PRESERVATIVE		METALS, TOTAL (List in comments below)		METALS, DISSOLVED (List in comments below)		METALS, TOTAL ° 8082 ° 608		PCBS ° 8081 ° 608		PESTICIDES ° 8021 ° 601/602		GC VOAs ° 8270 ° 625		GC/MS SVOAs ° 8260 ° 624 ° CLP		GC/MS VOAs ° 8260 ° 624 ° CLP		REMARKS/ ALTERNATE DESCRIPTION	
Company/Address Mucks Engineering 152 Yellow Mills Road Palmatica, NY 14522 Phone # 585-500-8392		Email JWolf@mucksengineering.com		Sampler's Printed Name Jeremy Wolf		FOR OFFICE USE ONLY LAB ID		SAMPLING TIME		DATE		MATRIX		NUMBER OF CONTAINERS		PRESERVATIVE		PREL		Preservative Key 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn, Acetate 6. MeOH 7. NaHSO4 8. Other			
CLIENT SAMPLE ID	MW-4	FOR OFFICE USE ONLY LAB ID		SAMPLING TIME	9/8/15	DATE	0945	MATRIX	GW	NUMBER OF CONTAINERS	3	PRESERVATIVE		PREL									
	MW-23				9/8/15		1015		GW		3												
	MW-10				9/8/15		1035		GW		3												
	MW-24S				9/8/15		1050		GW		3												
	MW-15				9/8/15		1110		GW		3												
	MW-13				9/8/15		1125		GW		3												
	MW-14				9/8/15		1140		GW		3												
	MW-17S				9/8/15		1155		GW		3												
	MW-16				9/8/15		1215		GW		3												
	SSFG MW-3				9/8/15		1240		GW		3												
	SC-1				9/8/15		1345		SW		3												
SPECIAL INSTRUCTIONS/COMMENTS Metals		Report . PDF. only to		JWolf@mucksengineering.com		Requested Report Date		Turnaround Requirements RUSH (SURCHARGES APPLY) 1 day 2 day 3 day 4 day 5 day		Report Requirements I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data		Invoice Information PO # 15-027 BILL TO: Mucks Engineering 152 Yellow Mills Rd. Palmatica, NY 14522											
STATE WHERE SAMPLES WERE COLLECTED		RECEIVED BY		RECEIVED BY		RECEIVED BY		RECEIVED BY		RECEIVED BY		RECEIVED BY											
Signature	Jeremy Wolf	Signature	Jeremy Wolf	Signature	Jeremy Wolf	Signature	Jeremy Wolf	Signature	Jeremy Wolf	Signature	Jeremy Wolf	Signature	Jeremy Wolf										
Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf	Printed Name	Jeremy Wolf										
Firm	Mucks Engineering	Firm	Mucks Engineering	Firm	Mucks Engineering	Firm	Mucks Engineering	Firm	Mucks Engineering	Firm	Mucks Engineering	Firm	Mucks Engineering										
Date/Time	9/8/15 1450	Date/Time	9/8/15 1450	Date/Time	9/8/15 1450	Date/Time	9/8/15 1450	Date/Time	9/8/15 1450	Date/Time	9/8/15 1450	Date/Time	9/8/15 1450										



Exhibit A
NYSDEC Request For Sampling
(via e-mail May 20, 2015)

Jeremy Wolf

From: Haugh, Joshua G (DEC) <joshua.haugh@dec.ny.gov>
Sent: Friday, August 14, 2015 12:26 PM
To: jwolf@marksengineering.com
Cc: Putzig, Bart X (DEC); John Wilson
Subject: FW: Modock Road Springs site #835013 - Groundwater monitoring
Attachments: July_15_2010_PDB_Deploy_Table_Modock.pdf;
report.hw835013.2012-04-06.Groundwater_Monitoring_Eventpdf.pdf

Jeremy,

The email below summarizes the approach for the upcoming sampling event at the Modock Road Springs site. As I explained on the phone this morning, this event is requested in advance of a finalized SMP, and it's anticipated that subsequent sampling events will be in accordance with an approved SMP.

I also attached the 2012 TriTech report. See summary tables (including historical analytical results for the short list wells) in Appendix E. I also attached the Department's response to this sampling event, which includes the results of the limited re-sampling event.

In regard to methodology, bottom weights were used previously and should be used going forward to ensure proper PDB placement depth. Rope line is acceptable if single use, but stainless steel or Teflon coated stainless steel wire is preferred and can be reused for future sampling rounds.

Here is a link to an appropriate guidance document that describes proper PDB deployment:
<http://www.itrcweb.org/GuidanceDocuments/DSP-1a.pdf>

Thanks,

Josh Haugh

NYSDEC
DER Bureau E

From: Haugh, Joshua G (DEC)
Sent: Wednesday, May 20, 2015 11:10 AM
To: Shannon Petch
Cc: vail1@aol.com; Kenney, Julia (HEALTH); Putzig, Bart (DEC); Cruden, Michael (DEC)
Subject: Modock Road Springs site #835013 - Groundwater monitoring

Shannon,

The state is still reviewing the SMP submitted by ERM and I anticipate having comments back to you in 1-2 weeks.

Last week I spoke with Mark Syracuse of DLS Sand & Gravel about performing a groundwater sampling round this spring (in advance of a final SMP). For the purposes of this event, sampling locations should include the ten (10) monitoring wells that were last sampled by TriTech Environmental Health & Safety, Inc. in October/December 2011, as well as the one (1) surface water location (SC-1) that was also sampled by TriTech in 2011 and was last sampled by the Department in November 2012. In general, sampling, analysis and QA/QC shall be in accordance with DER-10. PDB placement for this event shall be consistent with past Department sampling events (note that incorrect PDB placement by TriTech in

2011 led to artificially low contaminant concentrations). Please refer to the attached table for the list of monitoring well locations and PDB placement guidance. The PDBs should be deployed at least 2 weeks before samples are collected. Samples shall be submitted to an ELAP accredited laboratory for TCL VOCs.

Please contact me with any questions or concerns and to discuss the schedule so I can arrange to meet you at the site.

Thanks,

Josh Haugh

NYSDEC
Division of Environmental Remediation
Remedial Bureau E
625 Broadway
Albany, New York 12233-7017
Telephone: 518-402-9814
Fax: 518-402-9819



Exhibit B

Laboratory Reports



September 23, 2015

Service Request No:R1507468

Mr. Jeremy Wolf
Marks Engineering, PC
152 Yellow Mills Road
Palmyra, NY 14522

Laboratory Results for: NYSDEC Site No. 8-35-013

Dear Mr. Wolf,

Enclosed are the results of the sample(s) submitted to our laboratory September 09, 2015
For your reference, these analyses have been assigned our service request number **R1507468**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Tracy.Christ@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Tracy Christ
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | FAX +1 585 288 8475

ALS Group USA, Corp.

dba ALS Environmental

CASE NARRATIVE

Client: Marks Engineering
Project: NYSDEC Site No8-35-013/15-027
Sample Matrix: Water

Service Request No.: R1507468
Date Received: 9/8/15

All analyses were performed consistent with the quality assurance program of ALS. This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses.

Sample Receipt

Twelve water samples and one trip blank were received for analysis at ALS Environmental. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

Organics

The Continuing Calibration Verification on 9/10/15 was outside the control limits for Chloromethane, on 9/11/15 for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Carbon Tetrachloride, and Tetrachloroethene, and on 9/14/15 for Carbon tetrachloride. All positive detections for samples associated with their relevant CCVs should be considered as estimated.

The Laboratory Control Sample on 9/11/15 was outside the control limits. No data was affected.

No other analytical or QC problems were encountered.

