Remedial Activities Summary Report

Standard Portable
NYSDEC Site No. C907030A
25 West Lake Road, Mayville
Chautauqua County, New York

PREPARED FOR:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
270 Michigan Avenue
Buffalo, New York 14203

October 2016

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1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES), on behalf the New York State Department of Environmental Conservation (NYSDEC), has prepared this *Remedial Activities Summary Report* (this Report) to document the remediation activities completed on properties adjacent to the subject site, Standard Portable, located at 25 West Lake Road in the Village of Mayville, New York (the "Site"). This Report summarizes all activities performed at the Site from September 18, 2014 through July 29, 2015 to successfully complete In-Situ Chemical Oxidation (ISCO) pilot testing at the location.

2.0 SITE SETTING AND BACKGROUND

The Standard Portable site is a Brownfield site that is currently owned and operated by Jo Lyn Enterprises. The parcel is located at 21 Valley Street, and consists of 1.06 acres of land located directly west of Chautauqua Lake (across route 394). A Site Location Map is provided as **Figure 1**. The facility was formerly operated by Wappat Saw Company (Wappat), followed by then Standard Portable Products, Inc (Standard Portable). Both Wappat and Standard Portable performed various metalworking operations, which included the use of trichloroethylene (TCE) in a degreasing unit for vapor degreasing. The spent TCE had reportedly been stored in an underground tank, which was adjacent to the building. On-site and off-site investigations have indicated that there is TCE contamination in soil and groundwater.

The off-site property is municipally owned land. Work associated with the offsite investigation reported here-in was conducted in the Mayville Lakeside Park (across route 346, adjacent to Chautauqua Lake), on municipal land south of the site (undeveloped and provides access to the Nadine and Paul Webb Trail), and in the right-of-way (ROW) between Route 346 and the undeveloped municipal land.

2.1 Site Background

According to information provided by NYSDEC, Hazard Evaluations, Inc. (HEI) has conducted ongoing ISCO remediation at the site. HEI has conducted an ISCO feasibility study at the site, as outlined in the *Interim Remedial Measures Report and Work Plan* and the *Focused Feasibility Study for the Interim Remedial Measures*, both prepared by HEI and dated December 2006. An ISCO remedial system, designed and operated by HEI, exists on the site. The ISCO remedial system consists of an ISCO system and a dense non-aqueous phase liquid (DNAPL) recovery system. The chemical oxidant in use in the HEI ISCO system is potassium permanganate ($KMNO_4$). Additionally, a sub-slab vapor extraction system has also been installed in the existing building to mitigate potential soil vapor intrusion (SVI) impacts.

2.2 Offsite Investigation

From June 6 through June 12, 2012, TREC Environmental, Inc. (TREC), under the supervision of GES personnel, advanced eight soil borings (GMW1 through GMW8) using a Geoprobe 6620DT track-mounted direct push unit. Soil borings were advanced to depths of up to 14 feet (ft) below ground surface (bgs). Soil samples were collected in approximate two to four foot intervals via macro-core sampling. One soil sample was collected from each boring for laboratory analysis based on photoionization detector (PID) readings. In the absence of elevated PID readings, the sample collected at the interval observed in the soil/water interface was sent for laboratory analysis. Following the completion of soil sampling, each boring location (GMW1 through GMW8) was converted into a monitoring well, constructed with schedule 40 polyvinyl chloride (PVC) 2 inch diameter well casing from the ground surface top of screen, followed by ten feet of 0.010 inch slot well screen. Of the eight soil borings, only GMW4 exhibited compounds exceeding unrestricted Soil Cleanup Objectives (SCOs) as defined in Title 6 New York Codes, Rules, and Regulations - Part 375-6 (6 NYCRR 375-6). The compounds TCE, cis-1,2-dichloroethene and vinyl chloride were exceeded for unrestricted and protection of groundwater SCOs in soil samples collected from GMW4.

From July 16 through July 20, 2012, GES was onsite for monitoring well gauging, development, groundwater sampling, and well survey oversight of the newly installed wells, and select existing monitoring wells. On July 16, 2012, all of the monitoring wells onsite and offsite were gauged. From July 17 through July 20, 2012, offsite monitoring wells (GPW2, GPW3, GPW4, GPW5, GPW6, GPW8, GPW9, GPW10, GPW13, GPW14, GPW17, GPW18, GPW20, GMW1, GMW2, GMW3, GMW4, GMW5, GMW6, GMW7, GMW8) were developed and sampled. Of the wells sampled, individual concentrations of volatile organic compounds (VOCs) in groundwater exceeded NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* in groundwater samples collected from GPW2, GPW3, GPW4, GPW5, GPW6, GPW14, GMW4, GMW5 and GMW8.

Further details of the June and July 2012 subsurface investigation activities are reported in the *Offsite Subsurface Investigation Report* submitted by GES to NYSDEC on January 25, 2013.

3.0 ISCO PILOT TESTING ACTIVITIES

GES developed an ISCO pilot test for the Site, based on environmental data compiled for the Site from HEI, and submitted the *Offsite In-Situ Chemical Oxidation (ISCO) Work Plan* to NYSDEC on July 7, 2014. The pilot test work plan, approved by NYSDEC, described the proposed ISCO pilot testing activities, implemented using sodium permanganate as the selected oxidant, which would be performed to evaluate the

effectiveness of the technology as a viable alternative to remediate contaminated groundwater at the Site.

The ISCO process is a remediation technique which consists of injecting liquid sodium permanganate into the subsurface via proposed injection wells, to address the contaminated compounds identified in subsurface soils and groundwater. ISCO has been proven to be an effective remedial technology for the oxidation of chlorinated hydrocarbons, petroleum hydrocarbons and other organic compounds in subsurface soils and groundwater.

GES performed the injection portion of the ISCO pilot testing activities at the Site from October 21, 2014 through October 22, 2014. The following sections document the ISCO pilot testing activities and all related tasks completed during the time period indicated. The location selected for the pilot testing activities was on the south side of the large manufacturing building located at the Site. This portion of the Site has historically displayed the highest concentrations of chlorinated hydrocarbon impacts. A map of existing site features is provided as **Figure 2**.

3.1 Pre-Injection Groundwater Monitoring

GES completed groundwater monitoring at well locations within and near the proposed pilot testing area prior to beginning injection activities in order to establish baseline values of selected chemical parameters in the groundwater at the Site. GES also completed an initial round of groundwater sampling of all of the wells at the Site prior to implementing injection activities in order to establish background values for the concentrations of VOCs and to evaluate the amount of iron in groundwater.

3.1.1 Pre-Injection Groundwater Monitoring Procedures

Prior to beginning groundwater monitoring activities at the Site, well headspace readings were collected using a MultiRAE® multi-gas monitor. The total concentration of VOCs, percent (%) of lower explosive limit (LEL), percent oxygen (O_2), carbon dioxide (CO_2) concentration and hydrogen sulfide (H_2S) concentration were evaluated and documented. The groundwater elevation of each well was gauged using an oil/water interface probe and the depth (in ft) to the top of the water table (DTW) from the top of the PVC or steel well casing was documented. GES personnel then collected groundwater chemistry parameters from each monitoring well location. The groundwater in each well was monitored using an YSI 556 Multi- Probe System® (YSI) water quality meter. The pH, dissolved oxygen (DO) in milligrams per liter (mg/L), oxidation/reduction potential (ORP) in millivolts (mV), conductivity or specific conductance in milliSiemens per centimeter (mS/cm), and temperature (Temp.) in degree Celsius (°C) of the groundwater within each well were evaluated using the water quality meter and the results were documented. The probe of the water quality meter was decontaminated after use at each well location by rinsing it thoroughly with a solution of Alconox® decontaminating detergent, followed by a deionized water rinse.

3.1.2 Groundwater Sampling Procedures

After headspace readings were collected and groundwater gauging and monitoring were completed at each selected monitoring well location, the well was purged of three (3) well volumes of groundwater using Teflon®-coated bailers. Collected samples were placed in laboratory-provided sample containers, preserved on ice and shipped to Test America. The groundwater from each well was analyzed for total iron using EPA Method 6010B and the NYSDEC's Target Compound List (TCL) of VOCs by United States Environmental Protection Agency (USEPA) Method 8260B.

Purged groundwater generated during sampling activities was collected in 55-gallon drums, labeled and temporarily staged on the Site for subsequent disposal.

3.1.3 Pre-Injection Groundwater Sampling Results, September 18, 2014

GES completed gauging, monitoring and sampling activities at a total of 20 monitoring well locations on September 18, 2014. The monitoring wells sampled are listed as follows; GMW1 through GMW8, GPW2 through GPW6, GPW8 through GPW10, GPW13, GPW14, GPW17 and GPW20. Individual well locations may be referenced on the Site Map provided as **Figure 2**. The groundwater from each well location was analyzed for the NYSDEC's TCL of VOCs by USEPA Method 8260B and metals by USEPA Method 6010C. The equipment and procedures utilized to complete the groundwater monitoring and sampling activities on September 18, 2014 may be referenced in Section 3.1.1 and Section 3.1.2, respectively.

A total of 9 VOC compounds, including TCE, were found to exceed TOGS 1.1.1 guidance as a result of the September 18, 2014, groundwater sampling event. Each compound that was found to exceed the applicable TOGS 1.1.1 guidance value, the total number of wells sampled that displayed exceedances, the maximum concentration of the compound observed and the well location where the maximum concentration was observed in groundwater are summarized below.

- acetone: 7 exceedances, 19 micrograms per liter (µg/L) in GMW3
- benzene: two (2) exceedances, 0.13 µg/L in GPW14
- carbon disulfide: two (2) exceedance, 0.76 µg/L in GMW5
- cis-1,2-dichloroethene: 12 exceedances, 20,000 µg/L in GPW2
- methylene chloride: two (2) exceedances, 1,700 µg/L in GPW2
- toluene: 5 exceedances, 0.24 µg/L in GPW14
- trans-1,2-dichloroethene: 4 exceedances, 16 µg/L in GPW4
- TCE: 14 exceedances, 18,000 µg/L in GPW5
- vinyl chloride: 6 exceedances, 1,100 µg/L in GPW5

A summary of the results of the concentrations of VOCs for all of the organic compounds analyzed from wells sampled on September 18, 2014 are summarized on **Table 1**. Groundwater elevation data is provided in **Table 2**. Laboratory analytical reports are provided in **Appendix A**.

A total of 8 metals were found to exceed TOGS 1.1.1 guidance as a result of the September 18, 2014, groundwater sampling event. Each compound that was found to exceed the applicable TOGS 1.1.1 guidance value, the total number of wells sampled that displayed exceedances, the maximum concentration of the compound observed and the well location where the maximum concentration was observed in groundwater are summarized below.

- arsenic: two (2) exceedances, 140 µg/L in GPW2
- beryllium: two (2) exceedances, 4.0 µg/L in GPW3
- total chromium: two (2) exceedance, 130 µg/L in GPW2
- copper: one (1) exceedance, 230 µg/L in GPW3
- lead: three (3) exceedances, 130 µg/L in GPW2
- magnesium: three (3) exceedances, 100,000 µg/L in GPW2
- nickel: two (2) exceedances, 170 µg/L in GPW2
- sodium: two (2) exceedances, 30,100 µg/L in GPW5

A summary of the results of the concentrations of metals from wells sampled on September 18, 2014 are summarized on **Table 3**.

3.2 ISCO Pilot Testing Summary – Sodium Permanganate

The primary COC at the Site is TCE, a type of chlorinated VOC. The oxidation of chlorinated organic compounds using sodium permanganate involves direct electron transfer rather than the free radical processes that characterize oxidation by other chemical oxidants such, hydrogen peroxide, ozone, or sodium persulfate. Permanganate oxidation is highly effective on unsaturated aliphatic compounds containing a carbon-carbon double bond (such as Tetrachloroethene [PCE] and TCE) because the oxidant can readily react with the more available electrons which are present in these types of compounds. Permanganate is not as effective at oxidizing aromatic compounds, such as benzene, toluene, ethylbenzene, and xylene (collectively known as BTEX), because the electrons from the double bonds of aromatic compounds are more tightly shared, making them more stable than those of unsaturated aliphatic compounds.

The reaction of permanganate with PCE or TCE ultimately results in the formation of manganese dioxide (a solid), carbon dioxide, and free chloride, hydrogen, and sodium ions. The reaction of permanganate with PCE and TCE is outlined below:

PCE:

$$4NaMnO_4 + 3C_2Cl_4 + 4H_2O \rightarrow 6CO_2 + 4MnO_2(s) + 4Na^+ + 12Cl^- + 8H^+$$

TCE:

$$2NaMnO_4 + C_2HCl_3 \rightarrow 2CO_2 + 2MnO_2(s) + 3Cl^- + H^+ + 2Na^+$$

GES and NYSDEC developed a scope of work for the pilot test to evaluate whether or not ISCO using sodium permanganate could potentially be applied as a successful environmental remedy at the Site. GES completed the ISCO pilot testing at the Site using sodium permanganate from October 21 through October, 2014. The three (3) principal objectives of this test were to:

1) Evaluate the effectiveness of ISCO via sodium permanganate;
2) Determine the ISCO radius of influence (ROI) for sodium permanganate; and
3) Measure the injection flow rate, pressure, and related data to design an ISCO injection process using sodium permanganate.

The ISCO pilot testing activities using sodium permanganate were completed directly to the south of the large manufacturing building. The injection locations utilized during the pilot testing may be referenced on the Site Map provided as **Figure 2**.

3.2.1 Pilot Test Procedures

The remedial pilot testing activities were completed using GES' Permanganate Injection Platform (PIP). The PIP is a mobile, self-contained injection platform that is exclusively used for permanganate injections. The PIP is configured with mixing pumps, injection pumps, flow meters, secondary containment and other hardware to specifically perform permanganate injections. An example photograph of the PIP is provided below.

Photograph of an example of the PIP setup.

Well headspace readings, groundwater elevations and selected groundwater chemistry parameters were collected from the proposed injection wells and surrounding monitoring well locations by GES personnel on October 21, 2014, prior to beginning pilot testing activities to establish baseline values. GES continued to collect the same information during and after ISCO testing activities were completed to monitor the data. The procedures and equipment utilized to gather headspace, elevation and groundwater chemistry information may be referenced in Section 3.1.1 and Section 3.1.2. In addition, the sodium permanganate concentrations in groundwater were regularly monitored at well locations within and around the pilot testing area using EPA Periodate Oxidation Method 8034, via a Hach® Pocket Colorimeter II Manganese HR System, with a range of 0 mg/L to 22 mg/L. The groundwater monitoring and chemistry results collected during the pilot testing activities are summarized in **Table 4.**

3.2.2 Pilot Test Results

An ISCO injection was conducted using existing wells EW1 through EW20, SB11, SB12, and GPW2 through GPW5 for the injection of sodium permanganate. The three principal objectives of these injections were to: 1) evaluate the effectiveness of ISCO via sodium permanganate; 2) determine the ISCO ROI for sodium permanganate; and 3) measure the injection flow rate, pressure, and other data to design an ISCO injection process for sodium permanganate.

Chemical Injection Wells: EW3 through EW20, SB11, SB12, and GPW2 through GPW-5

Monitoring Wells: EW1 through EW20, SB11, SB12, and GPW2 through GPW5 prior to injection and GPW1 through GPW20 during injection.

Historic Injection Volumes - Permanganate

Well	Grand Total (gallons)	10/21/14	10/22/14	Notes
EW1	0.0		NA	Outside injection area- did not attempt injection
EW2	0.0		NA	Outside injection area- did not attempt injection
EW3	2.5		2.5	Daylighted directly through well annulus
EW4	2.5		2.5	Daylighted directly through well annulus
EW5	2.5		2.5	Daylighted directly through well annulus
EW6	2.5		2.5	Daylighted directly through well annulus
EW7	2.5	2.5		Daylighted directly through well

				annulus
EW8	2.5		2.5	Daylighted directly through well annulus
EW9	2.5		2.5	Daylighted directly through well annulus
EW10	2.5		2.5	Daylighted directly through well annulus
EW11	146.0		146.0	Ok at very low flow rates well vault fills up slowly
EW12	132.0		132.0	Ok at very low flow rates well vault fills up slowly
EW13	0.0		NA	Under pressure from Injection on EW-14
EW14	228.5	82.5	146.0	Daylighted about 3 feet to the south, possibly though un-located SB-1.
EW15	12.7	12.7		Daylighted directly through well annulus
EW16	0.0		NA	Pressure from injections on EW-14 and EW-17
EW17	190.4		190.4	Ok at very low flow rates well vault fills up slowly
EW18	0.0		NA	Cannot open well
EW19	209.4	72.4	137.1	Appears to daylight through drainage pipe, could be residual from EW-20 on previous day.
EW20	294.5	294.5		Daylights through drainage pipe
SB12	2.5	2.5		Daylighted directly through well annulus
SB11	2.5		2.5	Daylighted directly through well annulus
GPW2	165.0	152.3	12.7	Daylighted about 10 feet away
GPW3	298.3	298.3		Daylighted about 5 feet away
GPW4	2.5		2.5	Daylighted directly through well annulus
GPW5	133.3	133.3		Daylighted directly through well annulus
Grand Total	**1838**	1,051	787	

Note - values are correct for flow meter error based on amount injected from supplier

Field instruments were used to collect groundwater chemistry readings including DTW, pH, DO, ORP, and conductivity during the event. Field headspace readings from inside each well was also collected and logged for total volatiles, percent of lower explosive limit, percent oxygen, carbon dioxide concentration and hydrogen sulfide concentration. Sodium permanganate concentrations were observed in each well using USEPA Periodate Oxidation Method 8034, via a Hach Pocket Colorimeter II Manganese HR

System, with a range of 0-22 mg/l. Dilution with deionized water was used to dilute the samples and bring the readings to within the range of the meter.

Refer to table above for a summary of data collected during ISCO testing activities. Pre-test and post-test field groundwater chemistry results are summarized in **Table 4.**

The injection consisted of multiple ISCO injections at the existing wells EW3 through EW20, SB11, SB12, and GPW2 through GPW5. The pressurized sodium permanganate injections into any of the monitoring wells all resulted in daylighting or short circuiting to the surface. A total of 1,838 gallons of 10% sodium permanganate were injected.

Short circuiting of the sodium permanganate occurred during the injection on all injection wells. However wells that had a greater distance from their screen interval to surface were able to accept over 200 gallons or more of 10% sodium permanganate. It is of note that no true injection wells were installed for use during the pilot test. A more appropriate injection well would be installed below the water table and include a grout seal to prevent pressurized oxidants from short-circuiting to the surface. The chemicals would then be property pushed into the subsurface.

Follow up groundwater chemistry sampling occurred November 7, and December 4, 2014 in order to estimate the longevity of sodium permanganate in the subsurface. A final groundwater chemistry sampling event occurred July 29th, 2015.

3.2.3 Pilot Test Summary and Conclusions – Sodium Permanganate

The first objective of this injection was to evaluate the effectiveness of ISCO via sodium permanganate. Flow rates and total gallons injected were not within the range of feasibility for a full scale implementation within a reasonable time frame using the current wells or method on site. Studies have shown that sodium permanganate can cause destruction of the main contaminants of concern, specifically TCE and its daughter products. It is not the scope of this summary to prove that this destruction will happen but to prove that the sodium permanganate will come in contact with the contaminants of concern to make this destruction possible and at flow rates and volumes that make the process economically viable. To that end, ISCO via sodium permanganate could be effective at remediating the chemical of concerns at the site but not with the current wells or methods deployed during the pilot test.

The second objective of this injection was to determine the ISCO ROI for sodium permanganate. During the injection on EW14, sodium permanganate was observed in monitoring wells from 8 to 16 ft away. This is within our expected ROI of 12.5 feet based on well screen depth and the geological formation. A minimum of an 8 ft ROI was confirmed during the injections on EW20 and EW11 also.

The last objective of this test was to measure the injection flow rate, pressure, and other data to design an ISCO injection process for sodium permanganate. The observed flow

rates and injection volumes, before daylighting occurred were adequate for a full scale injection event. However daylighting eliminated the use of all of the wells. However, none of the injection wells were screened and grouted as true injection wells. GES recommends re-pilot testing using new dedicated injection points during any future injection events. At this time GES cannot recommend a full scale injection event based on the data obtained.

3.3 Post Injection Groundwater Chemistry Monitoring

GES completed post-remediation groundwater sampling at selected wells on the Site following the October 2014 ISCO pilot test event to evaluate the rate that sodium permanganate would decrease over time while reacting with the COCs in the subsurface. Groundwater chemistry reading were taken at the Site at three (3), six (6), and 34 weeks after the completion of ISCO activities. The procedures and field analysis utilized by GES to complete the sodium permanganate evaluations may be referenced in Section 3.2.1.

When the concentration of sodium permanganate in groundwater from a monitoring well was observed to contain less than 10 mg/L, groundwater chemistry readings were obtained from the same well. GES obtained groundwater chemistry readings from each well using the equipment and operating procedures described in Section 3.1.1. A summary of the post-pilot test sodium permanganate concentrations and associated monitoring data for all of the post-pilot test monitoring and sampling events are provided on **Table 4.**

3.4 34-Week Post-Injection Groundwater Sampling Procedures and Results

GES completed gauging, monitoring and sampling activities at a total of four monitoring well locations on July 29, 2015 (GPW2, GPW3, GPW5 and GPW6). Individual well locations may be referenced on the Site Map provided as **Figure 2**. The groundwater from each well location was analyzed for the NYSDEC's TCL of VOCs by USEPA Method 8260B. The equipment and procedures utilized to complete the groundwater monitoring and sampling activities on July 29, 2015 may be referenced in Section 3.1.1 and Section 3.1.2, respectively.

A total of four (4) compounds, including TCE, were found to exceed TOGS 1.1.1 guidance as a result of the July 29, 2015, groundwater sampling event. Each compound that was found to exceed the applicable TOGS 1.1.1 guidance value, the total number of wells sampled that displayed exceedances, the maximum concentration of the compound observed and the well location where the maximum concentration was observed in groundwater are summarized below.

- cis-1,2-dichloroethene: 4 exceedances, 25,000 µg/L in GPW5
- trans-1,2-dichloroethene: one (1) exceedance, 73 µg/L in GPW2

- TCE: 4 exceedances, 1,700 µg/L in GPW5
- vinyl chloride: 4 exceedances, 1,900 µg/L in GPW5

The results of the post-injection groundwater sampling event completed during July of 2015 are summarized on **Table 1**.

A total of 9 metals were found to exceed TOGS 1.1.1 guidance as a result of the July 29, 2015, groundwater sampling event. Each compound that was found to exceed the applicable TOGS 1.1.1 guidance value, the total number of wells sampled that displayed exceedances, the maximum concentration of the compound observed and the well location where the maximum concentration was observed in groundwater are summarized below.

- arsenic: two (2) exceedances, 56 µg/L in GPW3
- barium: two (2) exceedances, 3,300 µg/L in GPW3
- total chromium: two (2) exceedance, 110 µg/L in GPW3
- copper: one (1) exceedance, 790 µg/L in GPW3
- lead: one (1) exceedance, 62 µg/L in GPW3
- magnesium: one (1) exceedance, 36,700 µg/L in GPW5
- nickel: one (1) exceedance, 180 µg/L in GPW3
- selenium: one (1) exceedance, 60 µg/L in GPW-3
- sodium: two (2) exceedances, 30,100 µg/L in GPW5
- mercury: one (1) exceedance, 1.8 µg/L in GPW3

A summary of the results of the concentrations of metals from wells sampled on July 29, 2015 are summarized on **Table 3**.

A groundwater sampling event was also conducted by HEI on the Standard Portable site on July 29, 2015. A copy of the HEI's report and GES groundwater monitoring field notes are included as **Appendix B.** A total of five (5) compounds, including TCE, were found to exceed TOGS 1.1.1 guidance as a result of the July 29, 2015, groundwater sampling event onsite. Each compound that was found to exceed the applicable TOGS 1.1.1 guidance value, the total number of wells sampled that displayed exceedances, the maximum concentration of the compound observed and the well location where the maximum concentration was observed in groundwater are summarized below.

- 1,1- dichloroethane: 1 exceedance, 86 µg/L in EW14
- cis-1,2-dichloroethene: 10 exceedances, 79,000 µg/L in EW14
- tetrachloroethene: 2 exceedances, 6.6 µg/L in SB12

- trans-1,2-dichloroethene: 2 exceedances, 420 µg/L in EW14
- TCE: 12 exceedances, 46,000 µg/L in EW14
- vinyl chloride: 7 exceedances, 4,900 µg/L in EW14

Further details of the July 2015 sampling event conducted by HEI are included in **Appendix B**.