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027

Service Request:R1507468

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1507468-001	MW-4	9/8/2015	0945
R1507468-002	MW-23	9/8/2015	1015
R1507468-003	MW-10	9/8/2015	1035
R1507468-004	MW-24S	9/8/2015	1050
R1507468-005	MW-15	9/8/2015	1110
R1507468-006	MW-13	9/8/2015	1125
R1507468-007	MW-14	9/8/2015	1140
R1507468-008	MW-17S	9/8/2015	1155
R1507468-009	MW-16	9/8/2015	1215
R1507468-010	SS&G MW-3	9/8/2015	1240
R1507468-011	SC-1	9/8/2015	1345
R1507468-012	DUP090815	9/8/2015	1600
R1507468-013	TRIP BLANK	9/8/2015	

REPORT QUALIFIERS AND DEFINITIONS

<p>U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.</p> <p>J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).</p> <p>B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p>E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p>E Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p>D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.</p> <p>* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.</p> <p>H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.</p> <p># Spike was diluted out.</p>	<p>+ Correlation coefficient for MSA is <0.995.</p> <p>N Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p>N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p>S Concentration has been determined using Method of Standard Additions (MSA).</p> <p>W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.</p> <p>P Concentration >40% (25% for CLP) difference between the two GC columns.</p> <p>C Confirmed by GC/MS</p> <p>Q DoD reports: indicates a pesticide/Aroclor is not confirmed (>100% Difference between two GC columns).</p> <p>X See Case Narrative for discussion.</p> <p>MRL Method Reporting Limit. Also known as:</p> <p>LOQ Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p>MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).</p> <p>LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p>ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p>
---	---



Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID #
Delaware Accredited	Nebraska Accredited	294100 A/B
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 09:45
Date Received: 09/08/15 14:30

Sample Name: MW-4
Lab Code: R1507468-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	17	5.0	1	09/10/15 16:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 16:18	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 16:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 16:18	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 16:18	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 16:18	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 16:18	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 16:18	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 16:18	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 16:18	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
1,4-Dioxane	100 U	100	1	09/10/15 16:18	
2-Butanone (MEK)	10 U	10	1	09/10/15 16:18	
2-Hexanone	10 U	10	1	09/10/15 16:18	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 16:18	
Acetone	10 U	10	1	09/10/15 16:18	
Benzene	5.0 U	5.0	1	09/10/15 16:18	
Bromochloromethane	5.0 U	5.0	1	09/10/15 16:18	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 16:18	
Bromoform	5.0 U	5.0	1	09/10/15 16:18	
Bromomethane	5.0 U	5.0	1	09/10/15 16:18	
Carbon Disulfide	10 U	10	1	09/10/15 16:18	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 16:18	
Chlorobenzene	5.0 U	5.0	1	09/10/15 16:18	
Chloroethane	5.0 U	5.0	1	09/10/15 16:18	
Chloroform	5.0 U	5.0	1	09/10/15 16:18	
Chloromethane	5.0 U	5.0	1	09/10/15 16:18	
Cyclohexane	10 U	10	1	09/10/15 16:18	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 16:18	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 16:18	
Dichloromethane	5.0 U	5.0	1	09/10/15 16:18	
Ethylbenzene	5.0 U	5.0	1	09/10/15 16:18	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 16:18	
Methyl Acetate	10 U	10	1	09/10/15 16:18	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 16:18	
Methylcyclohexane	10 U	10	1	09/10/15 16:18	
Styrene	5.0 U	5.0	1	09/10/15 16:18	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 16:18	
Toluene	5.0 U	5.0	1	09/10/15 16:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-4
Lab Code: R1507468-001

Service Request: R1507468
Date Collected: 09/08/15 09:45
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	82	5.0	1	09/10/15 16:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 16:18	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 16:18	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 16:18	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 16:18	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 16:18	
o-Xylene	5.0 U	5.0	1	09/10/15 16:18	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 16:18	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 16:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/10/15 16:18	
Dibromofluoromethane	99	89 - 119	09/10/15 16:18	
Toluene-d8	102	87 - 121	09/10/15 16:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-23
Lab Code: R1507468-002

Service Request: R1507468
Date Collected: 09/08/15 10:15
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/10/15 16:45	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 16:45	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 16:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 16:45	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 16:45	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 16:45	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 16:45	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 16:45	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 16:45	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 16:45	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
1,4-Dioxane	100 U	100	1	09/10/15 16:45	
2-Butanone (MEK)	10 U	10	1	09/10/15 16:45	
2-Hexanone	10 U	10	1	09/10/15 16:45	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 16:45	
Acetone	10 U	10	1	09/10/15 16:45	
Benzene	5.0 U	5.0	1	09/10/15 16:45	
Bromochloromethane	5.0 U	5.0	1	09/10/15 16:45	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 16:45	
Bromoform	5.0 U	5.0	1	09/10/15 16:45	
Bromomethane	5.0 U	5.0	1	09/10/15 16:45	
Carbon Disulfide	10 U	10	1	09/10/15 16:45	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 16:45	
Chlorobenzene	5.0 U	5.0	1	09/10/15 16:45	
Chloroethane	5.0 U	5.0	1	09/10/15 16:45	
Chloroform	5.0 U	5.0	1	09/10/15 16:45	
Chloromethane	5.0 U	5.0	1	09/10/15 16:45	
Cyclohexane	10 U	10	1	09/10/15 16:45	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 16:45	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 16:45	
Dichloromethane	5.0 U	5.0	1	09/10/15 16:45	
Ethylbenzene	5.0 U	5.0	1	09/10/15 16:45	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 16:45	
Methyl Acetate	10 U	10	1	09/10/15 16:45	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 16:45	
Methylcyclohexane	10 U	10	1	09/10/15 16:45	
Styrene	5.0 U	5.0	1	09/10/15 16:45	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 16:45	
Toluene	5.0 U	5.0	1	09/10/15 16:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-23
Lab Code: R1507468-002

Service Request: R1507468
Date Collected: 09/08/15 10:15
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/10/15 16:45	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 16:45	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 16:45	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 16:45	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 16:45	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 16:45	
o-Xylene	5.0 U	5.0	1	09/10/15 16:45	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 16:45	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 16:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/10/15 16:45	
Dibromofluoromethane	97	89 - 119	09/10/15 16:45	
Toluene-d8	102	87 - 121	09/10/15 16:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 10:35
Date Received: 09/08/15 14:30

Sample Name: MW-10
Lab Code: R1507468-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/10/15 17:12	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 17:12	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 17:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 17:12	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 17:12	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 17:12	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 17:12	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 17:12	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 17:12	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 17:12	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
1,4-Dioxane	100 U	100	1	09/10/15 17:12	
2-Butanone (MEK)	10 U	10	1	09/10/15 17:12	
2-Hexanone	10 U	10	1	09/10/15 17:12	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 17:12	
Acetone	10 U	10	1	09/10/15 17:12	
Benzene	5.0 U	5.0	1	09/10/15 17:12	
Bromochloromethane	5.0 U	5.0	1	09/10/15 17:12	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 17:12	
Bromoform	5.0 U	5.0	1	09/10/15 17:12	
Bromomethane	5.0 U	5.0	1	09/10/15 17:12	
Carbon Disulfide	10 U	10	1	09/10/15 17:12	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 17:12	
Chlorobenzene	5.0 U	5.0	1	09/10/15 17:12	
Chloroethane	5.0 U	5.0	1	09/10/15 17:12	
Chloroform	5.0 U	5.0	1	09/10/15 17:12	
Chloromethane	5.0 U	5.0	1	09/10/15 17:12	
Cyclohexane	10 U	10	1	09/10/15 17:12	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 17:12	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 17:12	
Dichloromethane	5.0 U	5.0	1	09/10/15 17:12	
Ethylbenzene	5.0 U	5.0	1	09/10/15 17:12	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 17:12	
Methyl Acetate	10 U	10	1	09/10/15 17:12	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 17:12	
Methylcyclohexane	10 U	10	1	09/10/15 17:12	
Styrene	5.0 U	5.0	1	09/10/15 17:12	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 17:12	
Toluene	5.0 U	5.0	1	09/10/15 17:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-10
Lab Code: R1507468-003

Service Request: R1507468
Date Collected: 09/08/15 10:35
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/10/15 17:12	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 17:12	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 17:12	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 17:12	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 17:12	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 17:12	
o-Xylene	5.0 U	5.0	1	09/10/15 17:12	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 17:12	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 17:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/10/15 17:12	
Dibromofluoromethane	101	89 - 119	09/10/15 17:12	
Toluene-d8	102	87 - 121	09/10/15 17:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 10:50
Date Received: 09/08/15 14:30

Sample Name: MW-24S
Lab Code: R1507468-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	27	5.0	1	09/10/15 17:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 17:39	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 17:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 17:39	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 17:39	
1,1-Dichloroethene (1,1-DCE)	6.8	5.0	1	09/10/15 17:39	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 17:39	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 17:39	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 17:39	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 17:39	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
1,4-Dioxane	100 U	100	1	09/10/15 17:39	
2-Butanone (MEK)	10 U	10	1	09/10/15 17:39	
2-Hexanone	10 U	10	1	09/10/15 17:39	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 17:39	
Acetone	10 U	10	1	09/10/15 17:39	
Benzene	5.0 U	5.0	1	09/10/15 17:39	
Bromochloromethane	5.0 U	5.0	1	09/10/15 17:39	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 17:39	
Bromoform	5.0 U	5.0	1	09/10/15 17:39	
Bromomethane	5.0 U	5.0	1	09/10/15 17:39	
Carbon Disulfide	10 U	10	1	09/10/15 17:39	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 17:39	
Chlorobenzene	5.0 U	5.0	1	09/10/15 17:39	
Chloroethane	5.0 U	5.0	1	09/10/15 17:39	
Chloroform	5.0 U	5.0	1	09/10/15 17:39	
Chloromethane	5.0 U	5.0	1	09/10/15 17:39	
Cyclohexane	10 U	10	1	09/10/15 17:39	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 17:39	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 17:39	
Dichloromethane	5.0 U	5.0	1	09/10/15 17:39	
Ethylbenzene	5.0 U	5.0	1	09/10/15 17:39	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 17:39	
Methyl Acetate	10 U	10	1	09/10/15 17:39	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 17:39	
Methylcyclohexane	10 U	10	1	09/10/15 17:39	
Styrene	5.0 U	5.0	1	09/10/15 17:39	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 17:39	
Toluene	5.0 U	5.0	1	09/10/15 17:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-24S
Lab Code: R1507468-004

Service Request: R1507468
Date Collected: 09/08/15 10:50
Date Received: 09/08/15 14:30
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	110	5.0	1	09/10/15 17:39	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 17:39	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 17:39	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 17:39	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 17:39	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 17:39	
o-Xylene	5.0 U	5.0	1	09/10/15 17:39	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 17:39	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 17:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/10/15 17:39	
Dibromofluoromethane	99	89 - 119	09/10/15 17:39	
Toluene-d8	103	87 - 121	09/10/15 17:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-15
Lab Code: R1507468-005

Service Request: R1507468
Date Collected: 09/08/15 11:10
Date Received: 09/08/15 14:30
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	19	5.0	1	09/10/15 18:07	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 18:07	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 18:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 18:07	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 18:07	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 18:07	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 18:07	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 18:07	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 18:07	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 18:07	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
1,4-Dioxane	100 U	100	1	09/10/15 18:07	
2-Butanone (MEK)	10 U	10	1	09/10/15 18:07	
2-Hexanone	10 U	10	1	09/10/15 18:07	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 18:07	
Acetone	10 U	10	1	09/10/15 18:07	
Benzene	5.0 U	5.0	1	09/10/15 18:07	
Bromochloromethane	5.0 U	5.0	1	09/10/15 18:07	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 18:07	
Bromoform	5.0 U	5.0	1	09/10/15 18:07	
Bromomethane	5.0 U	5.0	1	09/10/15 18:07	
Carbon Disulfide	10 U	10	1	09/10/15 18:07	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 18:07	
Chlorobenzene	5.0 U	5.0	1	09/10/15 18:07	
Chloroethane	5.0 U	5.0	1	09/10/15 18:07	
Chloroform	5.0 U	5.0	1	09/10/15 18:07	
Chloromethane	5.0 U	5.0	1	09/10/15 18:07	
Cyclohexane	10 U	10	1	09/10/15 18:07	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 18:07	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 18:07	
Dichloromethane	5.0 U	5.0	1	09/10/15 18:07	
Ethylbenzene	5.0 U	5.0	1	09/10/15 18:07	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 18:07	
Methyl Acetate	10 U	10	1	09/10/15 18:07	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 18:07	
Methylcyclohexane	10 U	10	1	09/10/15 18:07	
Styrene	5.0 U	5.0	1	09/10/15 18:07	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 18:07	
Toluene	5.0 U	5.0	1	09/10/15 18:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-15
Lab Code: R1507468-005

Service Request: R1507468
Date Collected: 09/08/15 11:10
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/10/15 18:07	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 18:07	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 18:07	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 18:07	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 18:07	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 18:07	
o-Xylene	5.0 U	5.0	1	09/10/15 18:07	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 18:07	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 18:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/10/15 18:07	
Dibromofluoromethane	100	89 - 119	09/10/15 18:07	
Toluene-d8	102	87 - 121	09/10/15 18:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 11:25
Date Received: 09/08/15 14:30

Sample Name: MW-13
Lab Code: R1507468-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	7.8	5.0	1	09/10/15 18:34	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 18:34	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 18:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 18:34	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 18:34	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 18:34	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 18:34	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 18:34	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 18:34	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 18:34	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
1,4-Dioxane	100 U	100	1	09/10/15 18:34	
2-Butanone (MEK)	10 U	10	1	09/10/15 18:34	
2-Hexanone	10 U	10	1	09/10/15 18:34	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 18:34	
Acetone	10 U	10	1	09/10/15 18:34	
Benzene	5.0 U	5.0	1	09/10/15 18:34	
Bromochloromethane	5.0 U	5.0	1	09/10/15 18:34	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 18:34	
Bromoform	5.0 U	5.0	1	09/10/15 18:34	
Bromomethane	5.0 U	5.0	1	09/10/15 18:34	
Carbon Disulfide	10 U	10	1	09/10/15 18:34	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 18:34	
Chlorobenzene	5.0 U	5.0	1	09/10/15 18:34	
Chloroethane	5.0 U	5.0	1	09/10/15 18:34	
Chloroform	5.0 U	5.0	1	09/10/15 18:34	
Chloromethane	5.0 U	5.0	1	09/10/15 18:34	
Cyclohexane	10 U	10	1	09/10/15 18:34	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 18:34	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 18:34	
Dichloromethane	5.0 U	5.0	1	09/10/15 18:34	
Ethylbenzene	5.0 U	5.0	1	09/10/15 18:34	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 18:34	
Methyl Acetate	10 U	10	1	09/10/15 18:34	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 18:34	
Methylcyclohexane	10 U	10	1	09/10/15 18:34	
Styrene	5.0 U	5.0	1	09/10/15 18:34	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 18:34	
Toluene	5.0 U	5.0	1	09/10/15 18:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-13
Lab Code: R1507468-006

Service Request: R1507468
Date Collected: 09/08/15 11:25
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	32	5.0	1	09/10/15 18:34	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 18:34	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 18:34	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 18:34	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 18:34	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 18:34	
o-Xylene	5.0 U	5.0	1	09/10/15 18:34	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 18:34	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 18:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/10/15 18:34	
Dibromofluoromethane	100	89 - 119	09/10/15 18:34	
Toluene-d8	103	87 - 121	09/10/15 18:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-14
Lab Code: R1507468-007

Service Request: R1507468
Date Collected: 09/08/15 11:40
Date Received: 09/08/15 14:30
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	25	5.0	1	09/11/15 13:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 13:00	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 13:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 13:00	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 13:00	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/11/15 13:00	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 13:00	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 13:00	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 13:00	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 13:00	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
1,4-Dioxane	100 U	100	1	09/11/15 13:00	
2-Butanone (MEK)	10 U	10	1	09/11/15 13:00	
2-Hexanone	10 U	10	1	09/11/15 13:00	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 13:00	
Acetone	10 U	10	1	09/11/15 13:00	
Benzene	5.0 U	5.0	1	09/11/15 13:00	
Bromochloromethane	5.0 U	5.0	1	09/11/15 13:00	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 13:00	
Bromoform	5.0 U	5.0	1	09/11/15 13:00	
Bromomethane	5.0 U	5.0	1	09/11/15 13:00	
Carbon Disulfide	10 U	10	1	09/11/15 13:00	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 13:00	
Chlorobenzene	5.0 U	5.0	1	09/11/15 13:00	
Chloroethane	5.0 U	5.0	1	09/11/15 13:00	
Chloroform	5.0 U	5.0	1	09/11/15 13:00	
Chloromethane	5.0 U	5.0	1	09/11/15 13:00	
Cyclohexane	10 U	10	1	09/11/15 13:00	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 13:00	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 13:00	
Dichloromethane	5.0 U	5.0	1	09/11/15 13:00	
Ethylbenzene	5.0 U	5.0	1	09/11/15 13:00	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 13:00	
Methyl Acetate	10 U	10	1	09/11/15 13:00	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 13:00	
Methylcyclohexane	10 U	10	1	09/11/15 13:00	
Styrene	5.0 U	5.0	1	09/11/15 13:00	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 13:00	
Toluene	5.0 U	5.0	1	09/11/15 13:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-14
Lab Code: R1507468-007