3.4.1 Volatile Organic Compounds Analytical Results Summary

A comparison of the concentrations of total VOCs in groundwater sampled on July 2012 and September 2014, prior to the implementation of the ISCO remediation events, with the concentration of VOCs in groundwater sampled on July 29, 2015 after the completion of ISCO activities shows an overall decrease in the total concentration of VOCs in the post-ISCO samples. The concentration of total VOCs in groundwater from the monitoring wells displayed a decrease in all wells that were sampled during July 2015. The concentration of total VOCs in groundwater from GPW-2 was 63,000 µg/L in pre-ISCO samples, and decreased to 1,972 µg/L in the post-ISCO samples. The concentration of total VOCs in groundwater from GPW-3 displayed a decrease 41,200 µg/L in pre-ISCO samples and decreased to 3,993 µg/L in the post-ISCO samples. The concentration of total VOCs in groundwater from GPW-5 displayed a decrease from 31,400 µg/L in pre-ISCO samples and decreased to 28,600 µg/L in the post-ISCO samples, and GPW-6 VOC concentrations decreased from 3,990 µg/L in the pre-ISCO samples to 37.7 µg/L in post-ISCO samples. A summary of the pre-ISCO and post-ISCO total concentrations of VOCs in for all wells samples is provided on **Table 1**. A graphic representation of this data is present on **Figure 3** though **Figure 11.**

In general, TCE will be oxidized in the subsurface and undergo degradation to cis-1,2-dichloroethane. The compound cis-1,2-dichloroethene will subsequently undergo further degradation which yields vinyl chloride. However, it should be noted that TCE will degrade at a faster rate than cis-1,2-dichloroethene under oxidizing conditions. Likewise, cis-1,2-dichloroethene will degrade at a faster rate than vinyl chloride. As a result, after the breakdown of TCE, an accumulation of both cis-1,2-dichloroethene and vinyl chloride may be observed in groundwater where TCE is undergoing degradation. These predictable changes in the concentrations of TCE, cis-1,2-dichloroethene and vinyl chloride were demonstrated in groundwater sampled before and after injection activities were completed on the Site. A graphical representation of the relative concentrations of the three (3) above-mentioned compounds in groundwater from selected monitoring wells within the impacted area of the Site are provided in **Appendix C**. The graph of the TCE concentrations depicts a decrease in the concentration of the compound after the ISCO activities were completed. The graph depicting the relative concentration of cis-1,2-dichlorethene in the selected wells displays decreases in groundwater in some wells (degradation) and increases in the concentration of the compound in other wells

(accumulation). Finally, the graph of the relative concentrations of vinyl chloride depicts an accumulation of the compound in the wells after the completion of ISCO activities.

4.0 FUTURE ACTIVITIES

The remedial technology pilot testing conducted in October 2014 will be used to evaluate remedial options for the Site. Remedial recommendations will be submitted under a separate cover.

SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1979
CHAUTAUQUA, NEW YORK
CONTOUR INTERVAL = 10'

QUADRANGLE LOCATION

DRAFTED BY: W.G.S. (N.J.)	SITE LOCATION MAP
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	
NORTH	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

SCALE IN FEET	DATE	FIGURE
0 2000	1-26-16	1

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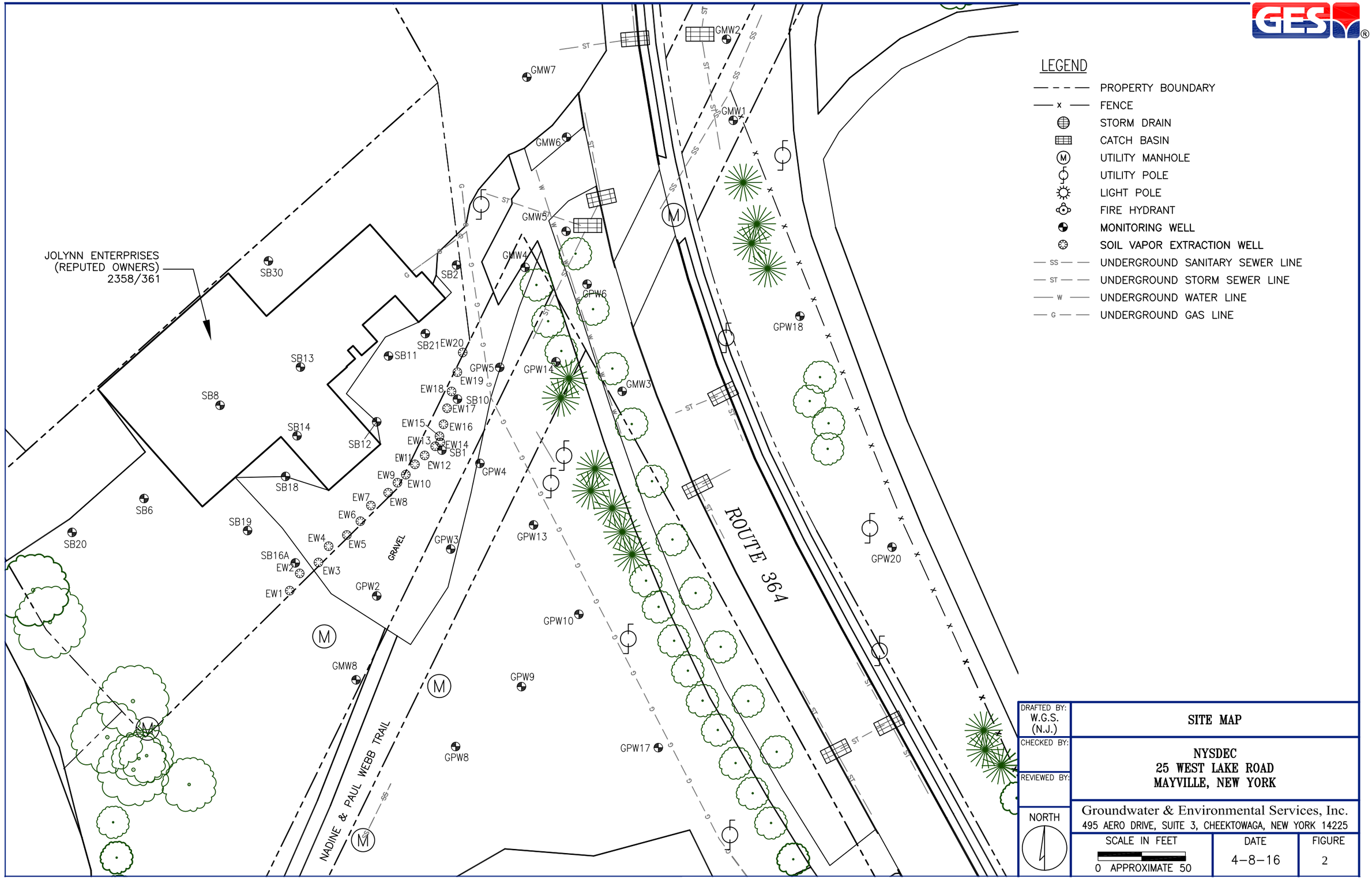

DRAFTED BY: W.G.S. (N.J.)	SITE MAP
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	
NORTH	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
SCALE IN FEET: 0 APPROXIMATE 50	DATE: 4-8-16
	FIGURE: 2

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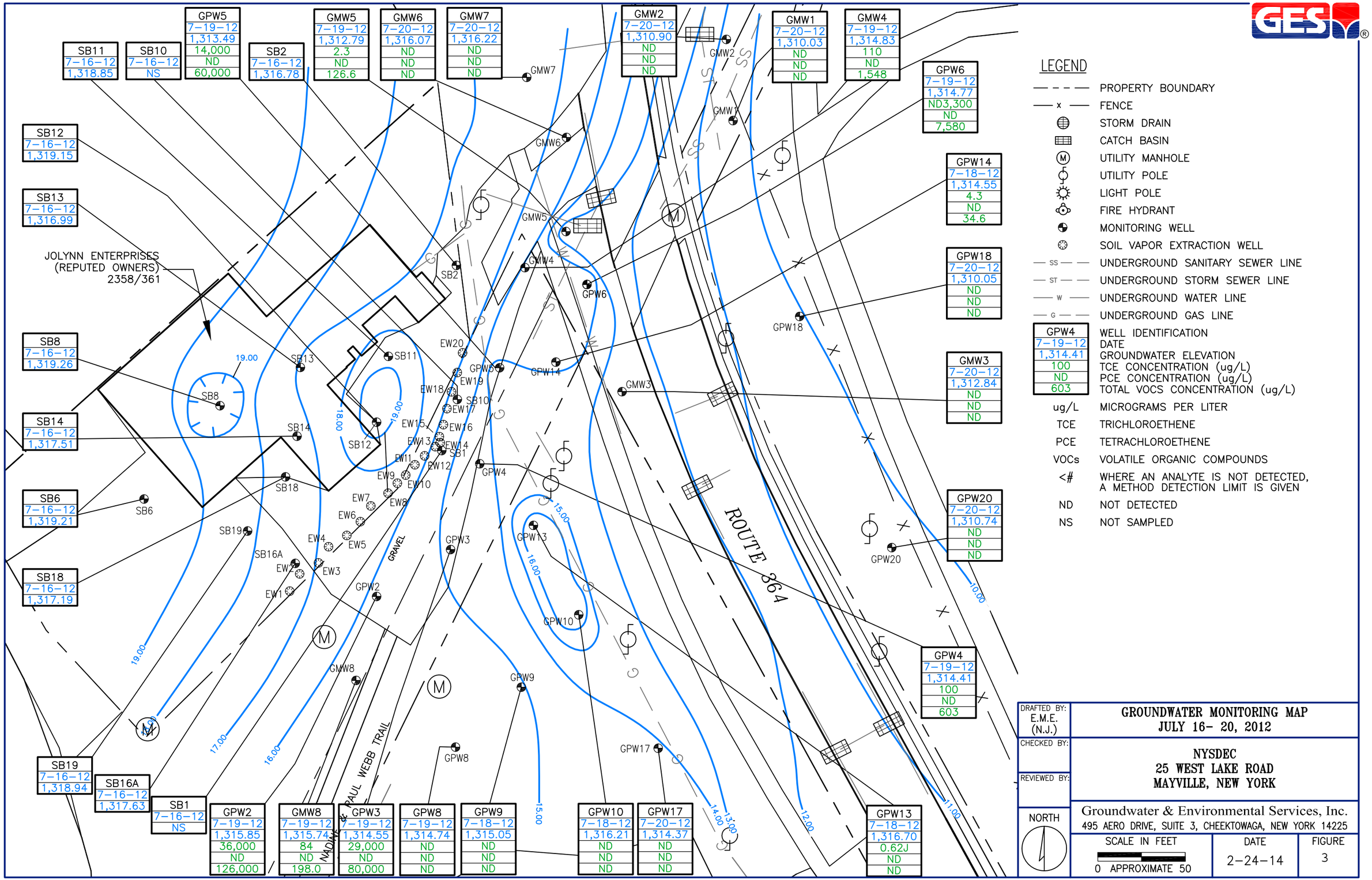

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SB11	SB21	EW20	SB2
9-31-14	9-31-14	9-31-14	9-31-14
NA	NA	NA	NA
88.6	0.0	7,700	0.0

GMW4	GMW7	GMW2
9-18-14	9-18-14	9-18-14
1,316.98	1,317.64	1,314.39
626.4	ND	0.27

GMW5
9-18-14
1,316.87
0.76

GMW1
9-18-14
1,314.03
0.0

GMW6
9-18-14
1,316.79
3.20

SB13
9-31-14
NA
132.0

SB30
9-31-14
NA
0.0

SB12
9-31-14
NA
284,000

GPW6
9-18-14
1,31.30
34.15

GPW5
9-18-14
1,317.19
33,100

GPW14
9-18-14
1,316.03
67.13

JOLYNN ENTERPRISES
(REPUTED OWNERS)
2358/361

SB14
9-31-14
NA
2,470

SB8
9-31-14
NA
1,459

SB18
9-31-14
NA
5,580

GMW3
9-18-14
1,316.34
15

EW16
9-31-14
NA
0.0

EW7
9-31-14
NA
173,100

EW14
9-31-14
NA
511,372

SB6
9-31-14
NA
0.5

GPW4
9-18-14
1,316.52
24,130

SB20	SB19
9-31-14	9-31-14
NA	NA
0.0	236.0

GPW20
9-18-14
1,316.58
0.30

GPW13
9-18-14
1,318.33
3.23

EW2
9-31-14
NA
175.1

GPW2
9-18-14
1,317.24
33,700

GPW3
9-18-14
1,317.81
24,130

GPW10
9-18-14
1,318.49
5.70

GPW17
9-18-14
1,318.35
3.51

GMW8
9-18-14
1,316.89
93

GPW8
9-18-14
1,317.68
6.31

GPW9
9-18-14
1,310.23
5.10

ROUTE 364

GRAVEL

NADINE & PAUL WEBB TRAIL

1,316.00

1,317.00

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE

GPW2
9-30-14
1,317.24
33,700

WELL IDENTIFICATION
SAMPLE DATE
GROUNDWATER ELEVATION
TOTAL VOCs CONCENTRATION (ug/L)

ug/L MICROGRAMS PER LITER
VOCs VOLATILE ORGANIC COMPOUNDS
NA NOT AVAILABLE

DRAFTED BY: W.G.S. (N.J.)
CHECKED BY:
REVIEWED BY:

GROUNDWATER MONITORING MAP
SEPTEMBER, 2014

NYSDEC
25 WEST LAKE ROAD
MAYVILLE, NEW YORK

NORTH

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

SCALE IN FEET
0 APPROXIMATE 50

DATE
4-8-16

FIGURE
4

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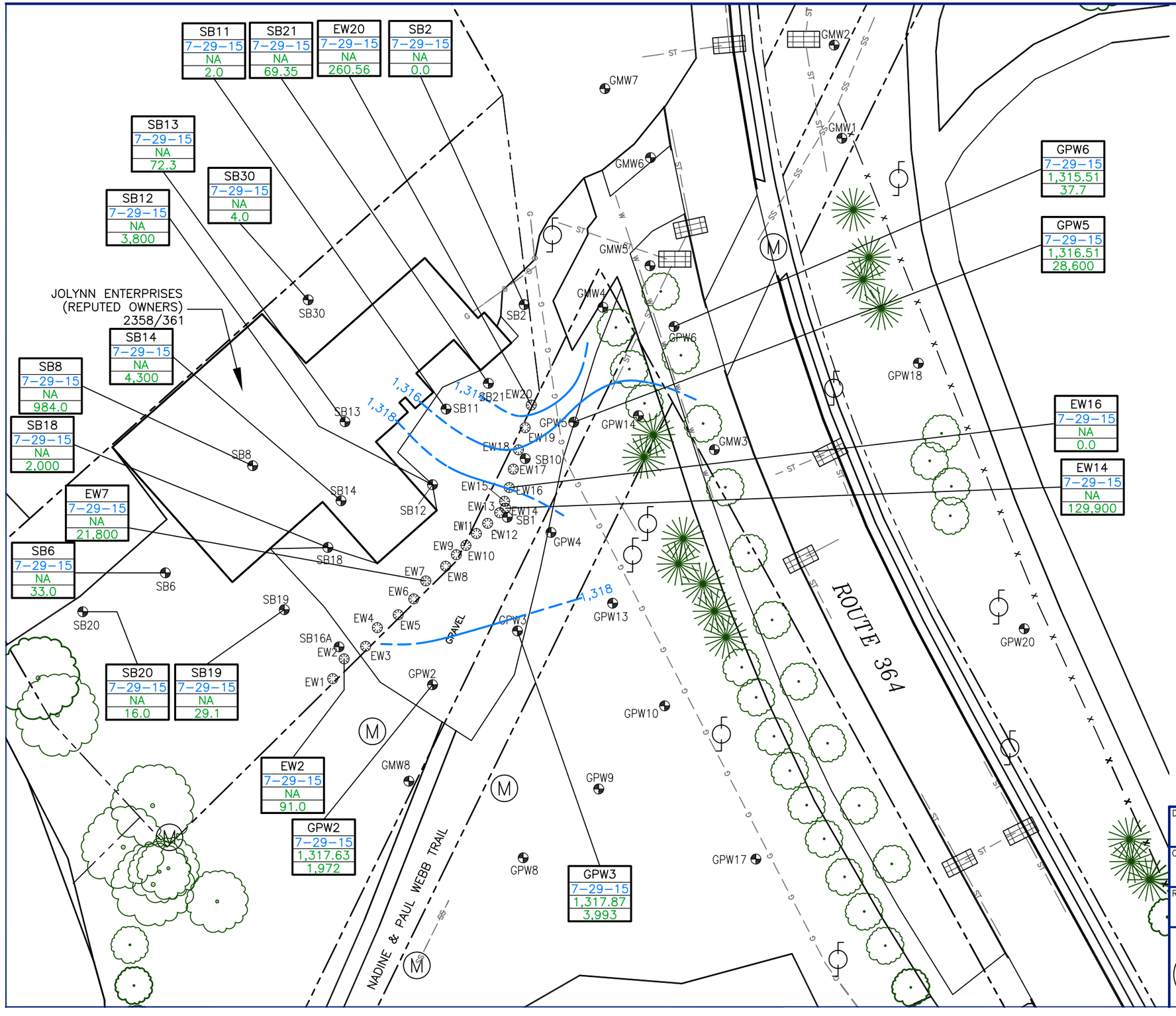

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE

GPW2
7-29-15
1,317.63
1,972

WELL IDENTIFICATION
SAMPLE DATE
GROUNDWATER ELEVATION
TOTAL VOCs CONCENTRATION (ug/L)

ug/L MICROGRAMS PER LITER
VOCs VOLATILE ORGANIC COMPOUNDS
NA NOT AVAILABLE

DRAFTED BY: W.G.S. (N.J.)	GROUNDWATER MONITORING MAP JULY 29-30, 2015
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
NORTH	SCALE IN FEET: 0 APPROXIMATE 50 / DATE: 4-8-16 / FIGURE: 5

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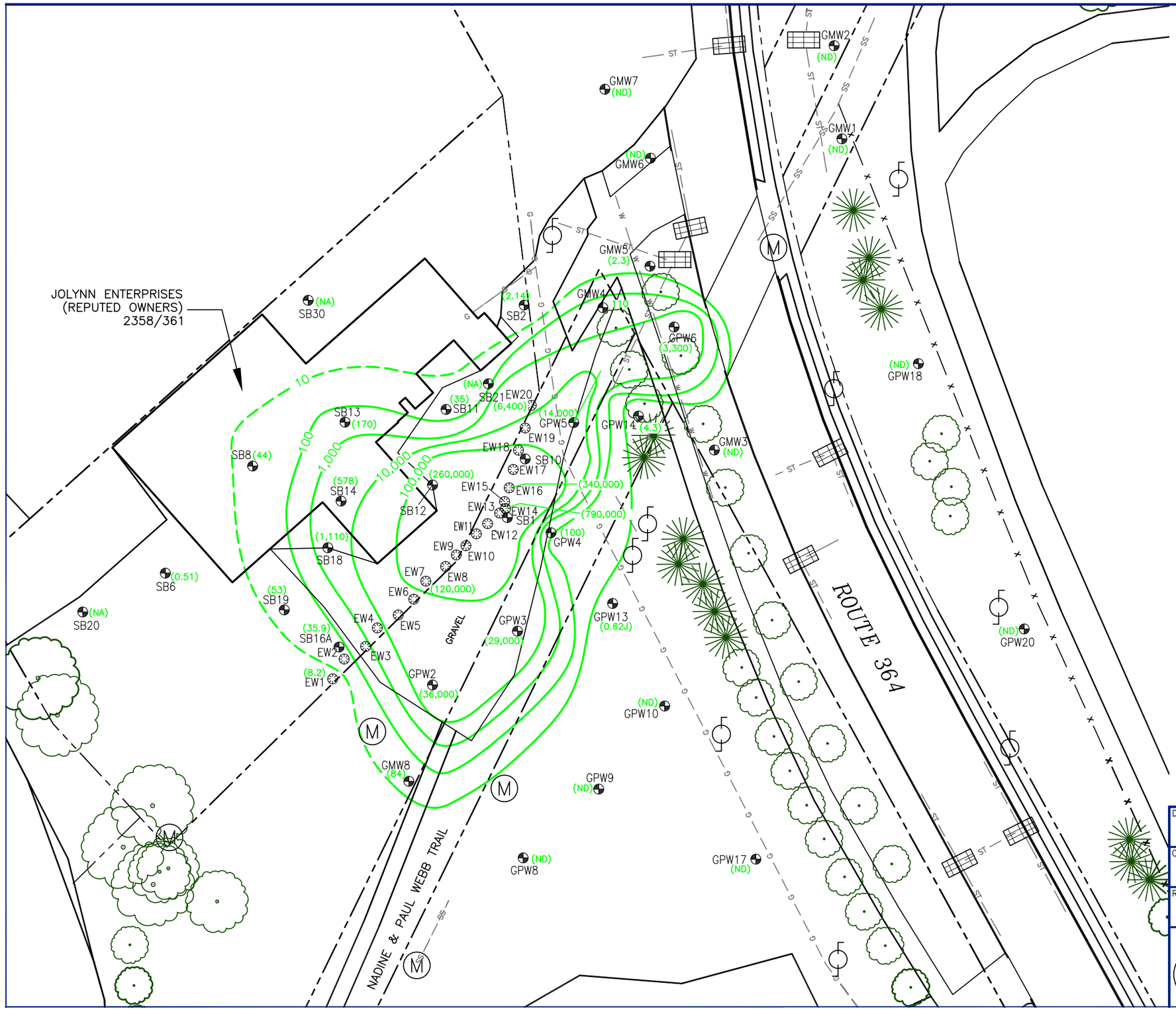

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- (790,000) TCE CONCENTRATION (ug/L)
- TCE CONCENTRATION CONTOUR (ug/L)
- TCE TRICHLOROETHENE
- ug/L MICROGRAMS PER LITER
- ND NOT DETECTED
- J ESTIMATED CONCENTRATION
- NA NOT AVAILABLE

DRAFTED BY: W.G.S. (N.J.)	TCE CONCENTRATION IN GROUNDWATER MAP 2012-2013
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
NORTH	SCALE IN FEET: 0 APPROXIMATE 50 / DATE: 4-7-16 / FIGURE: 6

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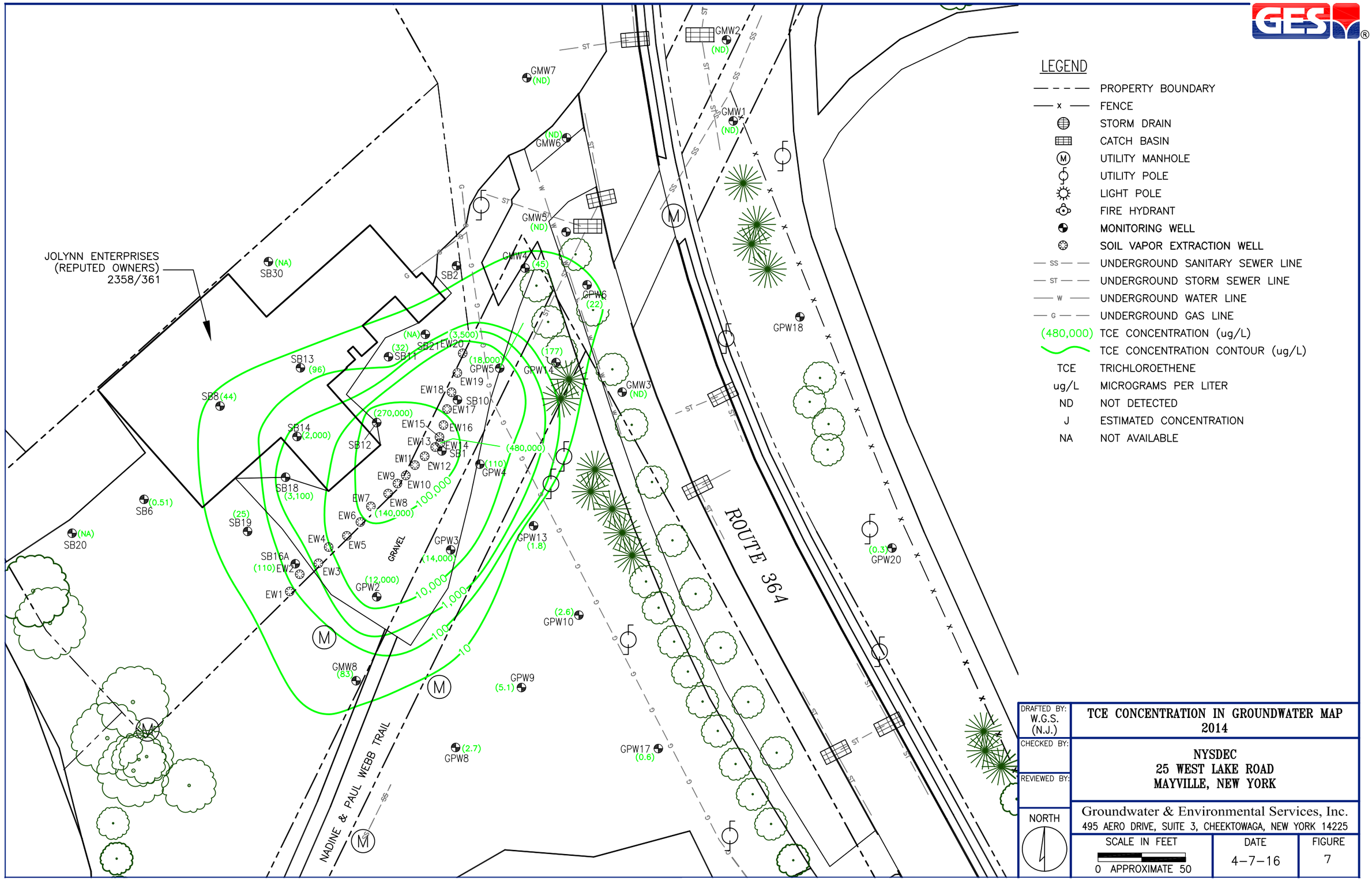