Service Request: R1507468
Date Collected: 09/08/15 11:40
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	120	5.0	1	09/11/15 13:00	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 13:00	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 13:00	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 13:00	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 13:00	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 13:00	
o-Xylene	5.0 U	5.0	1	09/11/15 13:00	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 13:00	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 13:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	09/11/15 13:00	
Dibromofluoromethane	102	89 - 119	09/11/15 13:00	
Toluene-d8	105	87 - 121	09/11/15 13:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 11:55
Date Received: 09/08/15 14:30

Sample Name: MW-17S
Lab Code: R1507468-008

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	43	5.0	1	09/11/15 13:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 13:47	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 13:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 13:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 13:47	
1,1-Dichloroethene (1,1-DCE)	8.3	5.0	1	09/11/15 13:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 13:47	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 13:47	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 13:47	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 13:47	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
1,4-Dioxane	100 U	100	1	09/11/15 13:47	
2-Butanone (MEK)	10 U	10	1	09/11/15 13:47	
2-Hexanone	10 U	10	1	09/11/15 13:47	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 13:47	
Acetone	10 U	10	1	09/11/15 13:47	
Benzene	5.0 U	5.0	1	09/11/15 13:47	
Bromochloromethane	5.0 U	5.0	1	09/11/15 13:47	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 13:47	
Bromoform	5.0 U	5.0	1	09/11/15 13:47	
Bromomethane	5.0 U	5.0	1	09/11/15 13:47	
Carbon Disulfide	10 U	10	1	09/11/15 13:47	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 13:47	
Chlorobenzene	5.0 U	5.0	1	09/11/15 13:47	
Chloroethane	5.0 U	5.0	1	09/11/15 13:47	
Chloroform	5.0 U	5.0	1	09/11/15 13:47	
Chloromethane	5.0 U	5.0	1	09/11/15 13:47	
Cyclohexane	10 U	10	1	09/11/15 13:47	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 13:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 13:47	
Dichloromethane	5.0 U	5.0	1	09/11/15 13:47	
Ethylbenzene	5.0 U	5.0	1	09/11/15 13:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 13:47	
Methyl Acetate	10 U	10	1	09/11/15 13:47	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 13:47	
Methylcyclohexane	10 U	10	1	09/11/15 13:47	
Styrene	5.0 U	5.0	1	09/11/15 13:47	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 13:47	
Toluene	5.0 U	5.0	1	09/11/15 13:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-17S
Lab Code: R1507468-008

Service Request: R1507468
Date Collected: 09/08/15 11:55
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	480	25	5	09/14/15 12:33	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 13:47	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 13:47	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 13:47	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 13:47	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 13:47	
o-Xylene	5.0 U	5.0	1	09/11/15 13:47	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 13:47	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 13:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	09/11/15 13:47	
Dibromofluoromethane	103	89 - 119	09/11/15 13:47	
Toluene-d8	103	87 - 121	09/11/15 13:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-16
Lab Code: R1507468-009

Service Request: R1507468
Date Collected: 09/08/15 12:15
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	42	5.0	1	09/11/15 14:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 14:14	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 14:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 14:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 14:14	
1,1-Dichloroethene (1,1-DCE)	9.3	5.0	1	09/11/15 14:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 14:14	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 14:14	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 14:14	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 14:14	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
1,4-Dioxane	100 U	100	1	09/11/15 14:14	
2-Butanone (MEK)	10 U	10	1	09/11/15 14:14	
2-Hexanone	10 U	10	1	09/11/15 14:14	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 14:14	
Acetone	10 U	10	1	09/11/15 14:14	
Benzene	5.0 U	5.0	1	09/11/15 14:14	
Bromochloromethane	5.0 U	5.0	1	09/11/15 14:14	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 14:14	
Bromoform	5.0 U	5.0	1	09/11/15 14:14	
Bromomethane	5.0 U	5.0	1	09/11/15 14:14	
Carbon Disulfide	10 U	10	1	09/11/15 14:14	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 14:14	
Chlorobenzene	5.0 U	5.0	1	09/11/15 14:14	
Chloroethane	5.0 U	5.0	1	09/11/15 14:14	
Chloroform	5.0 U	5.0	1	09/11/15 14:14	
Chloromethane	5.0 U	5.0	1	09/11/15 14:14	
Cyclohexane	10 U	10	1	09/11/15 14:14	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 14:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 14:14	
Dichloromethane	5.0 U	5.0	1	09/11/15 14:14	
Ethylbenzene	5.0 U	5.0	1	09/11/15 14:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 14:14	
Methyl Acetate	10 U	10	1	09/11/15 14:14	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 14:14	
Methylcyclohexane	10 U	10	1	09/11/15 14:14	
Styrene	5.0 U	5.0	1	09/11/15 14:14	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 14:14	
Toluene	5.0 U	5.0	1	09/11/15 14:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: MW-16
Lab Code: R1507468-009

Service Request: R1507468
Date Collected: 09/08/15 12:15
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	250 D	10	2	09/11/15 18:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 14:14	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 14:14	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 14:14	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 14:14	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 14:14	
o-Xylene	5.0 U	5.0	1	09/11/15 14:14	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 14:14	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 14:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/11/15 14:14	
Dibromofluoromethane	101	89 - 119	09/11/15 14:14	
Toluene-d8	102	87 - 121	09/11/15 14:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 12:40
Date Received: 09/08/15 14:30

Sample Name: SS&G MW-3
Lab Code: R1507468-010

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	9.1	5.0	1	09/11/15 18:46	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 18:46	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 18:46	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 18:46	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 18:46	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/11/15 18:46	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 18:46	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 18:46	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 18:46	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 18:46	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
1,4-Dioxane	100 U	100	1	09/11/15 18:46	
2-Butanone (MEK)	10 U	10	1	09/11/15 18:46	
2-Hexanone	10 U	10	1	09/11/15 18:46	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 18:46	
Acetone	10 U	10	1	09/11/15 18:46	
Benzene	5.0 U	5.0	1	09/11/15 18:46	
Bromochloromethane	5.0 U	5.0	1	09/11/15 18:46	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 18:46	
Bromoform	5.0 U	5.0	1	09/11/15 18:46	
Bromomethane	5.0 U	5.0	1	09/11/15 18:46	
Carbon Disulfide	10 U	10	1	09/11/15 18:46	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 18:46	
Chlorobenzene	5.0 U	5.0	1	09/11/15 18:46	
Chloroethane	5.0 U	5.0	1	09/11/15 18:46	
Chloroform	5.0 U	5.0	1	09/11/15 18:46	
Chloromethane	5.0 U	5.0	1	09/11/15 18:46	
Cyclohexane	10 U	10	1	09/11/15 18:46	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 18:46	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 18:46	
Dichloromethane	5.0 U	5.0	1	09/11/15 18:46	
Ethylbenzene	5.0 U	5.0	1	09/11/15 18:46	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 18:46	
Methyl Acetate	10 U	10	1	09/11/15 18:46	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 18:46	
Methylcyclohexane	10 U	10	1	09/11/15 18:46	
Styrene	5.0 U	5.0	1	09/11/15 18:46	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 18:46	
Toluene	5.0 U	5.0	1	09/11/15 18:46	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: SS&G MW-3
Lab Code: R1507468-010

Service Request: R1507468
Date Collected: 09/08/15 12:40
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	13	5.0	1	09/11/15 18:46	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 18:46	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 18:46	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 18:46	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 18:46	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 18:46	
o-Xylene	5.0 U	5.0	1	09/11/15 18:46	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 18:46	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 18:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	09/11/15 18:46	
Dibromofluoromethane	102	89 - 119	09/11/15 18:46	
Toluene-d8	100	87 - 121	09/11/15 18:46	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 13:45
Date Received: 09/08/15 14:30