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- (480,000) TCE CONCENTRATION (ug/L)
- TCE CONCENTRATION CONTOUR (ug/L)
- TCE TRICHLOROETHENE
- ug/L MICROGRAMS PER LITER
- ND NOT DETECTED
- J ESTIMATED CONCENTRATION
- NA NOT AVAILABLE

DRAFTED BY: W.G.S. (N.J.)	TCE CONCENTRATION IN GROUNDWATER MAP 2014
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	
NORTH	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
SCALE IN FEET: 0 APPROXIMATE 50	DATE: 4-7-16 / FIGURE: 7

M:\Graphics\0900-Buffalo\NYSDEC\Mayville\Mayville SM.dwg, B-50, WShea

JOLYNN ENTERPRISES
(REPUTED OWNERS)
2358/361

GMW7
GMW2
GMW1
GMW6
GMW5
GMW4
GMW3 (ND)
GMW8

SB30 (4)
SB2
SB13 (62)
SB11 (2)
SB21 (24)
EW20 (180)
GPW5 (1,900)
GPW14
EW19
EW18
SB10
EW17
SB8 (20)
(1,100)
EW15
EW16
SB14 (3,100)
SB12
EW13
EW14 (46,000)
SB1
EW11
EW12
GPW4
EW9
EW10
SB18 (50)
(17,000)
EW7
EW8
10,000
1,000
100
10
(ND) SB6
(28) SB19
EW6
(16) SB20
EW4
EW5
GRAVEL
GPW3 (83)
GPW13
SB16A
(47) EW2
EW3
EW1
GPW2 (89)
GPW6 (6.7)
GPW18
GPW20
GPW10
GPW9
GPW8
GPW17

ROUTE 364

NADINE & PAUL WEBB TRAIL

LEGEND

— — —	PROPERTY BOUNDARY
— x —	FENCE
	STORM DRAIN
	CATCH BASIN
M	UTILITY MANHOLE
	UTILITY POLE
	LIGHT POLE
	FIRE HYDRANT
	MONITORING WELL
	SOIL VAPOR EXTRACTION WELL
— SS —	UNDERGROUND SANITARY SEWER LINE
— ST —	UNDERGROUND STORM SEWER LINE
— W —	UNDERGROUND WATER LINE
— G —	UNDERGROUND GAS LINE
(46,000)	TCE CONCENTRATION (ug/L)
	TCE CONCENTRATION CONTOUR (ug/L)
TCE	TRICHLOROETHENE
ug/L	MICROGRAMS PER LITER
ND	NOT DETECTED
J	ESTIMATED CONCENTRATION
NA	NOT AVAILABLE

DRAFTED BY: W.G.S. (N.J.)	**TCE CONCENTRATION IN GROUNDWATER MAP 2015**
CHECKED BY:	**NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK**
REVIEWED BY:	
NORTH	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
SCALE IN FEET: 0 APPROXIMATE 50	DATE: 4-7-16
	FIGURE: 8

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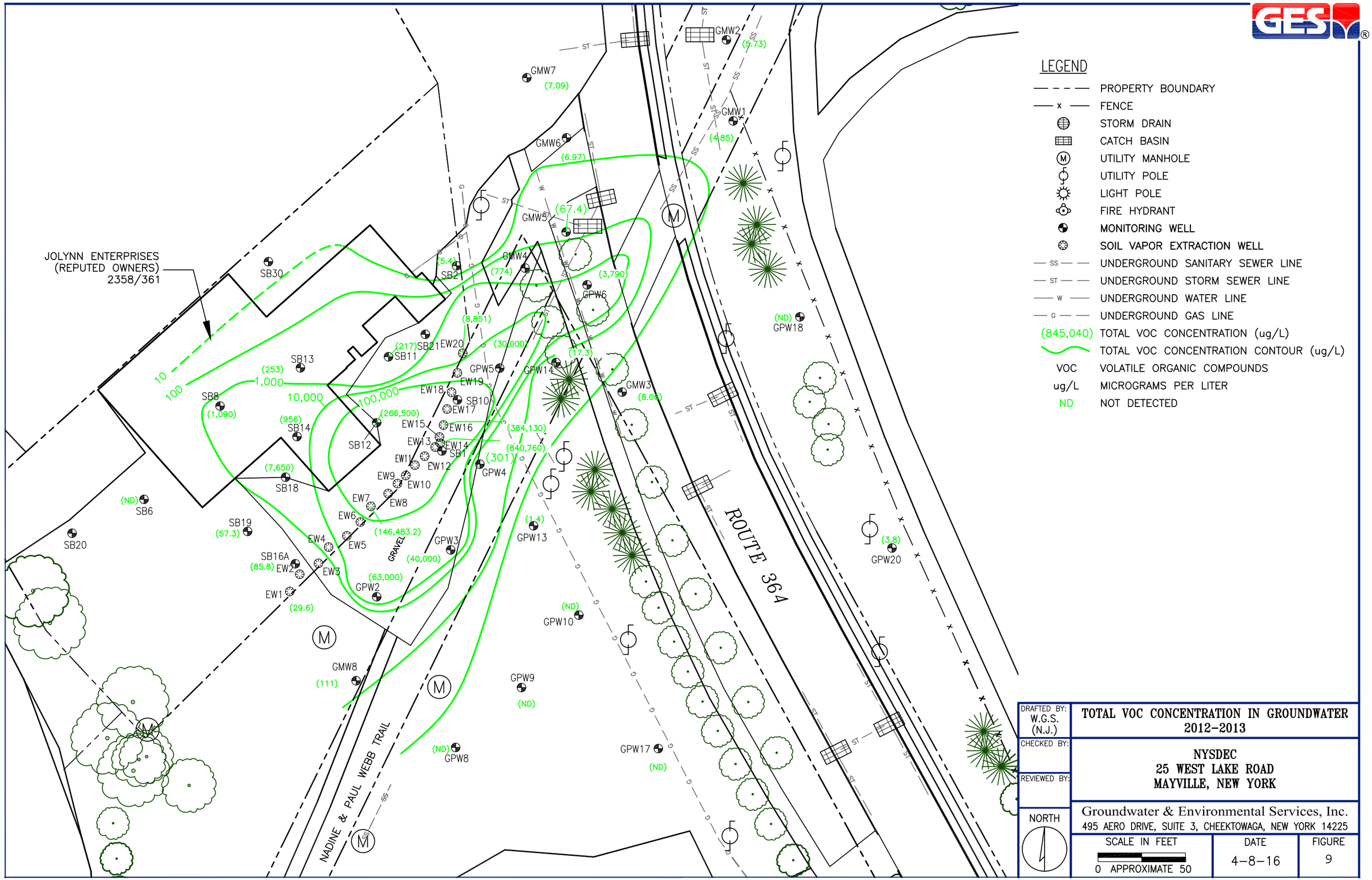

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- (845,040) TOTAL VOC CONCENTRATION (ug/L)
- TOTAL VOC CONCENTRATION CONTOUR (ug/L)
- VOC VOLATILE ORGANIC COMPOUNDS
- ug/L MICROGRAMS PER LITER
- ND NOT DETECTED

DRAFTED BY: W.G.S. (N.J.)	TOTAL VOC CONCENTRATION IN GROUNDWATER 2012-2013
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
NORTH	SCALE IN FEET: 0 APPROXIMATE 50 / DATE: 4-8-16 / FIGURE: 9

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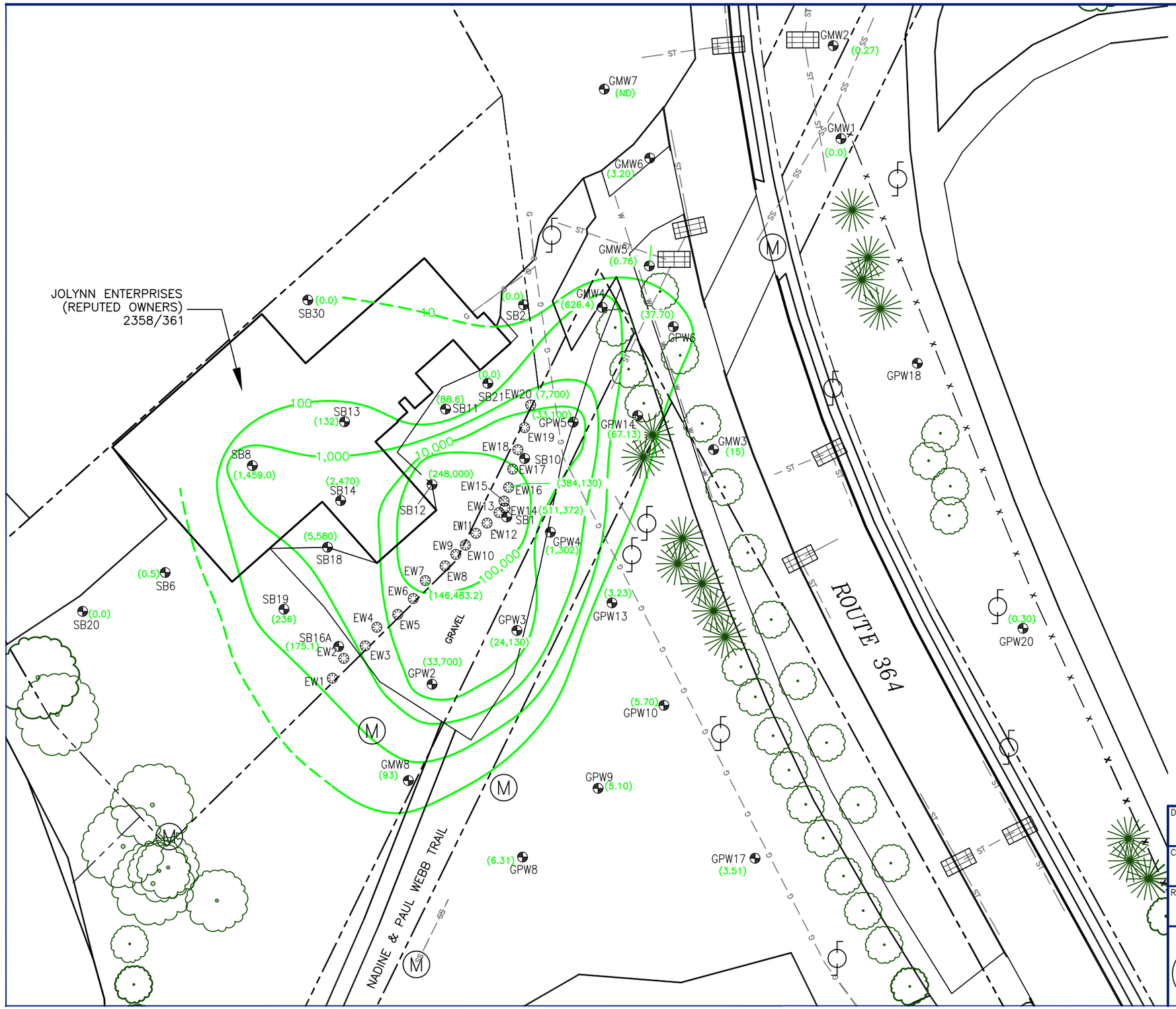

LEGEND

- PROPERTY BOUNDARY
- FENCE
- STORM DRAIN
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- (845,040) TOTAL VOC CONCENTRATION (ug/L)
- TOTAL VOC CONCENTRATION CONTOUR (ug/L)
- VOC VOLATILE ORGANIC COMPOUNDS
- ug/L MICROGRAMS PER LITER
- ND NOT DETECTED

DRAFTED BY: W.G.S. (N.J.)	TOTAL VOC CONCENTRATION IN GROUNDWATER 2014
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
NORTH	SCALE IN FEET: 0 APPROXIMATE 50 / DATE: 4-8-16 / FIGURE: 10

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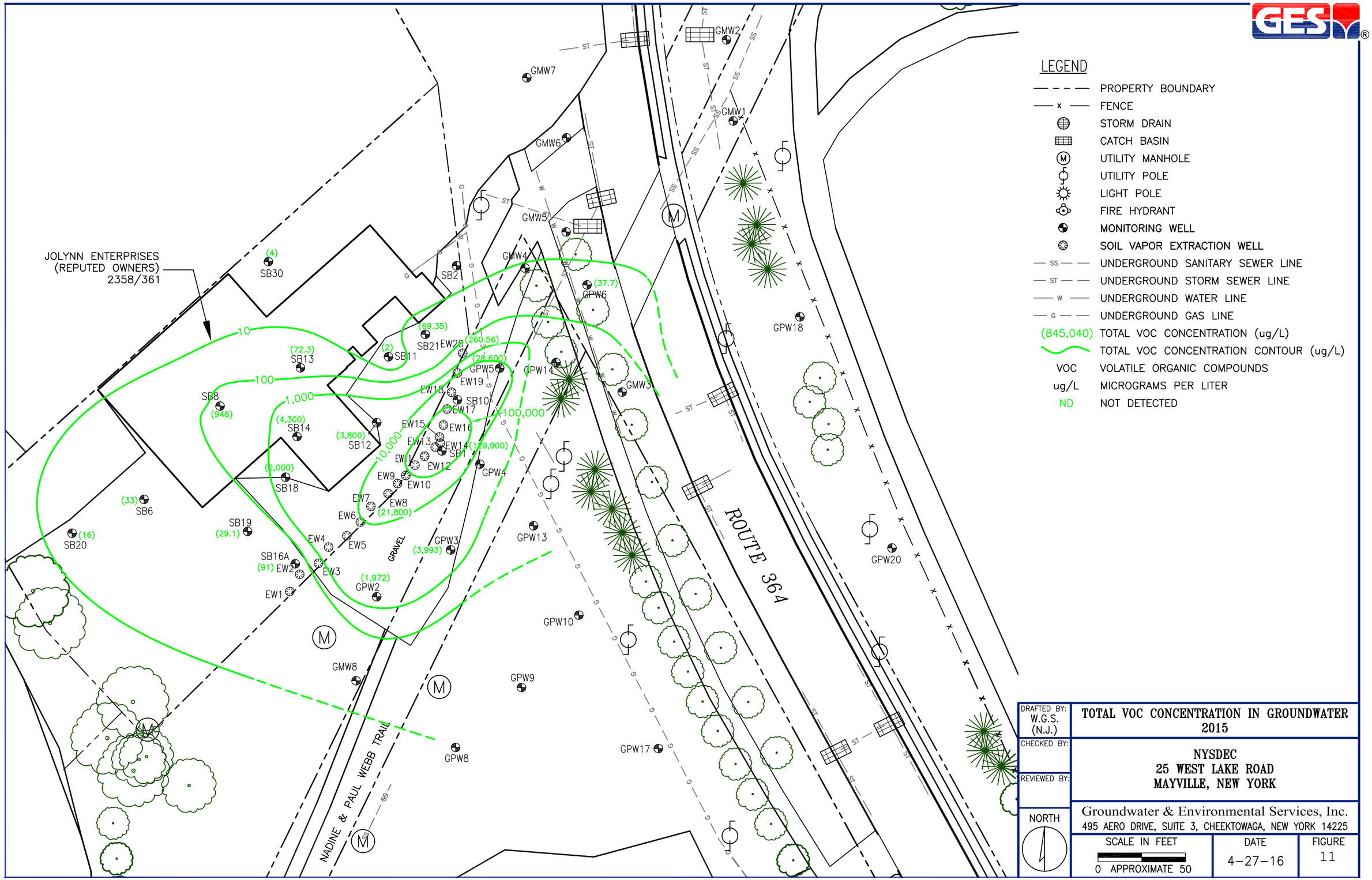


DRAFTED BY: W.G.S. (N.J.)	TOTAL VOC CONCENTRATION IN GROUNDWATER 2015
CHECKED BY:	NYSDEC 25 WEST LAKE ROAD MAYVILLE, NEW YORK
REVIEWED BY:	
NORTH	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225
SCALE IN FEET: 0 APPROXIMATE 50	DATE: 4-27-16 / FIGURE: 11

M:\Graphics\0900-Buffalo\NYSDEC\Mayville\Mayville SM.dwg, B-50, WShea

Table 1

Historical Groundwater Analytical Data
VOCs

25 West Lake Road
Mayville, New York
NYSDEC Site Number C907030A

Monitoring Well	Date	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1,2-Trichloro-1,2,2-trifluoroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,2-Dibromo-3-Chloropropane (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	2-Hexanone (µg/L)	2-Butanone (MEK) (µg/L)	4-Methyl-2-pentanone (MIBK) (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Dibromochloromethane (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	cis-1,3-Dichloropropene (µg/L)	Cyclohexane (µg/L)	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Isopropyl Benzene (µg/L)	Methyl acetate (µg/L)	MTBE (µg/L)	Methylcyclohexane (µg/L)	Methylene chloride (µg/L)	Styrene (µg/L)	Tetrachloroethene (µg/L)	Toluene (µg/L)	Trans-1,2-dichloroethene (µg/L)	Trans-1,3-dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl chloride (µg/L)	Total Xylenes (µg/L)	Total VOCs (µg/L)
TOGS 1.1.1 Groundwater Standards (µg/L)		5	5	1	5	5	5	5	0.04	5	3	0.6	1	3	3	50	50	NS	50	1	50	50	5	NS	5	5	50	5	7	5	5	0.4	NS	5	5	NS	5	5	5	5	5	0.4	5	5	2	5	NS
GPW-2	7/19/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**27,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**36,000**	ND	ND	ND	63,000
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20,000**	ND	ND	ND	ND	ND	ND	ND	ND	**1,700 J B**	ND	ND	ND	**12,000**	ND	ND	ND	33,700
	7/29/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1,400**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**89**	ND	**410**	ND	1,972
GPW-3	7/19/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**29,000**	ND	**1,200**	ND	41,200
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8,800**	ND	ND	ND	ND	ND	ND	ND	ND	**660 J B**	ND	ND	**670 J**	ND	24,130
	7/29/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3,100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**83**	ND	**810**	ND	3,993
GPW-4	7/19/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**180**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**100**	ND	**18**	ND	301
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**480**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**110**	ND	**52**	ND	658
GPW-5	7/19/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**16,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14,000**	ND	**1,400**	ND	31,400
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**18,000**	ND	**1,100**	ND	33,100
	7/29/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**25,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1,900**	ND	ND	ND	28,600
GPW-6	7/19/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3,300**	ND	**490**	ND	5,790
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**29**	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	0.39 J	ND	**7.4**	ND	63.15
	7/29/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**	ND	**6.7**	ND	37.7
GPW-8	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	0.20 J	ND	ND	2.7	ND	ND	ND	6.31
GPW-9	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	6.01
GPW-10	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.60 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5.70
GPW-13	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	ND	ND	ND	1.4
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	1.8	ND	ND	ND	2.45
GPW-14	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**13**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	17.3
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	**36**	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	0.76 J	ND	**5.9**	ND	67.13
GPW-17	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6 J	0.11 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20 J	ND	ND	0.60 J	ND	ND	ND	3.51
GPW-18	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GPW-20	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.30 J	ND	ND	ND	0.30
GMW-1	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4 J	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.85
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GMW-2	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1 J	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.73
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27
GMW-3	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2 J	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.06
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19
GMW-4	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**580**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**110**	ND	**84**	ND	774
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.4 J**	ND	**45**	ND	**76**	ND	626.4
GMW-5	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**47**	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	2.3	ND	**14**	ND	67.4
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.76 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.76
GMW-6	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1 J	ND	ND	ND	ND	0.87 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.97
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2
GMW-7	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4 J	ND	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.09
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GMW-8	7/18/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**15**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**84**	ND	ND	ND	111
	9/18/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**9.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**98 E**	ND	ND	ND	107.6
SB1/EW-14	5/12/2006	NA	NA	**1,210**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**18,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**132,000**	NA	**4,660**	NA	156,367.0
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**12,500**	NA	NA	NA	ND	NA	NA	NA	NA	NA	**1,020,000**	NA	ND	ND	1,032,500
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**37,800**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**432,000**	NA	ND	NA	469,800.0
	4/10/2013	ND	ND	**210**	ND	**31**	**110**	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	NA	ND	ND	ND	**50,000**	ND	NA	ND	NA	NA	NA	NA	NA	**9.4 J**	NA	**550**	NA	**530**	ND	**790,000**	ND	**3,600 E**	NA	845,040.4
	9/31-10/1/2014	NA	NA	**82**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**29,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**480,000**	NA	**1,800**	NA	511,372.0
	7/29-7/30/2015	NA	NA	ND	NA	**86 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**79,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**46,000**	NA	**4,900**	NA	129,900.0
SB2	5/12/2006	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14.6**	NA	ND	NA	14.6
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.17	NA	ND	NA	5.6
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.29**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	ND	7.29
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.14	NA	ND	NA	5.4
SB6	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	ND
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NT	NA	ND	NA	ND
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	ND	ND
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	0.0
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.51	NA	ND	NA	0.5
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 J	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	33.0

Table 1

Historical Groundwater Analytical Data
VOCs

25 West Lake Road
Mayville, New York
NYSDEC Site Number C907030A

Monitoring Well	Date	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1,2-Trichloro-1,2,2-trifluoroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,2-Dibromo-3-Chloropropane (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	2-Hexanone (µg/L)	2-Butanone (MEK) (µg/L)	4-Methyl-2-pentanone (MIBK) (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Dibromochloromethane (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	cis-1,3-Dichloropropene (µg/L)	Cyclohexane (µg/L)	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Isopropyl Benzene (µg/L)	Methyl acetate (µg/L)	MTBE (µg/L)	Methylcyclohexane (µg/L)	Methylene chloride (µg/L)	Styrene (µg/L)	Tetrachloroethene (µg/L)	Toluene (µg/L)	Trans-1,2-dichloroethene (µg/L)	Trans-1,3-dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl chloride (µg/L)	Total Xylenes (µg/L)	Total VOCs (µg/L)
TOGS 1.1.1 Groundwater Standards (µg/L)		5	5	1	5	5	5	5	0.04	5	3	0.6	1	3	3	50	50	NS	50	1	50	50	5	NS	5	5	50	5	7	5	5	0.4	NS	5	5	5	5	5	5	0.4	5	5	2	5	NS
SB8	5/12/2006	NA	NA	NT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**396**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**773**	NA	**21**	NA	1,190.0
	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**564**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**690**	NA	ND	NA	1,254.0
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**175**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**294**	NA	**11.1**	NA	480.1
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**203**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**271**	NA	**7.44**	ND	481.44
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**23**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**21.5**	NA	ND	NA	44.8
	4/10/2013	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**950**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	NA	**44**	ND	**96**	NA	1,125
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,200**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**49**	NA	**210**	NA	1,459.0
	7/29-7/30/2015	NA	NA	NT	NA	1.9 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**15**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**700**	NA	160	NA	NA	NA	NA	NA	NA	50 J	NA	NA	ND	NA	NA	NA	**20**	NA	**53**	NA	948.0
SB11	5/12/2006	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**164**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.08**	NA	**77.7**	NA	**6.69**	NA	255.5
	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**191**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**15.9**	NA	**8.55**	NA	215.5
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.55**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**15.4**	NA	**99.4**	NA	ND	NA	121.4
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**92.2**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**10.2**	NA	**5.08**	ND	107.48
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**36**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.34**	NA	NA	NA	ND	NA	54.3
	4/10/2013	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**170**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	**7.4**	NA	ND	ND	**35**	ND	**4.7**	NA	217.1
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**48**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.2**	NA	**32**	NA	**1.40**	NA	88.6
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.95 J	NA	2.1J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.39 J	NA	NA	NA	**2**	NA	**0.94 J**	NA	2.0
SB12	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,430**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**11,900**	NA	NT	NA	14,330.0
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3,480**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**49,000**	NA	NT	NA	52,440.0
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,480**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**4,850**	NA	ND	ND	6,330
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3,750**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**1,790**	NA	**356**	NA	5,896.0
	4/10/2013	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**6,500**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	NA	**260,000**	ND	ND	NA	266,500
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**270,000**	NA	ND	NA	284,000.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,500**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.6 J**	NA	**1,100**	NA	**200**	NA	3,800.0
SB13	5/12/2006	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**33.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.86	NA	**552**	NA	ND	NA	589.3
	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**26.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.99	NA	**202**	NA	ND	NA	231.2
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**21**	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.96	NA	**167**	NA	ND	NA	192.0
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**48.7**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**350**	NA	ND	ND	398.7
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**31.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.78	NA	**79.2**	NA	ND	NA	113.7
	4/10/2013	ND	ND	ND	ND	ND	0.39 J	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**81**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	2.1	NA	ND	ND	**170**	ND	ND	NA	253.49
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**33**	NA	NA	NA	NA	NA	NA	NA	NA	NA	3	NA	**96**	NA	ND	NA	132.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA	**62**	NA	ND	NA	72.3
SB14	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**178**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**2,140**	NA	NT	NA	2,318.0
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**43.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**289**	NA	NT	NA	332.2
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**176**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**477**	NA	ND	ND	653
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**378**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**578**	NA	ND	NA	956.0
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**470**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**2,000**	NA	ND	NA	2,470.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,200**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11 J**	NA	NA	NA	**3,100**	NA	**14 J**	NA	4,300.0
SB16/EW2	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**49.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**35.9**	NA	ND	NA	85.8
	4/10/2013	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**8.2**	NA	ND	NA	10.5
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**64**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**110**	NA	ND	NA	175.1
	7/29-7/30/2015	NA	NA	ND	NA	0.91 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 J	23	NA	1.8 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**20**	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA	**47**	NA	ND	NA	91.0
SB18	5/12/2006	NA	NA	**1,550**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10,500**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**540**	NA	NA	NA	**151,000**	NA	**335**	NA	163,925.0
	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,360**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**1,230**	NA	**375**	NA	3,965.0
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8,450**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**7,360**	NA	**264**	NA	16,074.0
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,730**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	**1,330**	NA	ND	ND	4,060
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4,840**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	**423**	NA	NA	NA	5,263.0
	4/10/2013	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**6,400**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	NA	**1,110**	ND	**140**	NA	7,650
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,900**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**3,100**	NA	**580**	NA	5,580.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,400**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**50**	NA	**550**	NA	2,000.0
SB19	5/12/2006	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.07	NA	NA	NA	**87**	NA	ND	NA	90.7
	7/23/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**66.4**	NA	ND	NA	73.1
	10/30/2008	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**38.2**	NA	ND	NA	41.7
	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	**27.7**	NA	ND	ND	27.7
	8/9/2012 & 8/23/2012	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**53**	NA	ND	NA	57.3
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.99	NA	NA	NA	**25**	NA	**210**	NA	236.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	NA	NA	**28**	NA	ND	NA	29.1
SB20	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	0.27 J	NA	NA	NA	**16**	NA	ND	NA	16.3
SB21	7/29-7/30/2015	NA	NA	ND	NA	0.20 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.16 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**38**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.85	NA	NA	NA	**24**	NA	**6.5**	NA	69.35
SB30	7/29-7/30/2015	NA	NA	ND	NA	0.28 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	NA	NA	4	NA	ND	NA	4.0
EW1	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14.4**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	**61.3**	NA	4.99	ND	80.7
	4/10/2013	1.2	ND	ND	ND	**11**	ND	NA	ND	ND	NA	**2.8**	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	2.3	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	**8.2**	ND	ND	NA	29.6
EW7	4/10/2013	ND	ND	**4.2**	ND	2.0	**51**	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	0.38 J	**26,000**	ND	NA	ND	NA	NA	NA	NA	NA	ND	NA	**59**	NA	**490 E**	ND	**120,000**	ND	**420 E**	NA	147,027
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**31,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**140,000**	NA	**2,100**	NA	173,100.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4,800**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	**17,000**	NA	**99 J**	NA	21,800.0
EW16	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**24,600**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**411,000**	NA	ND	ND	435,600
	4/10/2013	ND	ND	ND	ND	ND	**100**	NA	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**40,000**	ND	NA	ND	NA	NA	NA	NA	NA	ND	**230**	NA	**310**	ND	**340,000**	ND	**3,900**	NA	384,540
EW20	6/24/2009	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3,200**	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	**10,700**	NA	ND	ND	13,900
	4/10/2013	ND	ND	ND	ND	ND	N	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	ND	**2,400**	ND	NA	ND	NA	NA	NA	NA	NA	ND	**51**	NA	ND	ND	**6,400**	ND	ND	NA	8,851
	9/31-10/1/2014	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	**3,500**	NA	**200**	NA	7,700.0
	7/29-7/30/2015	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**80**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.56	NA	NA	NA	**180**	NA	0.43 J	NA	260.56