Sample Name: SC-1
Lab Code: R1507468-011

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	12	5.0	1	09/11/15 15:08	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 15:08	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 15:08	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 15:08	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 15:08	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/11/15 15:08	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 15:08	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 15:08	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 15:08	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 15:08	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
1,4-Dioxane	100 U	100	1	09/11/15 15:08	
2-Butanone (MEK)	10 U	10	1	09/11/15 15:08	
2-Hexanone	10 U	10	1	09/11/15 15:08	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 15:08	
Acetone	10 U	10	1	09/11/15 15:08	
Benzene	5.0 U	5.0	1	09/11/15 15:08	
Bromochloromethane	5.0 U	5.0	1	09/11/15 15:08	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 15:08	
Bromoform	5.0 U	5.0	1	09/11/15 15:08	
Bromomethane	5.0 U	5.0	1	09/11/15 15:08	
Carbon Disulfide	10 U	10	1	09/11/15 15:08	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 15:08	
Chlorobenzene	5.0 U	5.0	1	09/11/15 15:08	
Chloroethane	5.0 U	5.0	1	09/11/15 15:08	
Chloroform	5.0 U	5.0	1	09/11/15 15:08	
Chloromethane	5.0 U	5.0	1	09/11/15 15:08	
Cyclohexane	10 U	10	1	09/11/15 15:08	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 15:08	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 15:08	
Dichloromethane	5.0 U	5.0	1	09/11/15 15:08	
Ethylbenzene	5.0 U	5.0	1	09/11/15 15:08	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 15:08	
Methyl Acetate	10 U	10	1	09/11/15 15:08	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 15:08	
Methylcyclohexane	10 U	10	1	09/11/15 15:08	
Styrene	5.0 U	5.0	1	09/11/15 15:08	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 15:08	
Toluene	5.0 U	5.0	1	09/11/15 15:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: SC-1
Lab Code: R1507468-011

Service Request: R1507468
Date Collected: 09/08/15 13:45
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	50	5.0	1	09/11/15 15:08	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 15:08	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 15:08	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 15:08	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 15:08	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 15:08	
o-Xylene	5.0 U	5.0	1	09/11/15 15:08	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 15:08	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 15:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/11/15 15:08	
Dibromofluoromethane	101	89 - 119	09/11/15 15:08	
Toluene-d8	102	87 - 121	09/11/15 15:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15 16:00
Date Received: 09/08/15 14:30

Sample Name: DUP090815
Lab Code: R1507468-012

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	39	5.0	1	09/11/15 15:36	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 15:36	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 15:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 15:36	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 15:36	
1,1-Dichloroethene (1,1-DCE)	7.0	5.0	1	09/11/15 15:36	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 15:36	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 15:36	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 15:36	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 15:36	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
1,4-Dioxane	100 U	100	1	09/11/15 15:36	
2-Butanone (MEK)	10 U	10	1	09/11/15 15:36	
2-Hexanone	10 U	10	1	09/11/15 15:36	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 15:36	
Acetone	10 U	10	1	09/11/15 15:36	
Benzene	5.0 U	5.0	1	09/11/15 15:36	
Bromochloromethane	5.0 U	5.0	1	09/11/15 15:36	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 15:36	
Bromoform	5.0 U	5.0	1	09/11/15 15:36	
Bromomethane	5.0 U	5.0	1	09/11/15 15:36	
Carbon Disulfide	10 U	10	1	09/11/15 15:36	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 15:36	
Chlorobenzene	5.0 U	5.0	1	09/11/15 15:36	
Chloroethane	5.0 U	5.0	1	09/11/15 15:36	
Chloroform	5.0 U	5.0	1	09/11/15 15:36	
Chloromethane	5.0 U	5.0	1	09/11/15 15:36	
Cyclohexane	10 U	10	1	09/11/15 15:36	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 15:36	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 15:36	
Dichloromethane	5.0 U	5.0	1	09/11/15 15:36	
Ethylbenzene	5.0 U	5.0	1	09/11/15 15:36	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 15:36	
Methyl Acetate	10 U	10	1	09/11/15 15:36	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 15:36	
Methylcyclohexane	10 U	10	1	09/11/15 15:36	
Styrene	5.0 U	5.0	1	09/11/15 15:36	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 15:36	
Toluene	5.0 U	5.0	1	09/11/15 15:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: DUP090815
Lab Code: R1507468-012

Service Request: R1507468
Date Collected: 09/08/15 16:00
Date Received: 09/08/15 14:30

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	410 D	25	5	09/11/15 19:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 15:36	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 15:36	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 15:36	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 15:36	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 15:36	
o-Xylene	5.0 U	5.0	1	09/11/15 15:36	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 15:36	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 15:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/11/15 15:36	
Dibromofluoromethane	103	89 - 119	09/11/15 15:36	
Toluene-d8	104	87 - 121	09/11/15 15:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Collected: 09/08/15
Date Received: 09/09/15 14:30

Sample Name: TRIP BLANK
Lab Code: R1507468-013

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/11/15 19:13	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 19:13	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 19:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 19:13	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 19:13	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/11/15 19:13	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 19:13	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 19:13	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 19:13	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 19:13	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
1,4-Dioxane	100 U	100	1	09/11/15 19:13	
2-Butanone (MEK)	10 U	10	1	09/11/15 19:13	
2-Hexanone	10 U	10	1	09/11/15 19:13	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 19:13	
Acetone	10 U	10	1	09/11/15 19:13	
Benzene	5.0 U	5.0	1	09/11/15 19:13	
Bromochloromethane	5.0 U	5.0	1	09/11/15 19:13	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 19:13	
Bromoform	5.0 U	5.0	1	09/11/15 19:13	
Bromomethane	5.0 U	5.0	1	09/11/15 19:13	
Carbon Disulfide	10 U	10	1	09/11/15 19:13	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 19:13	
Chlorobenzene	5.0 U	5.0	1	09/11/15 19:13	
Chloroethane	5.0 U	5.0	1	09/11/15 19:13	
Chloroform	5.0 U	5.0	1	09/11/15 19:13	
Chloromethane	5.0 U	5.0	1	09/11/15 19:13	
Cyclohexane	10 U	10	1	09/11/15 19:13	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 19:13	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 19:13	
Dichloromethane	5.0 U	5.0	1	09/11/15 19:13	
Ethylbenzene	5.0 U	5.0	1	09/11/15 19:13	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 19:13	
Methyl Acetate	10 U	10	1	09/11/15 19:13	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 19:13	
Methylcyclohexane	10 U	10	1	09/11/15 19:13	
Styrene	5.0 U	5.0	1	09/11/15 19:13	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 19:13	
Toluene	5.0 U	5.0	1	09/11/15 19:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: TRIP BLANK
Lab Code: R1507468-013

Service Request: R1507468
Date Collected: 09/08/15
Date Received: 09/09/15 14:30
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/11/15 19:13	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 19:13	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 19:13	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 19:13	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 19:13	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 19:13	
o-Xylene	5.0 U	5.0	1	09/11/15 19:13	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 19:13	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 19:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	09/11/15 19:13	
Dibromofluoromethane	102	89 - 119	09/11/15 19:13	
Toluene-d8	102	87 - 121	09/11/15 19:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510633-01

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/10/15 12:51	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/10/15 12:51	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/10/15 12:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/10/15 12:51	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/10/15 12:51	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/10/15 12:51	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/10/15 12:51	
1,2-Dibromoethane	5.0 U	5.0	1	09/10/15 12:51	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
1,2-Dichloroethane	5.0 U	5.0	1	09/10/15 12:51	
1,2-Dichloropropane	5.0 U	5.0	1	09/10/15 12:51	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
1,4-Dioxane	100 U	100	1	09/10/15 12:51	
2-Butanone (MEK)	10 U	10	1	09/10/15 12:51	
2-Hexanone	10 U	10	1	09/10/15 12:51	
4-Methyl-2-pentanone	10 U	10	1	09/10/15 12:51	
Acetone	10 U	10	1	09/10/15 12:51	
Benzene	5.0 U	5.0	1	09/10/15 12:51	
Bromochloromethane	5.0 U	5.0	1	09/10/15 12:51	
Bromodichloromethane	5.0 U	5.0	1	09/10/15 12:51	
Bromoform	5.0 U	5.0	1	09/10/15 12:51	
Bromomethane	5.0 U	5.0	1	09/10/15 12:51	
Carbon Disulfide	10 U	10	1	09/10/15 12:51	
Carbon Tetrachloride	5.0 U	5.0	1	09/10/15 12:51	
Chlorobenzene	5.0 U	5.0	1	09/10/15 12:51	
Chloroethane	5.0 U	5.0	1	09/10/15 12:51	
Chloroform	5.0 U	5.0	1	09/10/15 12:51	
Chloromethane	5.0 U	5.0	1	09/10/15 12:51	
Cyclohexane	10 U	10	1	09/10/15 12:51	
Dibromochloromethane	5.0 U	5.0	1	09/10/15 12:51	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/10/15 12:51	
Dichloromethane	5.0 U	5.0	1	09/10/15 12:51	
Ethylbenzene	5.0 U	5.0	1	09/10/15 12:51	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/10/15 12:51	
Methyl Acetate	10 U	10	1	09/10/15 12:51	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/10/15 12:51	
Methylcyclohexane	10 U	10	1	09/10/15 12:51	
Styrene	5.0 U	5.0	1	09/10/15 12:51	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/10/15 12:51	
Toluene	5.0 U	5.0	1	09/10/15 12:51	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510633-01