Notes:
All data presented in micrograms per Liter (ug/L).
ND< = None detected above laboratory limit indicated.
J = The result is less than the reporting limit but is greater than or equal to the method detection limit, and the concentration is an approximate value
B = Analyte detected in blank and sample
E = Result exceeds calibration range
Bold values indicate exceedence of Guidance Values.
TOGS 1.1.1= Technical & Operational Guidance Series
VOC= Volatile Organic Compound
NT-Not tested during event
NS - No standard for TOGS 1.1.1
ND-Not detected above laboratory detection limits
NA-Not Available/Analyzed
Green shaded values indiciate elevated compounds of concern.

Table 2

Groundwater Elevation Data

25 West Lake Road
Mayville, New York
NYSDEC Site Number C907030A

Well ID	Date	Well Elevation *feet above mean sea level*	Depth to Water *feet below top-of-casing*	Groundwater Elevation *feet above mean sea level*
GPW-2	Jul-2012	1,321.80	5.95	1,315.85
	Sep-2014	1,321.80	4.56	1,317.24
	Jul-2015	1,321.80	4.17	1,317.63
GPW-3	Jul-2012	1,320.94	6.39	1,314.55
	Sep-2014	1,320.94	3.13	1,317.81
	Jul-2015	1,320.94	3.07	1,317.87
GPW-4	Jul-2012	1,320.83	6.42	1,314.41
	Sep-2014	1,320.83	4.31	1,316.52
GPW-5	Jul-2012	1,320.87	7.38	1,313.49
	Sep-2014	1,320.87	3.68	1,317.19
	Jul-2015	1,320.87	4.36	1,316.51
GPW-6	Jul-2012	1,321.75	6.98	1,314.77
	Sep-2014	1,321.75	6.45	1,315.30
	Jul-2015	1,321.75	6.24	1,315.51
GPW-8	Jul-2012	1,321.19	6.45	1,314.74
	Sep-2014	1,321.19	3.51	1,317.68
GPW-9	Jul-2012	1,312.41	5.36	1,307.05
	Sep-2014	1,312.41	2.18	1,310.23
GPW-10	Jul-2012	1,319.62	3.41	1,316.21
	Sep-2014	1,319.62	1.13	1,318.49
GPW-13	Jul-2012	1,320.10	3.40	1,316.70
	Sep-2014	1,320.10	1.77	1,318.33
GPW-14	Jul-2012	1,320.10	5.55	1,314.55
	Sep-2014	1,320.10	4.07	1,316.03
GPW-17	Jul-2012	1,319.35	4.98	1,314.37
	Sep-2014	1,319.35	1.00	1,318.35
GPW-18	Jul-2012	1,318.66	8.61	1,310.05
GPW-20	Jul-2012	1,318.39	7.65	1,310.74
	Sep-2014	1,318.39	1.81	1,316.58
GMW-1	Jul-2012	1,317.60	7.57	1,310.03
	Sep-2014	1,317.60	3.57	1,314.03
GMW-2	Jul-2012	1,317.15	6.25	1,310.90
	Sep-2014	1,317.15	2.76	1,314.39

Table 2

Groundwater Elevation Data

25 West Lake Road
Mayville, New York
NYSDEC Site Number C907030A

Well ID	Date	Well Elevation *feet above mean sea level*	Depth to Water *feet below top-of-casing*	Groundwater Elevation *feet above mean sea level*
GMW-3	Jul-2012	1,321.57	8.73	1,312.84
	Sep-2014	1,321.57	5.23	1,316.34
GMW-4	Jul-2012	1,321.29	6.46	1,314.83
	Sep-2014	1,321.29	4.31	1,316.98
GMW-5	Jul-2012	1,322.04	9.25	1,312.79
	Sep-2014	1,322.04	5.17	1,316.87
GMW-6	Jul-2012	1,322.44	6.37	1,316.07
	Sep-2014	1,322.44	5.65	1,316.79
GMW-7	Jul-2012	1,321.66	5.44	1,316.22
	Sep-2014	1,321.66	4.02	1,317.64
GMW-8	Jul-2012	1,321.82	6.08	1,315.74
	Sep-2014	1,321.82	4.93	1,316.89

Table 3

Groundwater Gauging and Analytical Data - Metals

25 West Lake Road
Mayville, New York
NYSDEC Site # C907030A

Monitoring Well			GPW2		GPW3		GPW5		GPW6
Sample Type			GW		GW		GW		GW
Sample Date	TOGS 1.1.1 GA - H(WS)	TOGS 1.1.1 GA - E	9/18/2014	7/29/2015	9/18/2014	7/29/2015	9/18/2014	7/29/2015	7/29/2015
Depth to Water (feet below top-of-casing)			4.56	4.17	3.13	3.07	3.68	4.36	6.24
TOC Elevation (feet above mean sea level)			1321.80	1,321.80	1,320.94	1,320.94	1,320.87	1,320.87	1,321.75
Groundwater Elevation (feet above mean sea level)			1,317.24	1,317.63	1,317.81	1,317.87	1317.19	1,316.51	1315.51
CAS #	Metals via 6010C (µg/L)								
7429-90-5	ALUMINUM	*NS*	*NS*	64,500	7,500	66,500	55,200	17,200	25,400	NA
7440-36-0	ANTIMONY	*3*	*NS*	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	NA
7440-38-2	ARSENIC	*25*	*NS*	**140**	ND<15	**77**	**56**	22	**29**	NA
7440-39-3	BARIUM	*1,000*	*NS*	1,000	450	800	**3,300**	450	**2,900**	NA
7440-41-7	BERYLLIUM	*3 (G)*	*NS*	**3.1**	ND<2.0	**4**	2.4	ND<2.0	ND<2.0	NA
7440-43-9	CADMIUM	*5*	*NS*	2.0	ND<2.0	4	ND<2.0	ND<2.0	ND<2.0	NA
7440-70-2	CALCIUM	*NS*	*NS*	694,000	165,000	538,000	136,000	364,000	170,000	NA
7440-47-3	CHROMIUM, TOTAL	*50*	*NS*	**100**	10	**130**	**110**	30	**74**	NA
7440-48-4	COBALT	*NS*	*NS*	78	7.1	59.0	49	27	ND<4.0	NA
7440-50-8	COPPER	*200*	*NS*	200	78	**230**	**790**	68	140	NA
7439-93-2	IRON	*NS*	*300*	**163,000**	**9,000**	**140,000**	**80,400**	**36,300**	**43,600**	NA
7439-92-1	LEAD	*25*	*NS*	**130**	ND<10	**120**	**62**	**48**	ND<10	NA
7439-95-4	MAGNESIUM	*35,000 (G)*	*NS*	**100,000**	24,800	**96,800**	21,800	**71,400**	**36,700**	NA
7439-96-5	MANGANESE	*NS*	*300*	**9,400**	**16,600**	**5,500**	**98,900**	**6,600**	**180,000 ^**	NA
7440-02-0	NICKEL	*100*	*NS*	**170**	30	**160**	**280**	47	53	NA
744-09-7	POTASSIUM	*NS*	*NS*	13,600	11,300	12,600	21,200	6,200	10,500	NA
7782-49-2	SELENIUM	*10*	*NS*	ND<25	ND<25	ND<25	**60**	ND<25	ND<25	NA
7440-22-4	SILVER	*50*	*NS*	ND<6.0	ND<6.0	ND<6.0	ND<6.0	ND<6.0	ND<6.0	NA
7440-23-5	SODIUM	*20,000*	*NS*	18,100	**754,000**	**26,500**	**702,000**	**30,100**	**198,000**	NA
7440-28-0	THALLIUM	*0.5 (G)*	*NS*	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	NA
7440-62-2	VANADIUM	*NS*	*NS*	120	12	130	98	33	53	NA
7440-66-6	ZINC	*2,000 (G)*	*5,000 (G)*	800	160	930	680	370	320	NA
7439-97-6	MERCURY	*0.7*	*NS*	0.46	0.25	0.41	**1.8**	0.5	0.39	NA

Notes:
ND = not detected at or above laboratory detection limits
GW = groundwater purge and sample via dispossable bailer
µg/L = micrograms per liter
^ = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Insturment related QC is outside accpetance limits.
NA = Not applicable/analyzed
CAS = Chemical Abstracts Services

TOGS 1.1.1 = New York State Department of Environmental Conservation Division of Water Technical and Operational Guidance Series 1.1.1 - Ambient water quality standards and guidance values.
GA - H(WS) = Groundwater class for the protection of drinking water
GA - E = Groundwater class for the protection of fresh water
NS=No standard or guidance value specified by TOGS 1.1.1
(G) = Guidance value for TOGS 1.1.1