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/10/15 12:51	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/10/15 12:51	
Vinyl Chloride	5.0 U	5.0	1	09/10/15 12:51	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 12:51	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 12:51	
m,p-Xylenes	5.0 U	5.0	1	09/10/15 12:51	
o-Xylene	5.0 U	5.0	1	09/10/15 12:51	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/10/15 12:51	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/10/15 12:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/10/15 12:51	
Dibromofluoromethane	100	89 - 119	09/10/15 12:51	
Toluene-d8	100	87 - 121	09/10/15 12:51	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510657-04

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/11/15 12:23	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/11/15 12:23	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/11/15 12:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/11/15 12:23	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/11/15 12:23	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/11/15 12:23	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/11/15 12:23	
1,2-Dibromoethane	5.0 U	5.0	1	09/11/15 12:23	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
1,2-Dichloroethane	5.0 U	5.0	1	09/11/15 12:23	
1,2-Dichloropropane	5.0 U	5.0	1	09/11/15 12:23	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
1,4-Dioxane	100 U	100	1	09/11/15 12:23	
2-Butanone (MEK)	10 U	10	1	09/11/15 12:23	
2-Hexanone	10 U	10	1	09/11/15 12:23	
4-Methyl-2-pentanone	10 U	10	1	09/11/15 12:23	
Acetone	10 U	10	1	09/11/15 12:23	
Benzene	5.0 U	5.0	1	09/11/15 12:23	
Bromochloromethane	5.0 U	5.0	1	09/11/15 12:23	
Bromodichloromethane	5.0 U	5.0	1	09/11/15 12:23	
Bromoform	5.0 U	5.0	1	09/11/15 12:23	
Bromomethane	5.0 U	5.0	1	09/11/15 12:23	
Carbon Disulfide	10 U	10	1	09/11/15 12:23	
Carbon Tetrachloride	5.0 U	5.0	1	09/11/15 12:23	
Chlorobenzene	5.0 U	5.0	1	09/11/15 12:23	
Chloroethane	5.0 U	5.0	1	09/11/15 12:23	
Chloroform	5.0 U	5.0	1	09/11/15 12:23	
Chloromethane	5.0 U	5.0	1	09/11/15 12:23	
Cyclohexane	10 U	10	1	09/11/15 12:23	
Dibromochloromethane	5.0 U	5.0	1	09/11/15 12:23	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/11/15 12:23	
Dichloromethane	5.0 U	5.0	1	09/11/15 12:23	
Ethylbenzene	5.0 U	5.0	1	09/11/15 12:23	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/11/15 12:23	
Methyl Acetate	10 U	10	1	09/11/15 12:23	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/11/15 12:23	
Methylcyclohexane	10 U	10	1	09/11/15 12:23	
Styrene	5.0 U	5.0	1	09/11/15 12:23	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/11/15 12:23	
Toluene	5.0 U	5.0	1	09/11/15 12:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510657-04

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/11/15 12:23	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/11/15 12:23	
Vinyl Chloride	5.0 U	5.0	1	09/11/15 12:23	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 12:23	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 12:23	
m,p-Xylenes	5.0 U	5.0	1	09/11/15 12:23	
o-Xylene	5.0 U	5.0	1	09/11/15 12:23	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/11/15 12:23	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/11/15 12:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	09/11/15 12:23	
Dibromofluoromethane	100	89 - 119	09/11/15 12:23	
Toluene-d8	102	87 - 121	09/11/15 12:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510846-01

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	09/14/15 11:55	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	09/14/15 11:55	
1,1,2-Trichloroethane	5.0 U	5.0	1	09/14/15 11:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	09/14/15 11:55	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	09/14/15 11:55	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	09/14/15 11:55	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	09/14/15 11:55	
1,2-Dibromoethane	5.0 U	5.0	1	09/14/15 11:55	
1,2-Dichlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
1,2-Dichloroethane	5.0 U	5.0	1	09/14/15 11:55	
1,2-Dichloropropane	5.0 U	5.0	1	09/14/15 11:55	
1,3-Dichlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
1,4-Dichlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
1,4-Dioxane	100 U	100	1	09/14/15 11:55	
2-Butanone (MEK)	10 U	10	1	09/14/15 11:55	
2-Hexanone	10 U	10	1	09/14/15 11:55	
4-Methyl-2-pentanone	10 U	10	1	09/14/15 11:55	
Acetone	10 U	10	1	09/14/15 11:55	
Benzene	5.0 U	5.0	1	09/14/15 11:55	
Bromochloromethane	5.0 U	5.0	1	09/14/15 11:55	
Bromodichloromethane	5.0 U	5.0	1	09/14/15 11:55	
Bromoform	5.0 U	5.0	1	09/14/15 11:55	
Bromomethane	5.0 U	5.0	1	09/14/15 11:55	
Carbon Disulfide	10 U	10	1	09/14/15 11:55	
Carbon Tetrachloride	5.0 U	5.0	1	09/14/15 11:55	
Chlorobenzene	5.0 U	5.0	1	09/14/15 11:55	
Chloroethane	5.0 U	5.0	1	09/14/15 11:55	
Chloroform	5.0 U	5.0	1	09/14/15 11:55	
Chloromethane	5.0 U	5.0	1	09/14/15 11:55	
Cyclohexane	10 U	10	1	09/14/15 11:55	
Dibromochloromethane	5.0 U	5.0	1	09/14/15 11:55	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	09/14/15 11:55	
Dichloromethane	5.0 U	5.0	1	09/14/15 11:55	
Ethylbenzene	5.0 U	5.0	1	09/14/15 11:55	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	09/14/15 11:55	
Methyl Acetate	10 U	10	1	09/14/15 11:55	
Methyl tert-Butyl Ether	5.0 U	5.0	1	09/14/15 11:55	
Methylcyclohexane	10 U	10	1	09/14/15 11:55	
Styrene	5.0 U	5.0	1	09/14/15 11:55	
Tetrachloroethene (PCE)	5.0 U	5.0	1	09/14/15 11:55	
Toluene	5.0 U	5.0	1	09/14/15 11:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ1510846-01

Service Request: R1507468
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	09/14/15 11:55	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	09/14/15 11:55	
Vinyl Chloride	5.0 U	5.0	1	09/14/15 11:55	
cis-1,2-Dichloroethene	5.0 U	5.0	1	09/14/15 11:55	
cis-1,3-Dichloropropene	5.0 U	5.0	1	09/14/15 11:55	
m,p-Xylenes	5.0 U	5.0	1	09/14/15 11:55	
o-Xylene	5.0 U	5.0	1	09/14/15 11:55	
trans-1,2-Dichloroethene	5.0 U	5.0	1	09/14/15 11:55	
trans-1,3-Dichloropropene	5.0 U	5.0	1	09/14/15 11:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/14/15 11:55	
Dibromofluoromethane	101	89 - 119	09/14/15 11:55	
Toluene-d8	102	87 - 121	09/14/15 11:55	

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/10/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510633-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.0	20.0	90	74-120
1,1,2,2-Tetrachloroethane	8260C	21.3	20.0	106	78-122
1,1,2-Trichloroethane	8260C	18.8	20.0	94	82-118
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	16.7	20.0	84	75-124
1,1-Dichloroethane (1,1-DCA)	8260C	18.9	20.0	94	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	17.3	20.0	87	74-135
1,2,3-Trichlorobenzene	8260C	20.6	20.0	103	56-164
1,2,4-Trichlorobenzene	8260C	20.1	20.0	100	68-147
1,2-Dibromo-3-chloropropane (DBCP)	8260C	18.9	20.0	94	55-149
1,2-Dibromoethane	8260C	20.0	20.0	100	81-125
1,2-Dichlorobenzene	8260C	20.5	20.0	102	80-119
1,2-Dichloroethane	8260C	19.1	20.0	95	71-127
1,2-Dichloropropane	8260C	19.7	20.0	98	80-119
1,3-Dichlorobenzene	8260C	21.0	20.0	105	79-121
1,4-Dichlorobenzene	8260C	19.9	20.0	99	79-119
1,4-Dioxane	8260C	392	400	98	69-151
2-Butanone (MEK)	8260C	18.6	20.0	93	61-137
2-Hexanone	8260C	19.4	20.0	97	63-124
4-Methyl-2-pentanone	8260C	19.5	20.0	97	66-124
Acetone	8260C	18.5	20.0	92	40-161
Benzene	8260C	18.5	20.0	93	76-118
Bromochloromethane	8260C	18.8	20.0	94	81-126
Bromodichloromethane	8260C	19.3	20.0	97	78-126
Bromoform	8260C	20.0	20.0	100	71-136
Bromomethane	8260C	18.8	20.0	94	42-166
Carbon Disulfide	8260C	18.7	20.0	93	65-127
Carbon Tetrachloride	8260C	17.0	20.0	85	68-125
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	19.3	20.0	96	70-127
Chloroform	8260C	18.2	20.0	91	76-120
Chloromethane	8260C	15.5	20.0	78	69-145
Cyclohexane	8260C	20.4	20.0	102	63-121
Dibromochloromethane	8260C	19.9	20.0	100	77-128

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/10/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510633-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	20.5	20.0	102	65-152
Dichloromethane	8260C	17.7	20.0	88	73-122
Ethylbenzene	8260C	17.1	20.0	86	76-120
Isopropylbenzene (Cumene)	8260C	20.5	20.0	102	78-126
Methyl Acetate	8260C	17.0	20.0	85	62-131
Methyl tert-Butyl Ether	8260C	20.3	20.0	101	78-125
Methylcyclohexane	8260C	19.8	20.0	99	51-129
Styrene	8260C	20.7	20.0	104	80-124
Tetrachloroethene (PCE)	8260C	18.6	20.0	93	78-124
Toluene	8260C	18.8	20.0	94	77-120
Trichloroethene (TCE)	8260C	17.8	20.0	89	78-123
Trichlorofluoromethane (CFC 11)	8260C	17.6	20.0	88	68-126
Vinyl Chloride	8260C	18.8	20.0	94	69-133
cis-1,2-Dichloroethene	8260C	17.5	20.0	87	80-121
cis-1,3-Dichloropropene	8260C	19.5	20.0	98	74-126
m,p-Xylenes	8260C	40.1	40.0	100	78-123
o-Xylene	8260C	19.3	20.0	96	80-120
trans-1,2-Dichloroethene	8260C	18.9	20.0	95	80-120
trans-1,3-Dichloropropene	8260C	19.3	20.0	96	67-135

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/11/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510657-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.9	20.0	90	74-120
1,1,2,2-Tetrachloroethane	8260C	22.7	20.0	114	78-122
1,1,2-Trichloroethane	8260C	18.8	20.0	94	82-118
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.2	20.0	86	75-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.3	20.0	97	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	17.0	20.0	85	74-135
1,2,3-Trichlorobenzene	8260C	26.4	20.0	132	56-164
1,2,4-Trichlorobenzene	8260C	23.8	20.0	119	68-147
1,2-Dibromo-3-chloropropane (DBCP)	8260C	23.4	20.0	117	55-149
1,2-Dibromoethane	8260C	21.1	20.0	106	81-125
1,2-Dichlorobenzene	8260C	22.0	20.0	110	80-119
1,2-Dichloroethane	8260C	19.8	20.0	99	71-127
1,2-Dichloropropane	8260C	20.2	20.0	101	80-119
1,3-Dichlorobenzene	8260C	21.1	20.0	106	79-121
1,4-Dichlorobenzene	8260C	21.0	20.0	105	79-119
1,4-Dioxane	8260C	725	400	181 *	69-151
2-Butanone (MEK)	8260C	25.6	20.0	128	61-137
2-Hexanone	8260C	24.3	20.0	122	63-124
4-Methyl-2-pentanone	8260C	20.8	20.0	104	66-124
Acetone	8260C	31.4	20.0	157	40-161
Benzene	8260C	18.7	20.0	93	76-118
Bromochloromethane	8260C	18.4	20.0	92	81-126
Bromodichloromethane	8260C	19.7	20.0	98	78-126
Bromoform	8260C	21.3	20.0	106	71-136
Bromomethane	8260C	19.4	20.0	97	42-166
Carbon Disulfide	8260C	18.4	20.0	92	65-127
Carbon Tetrachloride	8260C	16.1	20.0	80	68-125
Chlorobenzene	8260C	21.1	20.0	106	80-121
Chloroethane	8260C	19.3	20.0	96	70-127
Chloroform	8260C	18.6	20.0	93	76-120
Chloromethane	8260C	15.6	20.0	78	69-145
Cyclohexane	8260C	20.2	20.0	101	63-121
Dibromochloromethane	8260C	21.0	20.0	105	77-128

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/11/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510657-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	20.8	20.0	104	65-152
Dichloromethane	8260C	18.2	20.0	91	73-122
Ethylbenzene	8260C	18.8	20.0	94	76-120
Isopropylbenzene (Cumene)	8260C	21.5	20.0	107	78-126
Methyl Acetate	8260C	18.5	20.0	93	62-131
Methyl tert-Butyl Ether	8260C	20.8	20.0	104	78-125
Methylcyclohexane	8260C	20.0	20.0	100	51-129
Styrene	8260C	21.3	20.0	107	80-124
Tetrachloroethene (PCE)	8260C	19.0	20.0	95	78-124
Toluene	8260C	19.0	20.0	95	77-120
Trichloroethene (TCE)	8260C	18.5	20.0	93	78-123
Trichlorofluoromethane (CFC 11)	8260C	19.1	20.0	96	68-126
Vinyl Chloride	8260C	18.9	20.0	94	69-133
cis-1,2-Dichloroethene	8260C	17.9	20.0	90	80-121
cis-1,3-Dichloropropene	8260C	19.6	20.0	98	74-126
m,p-Xylenes	8260C	42.7	40.0	107	78-123
o-Xylene	8260C	19.8	20.0	99	80-120
trans-1,2-Dichloroethene	8260C	18.3	20.0	91	80-120
trans-1,3-Dichloropropene	8260C	20.0	20.0	100	67-135

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/14/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510846-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.8	20.0	94	74-120
1,1,2,2-Tetrachloroethane	8260C	20.6	20.0	103	78-122
1,1,2-Trichloroethane	8260C	19.6	20.0	98	82-118
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.5	20.0	88	75-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.1	20.0	100	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	19.1	20.0	96	74-135
1,2,3-Trichlorobenzene	8260C	25.2	20.0	126	56-164
1,2,4-Trichlorobenzene	8260C	23.8	20.0	119	68-147
1,2-Dibromo-3-chloropropane (DBCP)	8260C	21.1	20.0	105	55-149
1,2-Dibromoethane	8260C	20.5	20.0	102	81-125
1,2-Dichlorobenzene	8260C	21.5	20.0	108	80-119
1,2-Dichloroethane	8260C	20.0	20.0	100	71-127
1,2-Dichloropropane	8260C	21.2	20.0	106	80-119
1,3-Dichlorobenzene	8260C	21.7	20.0	108	79-121
1,4-Dichlorobenzene	8260C	20.7	20.0	104	79-119
1,4-Dioxane	8260C	593	400	148	69-151
2-Butanone (MEK)	8260C	22.1	20.0	110	61-137
2-Hexanone	8260C	21.9	20.0	110	63-124
4-Methyl-2-pentanone	8260C	20.2	20.0	101	66-124
Acetone	8260C	28.8	20.0	144	40-161
Benzene	8260C	19.6	20.0	98	76-118
Bromochloromethane	8260C	18.9	20.0	95	81-126
Bromodichloromethane	8260C	20.8	20.0	104	78-126
Bromoform	8260C	20.7	20.0	104	71-136
Bromomethane	8260C	20.4	20.0	102	42-166
Carbon Disulfide	8260C	18.7	20.0	93	65-127
Carbon Tetrachloride	8260C	18.2	20.0	91	68-125
Chlorobenzene	8260C	21.5	20.0	108	80-121
Chloroethane	8260C	20.4	20.0	102	70-127
Chloroform	8260C	19.2	20.0	96	76-120
Chloromethane	8260C	16.4	20.0	82	69-145
Cyclohexane	8260C	20.9	20.0	105	63-121
Dibromochloromethane	8260C	20.8	20.0	104	77-128

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Marks Engineering, PC
Project: NYSDEC Site No. 8-35-013/15-027
Sample Matrix: Water