Table 4

Groundwater Chemistry Reading

NYSDEC Mayville
25 West Lake Road
Mayville, NY

Reading	Well ID	Date	Time	DTW (ft)	Temp (^{o}C)	pH	DO (mg/L)	ORP (mV)	Cond (mS/cm)	PID (ppm)	LEL (%)	O_2 (%)	CO_2 (ppm)	H_2S (ppm)	Permanganate (mg/l)	Comment
EW1																
Pilot Test	EW1	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW10																
Pilot Test	EW10	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW11																
Pilot Test	EW11	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW12																
Pilot Test	EW12	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW13																
Pilot Test	EW13	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
3 Weeks Post Injection	EW13	11/7/14	12:55	2.39	NA	NA	NA	NA	NA	60.7	>100	7.4	1325	0	49.2	
6 Weeks Post Injection	EW13	12/4/14	12:15	1.87	NA	NA	NA	NA	NA	145.0	0	20.9	0	0	17.0	
EW14																
Pilot Test	EW14	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
9 Months Post Injection	EW14	7/29/15	NA	1.99	22.31	7.52	3.73	206.2	1207	470.0	0	18.5	0	0	NA	
EW15																
Pilot Test	EW15	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW16																
Pilot Test	EW16	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
9 Months Post Injection	EW16	7/29/15	NA	3.42	22.81	7.15	2.64	214.8	734	99.6	0	19.5	0	0	NA	
EW17																
Pilot Test	EW17	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW18																
Pilot Test	EW18	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW19																
Pilot Test	EW19	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW2																
Pilot Test	EW2	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW20																
Pilot Test	EW20	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
3 Weeks Post Injection	EW20	11/7/14	13:05	2.43	NA	NA	NA	NA	NA	0.0	6	19.2	1620	0	10.4	
6 Weeks Post Injection	EW20	12/4/14	12:05	2.71	NA	NA	NA	NA	NA	0.0	0	20.9	0	0	2.0	No Cap open to atmosphere
9 Months Post Injection	EW20	7/29/15	NA	3.60	19.58	7.82	6.18	155.3	266.000	0.0	0	20.9	0	0	NA	
EW3																

Table 4

Groundwater Chemistry Reading

NYSDEC Mayville
25 West Lake Road
Mayville, NY

Reading	Well ID	Date	Time	DTW (ft)	Temp (^{o}C)	pH	DO (mg/L)	ORP (mV)	Cond (mS/cm)	PID (ppm)	LEL (%)	O_2 (%)	CO_2 (ppm)	H_2S (ppm)	Permanganate (mg/l)	Comment
Pilot Test	EW3	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW4																
Pilot Test	EW4	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW5																
Pilot Test	EW5	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW6																
Pilot Test	EW6	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW7																
Pilot Test	EW7	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
9 Months Post Injection	EW7	7/29/15	NA	2.85	21.90	6.92	3.30	196.5	376	0.0	0	20.9	0	0	NA	
EW8																
Pilot Test	EW8	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
EW9																
Pilot Test	EW9	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
GMW1																
Pre-injection GWS	GMW1	9/18/14	17:00	3.57	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	NC	
GMW2																
Pre-injection GWS	GMW2	9/18/14	17:05	2.76	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	NC	
GMW3																
Pre-injection GWS	GMW3	9/18/14	14:30	5.23	11.12	7.16	4.46	-152.8	1.110	0.1	44	0.0	0	0	4.9	
GMW4																
Pre-injection GWS	GMW4	9/18/14	13:45	4.31	11.92	7.26	1.40	-39.7	0.734	0	14	0.0	0	0	1.2	
3 Weeks Post Injection	GMW4	11/7/14	12:05	3.64	12.41	6.91	1.62	1.2	0.455	0.5	6	14.5	0	0	1.7	
6 Weeks Post Injection	GMW4	12/4/14	13:15	4.00	12.43	7.01	0.14	-9.9	0.935	0.0	0	20.9	0	0	1.2	
GMW5																
Pre-injection GWS	GMW5	9/18/14	14:00	5.17	11.51	7.18	0.75	-67.3	0.696	0	14	0.0	0	0	5.5	
GMW6																
Pre-injection GWS	GMW6	9/18/14	15:00	5.65	11.53	7.15	0.90	-148.3	0.641	0	9	17.5	0	0	17.0	
GMW7																
Pre-injection GWS	GMW7	9/18/14	15:15	4.02	10.63	7.30	0.60	-97.0	0.589	0	13	6.1	0	0	3.5	
GMW8																
Pre-injection GWS	GMW8	9/18/14	15:30	4.93	11.08	6.94	1.09	-5.6	0.860	0	8	13.5	0	0	5.8	
3 Weeks Post Injection	GMW8	11/7/14	12:35	3.45	14.08	6.51	1.25	122.0	0.863	0.0	0	20.5	0	0	0.9	
6 Weeks Post Injection	GMW8	12/4/14	12:35	2.19	12.61	6.60	0.44	88.6	0.975	0.0	0	20.9	0	0	3.5	

Table 4

Groundwater Chemistry Reading

NYSDEC Mayville
25 West Lake Road
Mayville, NY

Reading	Well ID	Date	Time	DTW (ft)	Temp (^{o}C)	pH	DO (mg/L)	ORP (mV)	Cond (mS/cm)	PID (ppm)	LEL (%)	O_2 (%)	CO_2 (ppm)	H_2S (ppm)	Permanganate (mg/l)	Comment
GPW10																
Pre-injection GWS	GPW10	9/18/14	16:30	1.13	NA	NA	NA	NA	NA	0.0	8	18.8	0	0	0.0	
GPW13																
Pre-injection GWS	GPW13	9/18/14	16:45	1.77	NA	NA	NA	NA	NA	0.0	8	17.7	0	0	0.0	
3 Weeks Post Injection	GPW13	11/7/14	12:25	1.56	NA	NA	NA	NA	NA	0.0	5	17.7	0	0	2.0	
GPW14																
Pre-injection GWS	GPW14	9/18/14	14:45	4.07	NA	NA	NA	NA	NA	0.0	11	15.2	0	0	0.0	
3 Weeks Post Injection	GPW14	11/7/14	12:15	2.58	NA	NA	NA	NA	NA	0.0	0	19.2	0	0	0.0	
GPW17																
Pre-injection GWS	GPW17	9/18/14	16:15	1.00	NA	NA	NA	NA	NA	0.0	9	19.7	0	0	4.9	
GPW2																
Pre-injection GWS	GPW2	9/18/14	12:45	4.56	NA	NA	NA	NA	NA	59	9	11.2	0	0	2.0	
Pilot Test	GPW2	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
3 Weeks Post Injection	GPW2	11/7/14	12:45	3.85	NA	NA	NA	NA	NA	18.0	11	14.2	133	0	15.6	
6 Weeks Post Injection	GPW2	12/4/14	12:25	2.39	NA	NA	NA	NA	NA	0.0	0	20.9	0	0	15.8	No Cap open to atmosphere
9 Months Post Injection	GPW2	7/29/15	11:15	4.17	NA	NA	NA	NA	NA	0.4	0	20.9	0	0	NA	
GPW20																
Pre-injection GWS	GPW20	9/18/14	16:50	1.81	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	NC	
GPW3																
Pre-injection GWS	GPW3	9/18/14	13:00	3.13	NA	NA	NA	NA	NA	121	6	18.9	0	0	4.0	
Pilot Test	GPW3	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
6 Weeks Post Injection	GPW3	12/4/14	12:45	1.69	NA	NA	NA	NA	NA	9.4	0	20.9	4	0	5.8	
9 Months Post Injection	GPW3	7/29/15	12:15	3.07	22.64	7.87	2.19	34.6	2793	15.7	0	20.5	0	0	NA	
GPW4																
Pre-injection GWS	GPW4	9/18/14	13:15	2.87	NA	NA	NA	NA	NA	0.0	8	17.8	0	0	30.8	
Pilot Test	GPW4	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
3 Weeks Post Injection	GPW4	11/7/14	13:25	NC	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	17.6	
6 Weeks Post Injection	GPW4	12/4/14	12:55	1.61	NA	NA	NA	NA	NA	8.0	0	20.3	0	0	3.5	
GPW5																
Pre-injection GWS	GPW5	9/18/14	13:30	3.68	NA	NA	NA	NA	NA	0.1	10	14.8	0	0	0.6	
Pilot Test	GPW5	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
3 Weeks Post Injection	GPW5	11/7/14	13:15	NC	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	12.4	
6 Weeks Post Injection	GPW5	12/4/14	13:05	3.17	NA	NA	NA	NA	NA	74.9	0	18.9	0	0	5.8	
9 Months Post Injection	GPW5	7/29/15	10:25	4.36	19.13	7.29	2.97	156.1	14	22.6	0	18.5	0	0	NA	

Table 4

Groundwater Chemistry Reading

NYSDEC Mayville
25 West Lake Road
Mayville, NY

Reading	Well ID	Date	Time	DTW (ft)	Temp (^{o}C)	pH	DO (mg/L)	ORP (mV)	Cond (mS/cm)	PID (ppm)	LEL (%)	O_2 (%)	CO_2 (ppm)	H_2S (ppm)	Permanganate (mg/l)	Comment
GPW6																
Pre-injection GWS	GPW6	9/18/14	14:15	6.45	NA	NA	NA	NA	NA	0.0	10	13.1	0	0	0.0	
9 Months Post Injection	GPW6	7/29/15	13:45	6.24	19.13	7.18	5.24	125.6	814	0.1	0	18.5	0	0	NA	
GPW8																
Pre-injection GWS	GPW8	9/18/14	15:45	3.51	NA	NA	NA	NA	NA	0.3	8	19.6	0	0	4.0	
GPW9																
Pre-injection GWS	GPW9	9/18/14	16:00	2.18	NA	NA	NA	NA	NA	0	7	18.4	0	0	2.3	
SB11																
Pilot Test	SB11	10/22/14	8:00	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	>1,000,000	Injection Well
SB12																
Pre-injection GWS	SB12	9/18/14	16:35	1.80	NA	NA	NA	NA	NA	NC	NC	NC	NC	NC	NC	
Pilot Test	SB12	10/22/14	8:00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	>1,000,000	Injection Well
6 Weeks Post Injection	SB12	12/4/14	13:25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6	
9 Months Post injection	SB12	7/29/15	NA	2.12	17.61	7.30	4.08	146.0	187	6.80	0.00	20.90	0.00	0.00	NA	

Notes:
NA = No Reading Collected
ft = feet
mg/L = milligrams per liter
mV = millivolts
mS/cm = milliSiemens/centimeter
ppmv = part per million by volume
DTW = Depth to Water
Indicates Permaganate Present at greater than >1,000 mg/l
Indicates Permaganate Present at greater than >100 mg/l
Indicates Permaganate Present at greater than >10 mg/l

Indicates INITIAL READINGS
>30.0 = Over Range for Oxygen
DO = Dissolved Oxygen
ORP = Oxygen Reduction Potential
Cond=Conductivity
PID= Photionization Detector
LEL= Lower Explosive Limit
02=Oxygen
CO=Carbon Monoxide
H2S=Hydrogen Sulfide
>100 = over range for LEL

Appendix A

Laboratory Analytical Data Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-84764-1
Client Project/Site: NYSDEC-Standard Portable:Site# C907030A

For:
New York State D.E.C.
270 Michigan Avenue
Buffalo, New York 14203

Attn: Chad Staniszewski

Authorized for release by:
8/7/2015 4:04:31 PM
Orlette Johnson, Senior Project Manager
(484)685-0864
orlette.johnson@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Orlette Johnson
Senior Project Manager
8/7/2015 4:04:31 PM

Table of Contents

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-84764-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-84764-1

Receipt
The samples were received on 7/29/2015 5:23 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.8º C.

Receipt Exceptions

The samples were received at the laboratory outside the required temperature criteria. The samples are considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

A trip blank was listed on the Chain of Custody (COC) but was not submitted for analysis.

GC/MS VOA
Method(s) 8260C: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory and corrective action was not possible: GPW2 (480-84764-1), GPW3 (480-84764-2) and GPW5 (480-84764-3).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: GPW2 (480-84764-1), GPW3 (480-84764-2) and GPW5 (480-84764-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-256667 recovered above the upper control limit for Chloromethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The following sample is impacted: GPW5 (480-84764-3).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-256667 recovered outside acceptance criteria, low biased, for Carbon Disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data has been reported. The following sample is impacted: GPW5 (480-84764-3)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-256804 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: GPW2 (480-84764-1), GPW3 (480-84764-2) and GPW6 (480-84764-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-256850/21) contained Total Manganese outside the control limits. The reported sample GPW5 (480-84764-3) associated with this CCVL was either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of the sample was not performed.

Method(s) 6010C: The following sample was diluted due to the presence of Total Manganese which interferes with Silver and Thallium and the sample was also diluted for Total Beryllium, Cadmium, Cobalt, Copper, Magnesium, Nickel, Lead, Antimony, Selenium, and Vanadium due to the nature of the sample matrix : GPW5 (480-84764-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW2
Date Collected: 07/29/15 11:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			08/04/15 00:26	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			08/04/15 00:26	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			08/04/15 00:26	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			08/04/15 00:26	20
1,1-Dichloroethane	ND		20	7.6	ug/L			08/04/15 00:26	20
1,1-Dichloroethene	ND