Service Request: R1507468
Date Analyzed: 09/14/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1510846-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	21.1	20.0	106	65-152
Dichloromethane	8260C	18.0	20.0	90	73-122
Ethylbenzene	8260C	18.7	20.0	93	76-120
Isopropylbenzene (Cumene)	8260C	22.4	20.0	112	78-126
Methyl Acetate	8260C	16.6	20.0	83	62-131
Methyl tert-Butyl Ether	8260C	20.6	20.0	103	78-125
Methylcyclohexane	8260C	20.5	20.0	102	51-129
Styrene	8260C	21.3	20.0	107	80-124
Tetrachloroethene (PCE)	8260C	19.9	20.0	100	78-124
Toluene	8260C	19.8	20.0	99	77-120
Trichloroethene (TCE)	8260C	19.8	20.0	99	78-123
Trichlorofluoromethane (CFC 11)	8260C	19.9	20.0	99	68-126
Vinyl Chloride	8260C	19.9	20.0	99	69-133
cis-1,2-Dichloroethene	8260C	18.5	20.0	93	80-121
cis-1,3-Dichloropropene	8260C	20.2	20.0	101	74-126
m,p-Xylenes	8260C	43.4	40.0	109	78-123
o-Xylene	8260C	19.8	20.0	99	80-120
trans-1,2-Dichloroethene	8260C	19.2	20.0	96	80-120
trans-1,3-Dichloropropene	8260C	20.6	20.0	103	67-135



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

30720

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name NYSDEC Site No 8-35-013		Project Number 15-027	
Project Manager Jeremy Wolf		Report CC	
Company/Address Marks Engineering 152 Yellow Mills Road Palmyra, NY 14522			
Phone # 585-500-8392		Email JWolf@marksengineering.com	
Sampler's Signature <i>Jeremy Wolf</i>		Sampler's Printed Name Jeremy Wolf	
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	DATE	SAMPLING TIME
MW-4		9/8/15	0945
MW-23		9/8/15	1015
MW-10		9/9/15	1035
MW-24S		9/8/15	1050
MW-15		9/8/15	1110
MW-13		9/9/15	1125
MW-14		9/8/15	1140
MW-17S		9/8/15	1155
MW-16		9/8/15	1215
SSFG MW-3		9/8/15	1240
SC-1		9/8/15	1345
MATRIX		NUMBER OF CONTAINERS	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
GW		3	
SW		3	
SPECIAL INSTRUCTIONS/COMMENTS Metals Report . PDF. only to JWolf@marksengineering.com			
ANALYSIS REQUESTED (Include Method Number and Container Preservative)		PRESERVATIVE	
METALS, TOTAL (List in comments below)		1	
METALS, DISSOLVED (List in comments below)			
PCBS 8082 • 608			
PESTICIDES 8091 • 608			
GC VOAS 8021 • 601/602			
GCMS SVOAS 8270 • 625			
GCMS VOAS 8260 • 624 • CLP			
PRESERVATIVE KEY		REMARKS/ALTERNATE DESCRIPTION	
0. NONE			
1. HCl			
2. HNO ₃			
3. H ₂ SO ₄			
4. NaOH			
5. Zn Acetate			
6. MeOH			
7. NaHSO ₄			
8. Other			
TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) 1 day ___ 2 day ___ 3 day ___ 4 day <input checked="" type="checkbox"/> 5 day ___		REPORT REQUIREMENTS <input checked="" type="checkbox"/> I. Results Only ___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required) ___ III. Results + QC and Calibration Summaries ___ IV. Data Validation Report with Raw Data	
REQUESTED REPORT DATE		Edata ___ Yes ___ No	
RECEIVED BY <i>Jeremy Wolf</i>		RECEIVED BY	
Signature Jeremy Wolf		Signature	
Printed Name Jeremy Wolf		Printed Name	
Firm Marks Engineering		Firm	
Date/Time 9/8/15 1430		Date/Time	
STATE WHERE SAMPLES WERE COLLECTED		RELINQUISHED BY	
RELINQUISHED BY <i>Jeremy Wolf</i>		RECEIVED BY <i>Jeremy Wolf</i>	
Signature Jeremy Wolf		Signature Jeremy Wolf	
Printed Name Jeremy Wolf		Printed Name Jeremy Wolf	
Firm Marks Engineering		Firm Marks Engineering	
Date/Time 9/8/15 1430		Date/Time 9/8/15 1430	
FO # 15-027		BILL TO: Marks Engineering	
PO # 15-027		152 Yellow Mills Rd.	
Palmyra, NY 14522		Palmyra, NY 14522	
R1507468		5	



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

30719

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 2

Project Name NYSDOC Site No 8-35-03		Project Number 15-027		ANALYSIS REQUESTED (Include Method Number and Container Preservative)	
Project Manager Jenny Wolf		Report CC			
Company/Address Marks Engineering 152 Yellow Mills Road Palmyra NY 14522					
Phone # 585-500-8392		Email JWolf@marksengineering.com			
Sampler's Signature <i>Jenny Wolf</i>		Sampler's Printed Name Jenny Wolf			
FOR OFFICE USE ONLY		DATE		SAMPLING TIME	
CLIENT SAMPLE ID DUP090815		9/8/15		1600 GW 22	
NUMBER OF CONTAINERS		PRESERVATIVE		METALS, TOTAL (List in comments below)	
				METALS, DISSOLVED (List in comments below)	
				PCBS 8082 & 608	
				PESTICIDES 8091 & 608	
				GC VOAS 8021 & 601/602	
				GCMS SVOAS 8270 & 625	
				GCMS VOAS 824 & CLP	
				REMARKS/ALTERNATE DESCRIPTION	
				Preservative Key 0. NONE 1. HCl 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other	
SPECIAL INSTRUCTIONS/COMMENTS Metals Report PDF. only to JWolf@marksengineering.com		TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) 1 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> 3 day <input type="checkbox"/> 4 day <input type="checkbox"/> 5 day <input type="checkbox"/>		REPORT REQUIREMENTS <input checked="" type="checkbox"/> I. Results Only <input type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data Ecdata <input type="checkbox"/> Yes <input type="checkbox"/> No	
INVOICE INFORMATION PO # 15-027 BILL TO: Marks Engineering 152 Yellow Mills Rd. Palmyra, NY 14522		RECEIVED BY <i>Jenny Wolf</i>		RECEIVED BY	
See QAPP <input type="checkbox"/>		STATE WHERE SAMPLES WERE COLLECTED		RECEIVED BY	
RELINQUISHED BY <i>Jenny Wolf</i>		Signature <i>Jenny Wolf</i>		Signature	
Printed Name Jenny Wolf		Printed Name ALS		Printed Name	
Firm Marks Engineering		Firm ALS		Firm	
Date/Time 9/8/15 1430		Date/Time 9/8/15/1430		Date/Time	



Cooler Receipt and Preservation Check Form

Project/Client Mark's Eng. Folder Number R15-7468

Cooler received on 9/8/15 by: Shw

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <input checked="" type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> N
4	Circle: Wet Ice Dry Ice Gel packs present?	<input checked="" type="checkbox"/> N

5a	Perchlorate samples have required headspace?	Y N <input checked="" type="checkbox"/> NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y <input checked="" type="checkbox"/> NA
6	Where did the bottles originate?	ACS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <input checked="" type="checkbox"/> NA

8. Temperature Readings Date: 9/8/15 Time: 1440 ID: IR#5 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.3</u>						
Correction Factor (°C)	<u>-0.3</u>						
Corrected Temp (°C)	<u>8.0</u>						
Within 0-6°C?	Y <input checked="" type="checkbox"/>	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted _____ Poorly Packed _____ ~~Same Day Rule~~

& Client Approval to Run Samples: _____ Standing Approval _____ Client aware at drop-off _____ Client notified by: _____

All samples held in storage location: Rooz by Shw on 9/8/15 at 1440
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: Shw

Cooler Breakdown: Date: 9/9/15 Time: 0909 by: MDS

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- Air Samples: Cassettes / Tubes Intact _____ Canisters Pressurized _____ Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO ₃								
≤2	H ₂ SO ₄								
<4	NaHSO ₄								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add Na ₂ S ₂ O ₃ (CN), ascorbic (phenol).					
	Na ₂ S ₂ O ₃	-	-						
	ZnAcetate	-	-						
	HCl	**	**	<u>4114076</u>	<u>8/16</u>				

Yes=All samples OK
No=Samples were preserved at The lab as listed
PM OK to Adjust: _____

**Not to be tested before analysis - pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 5-120-002

Other Comments: _____

PC Secondary Review: Shw

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter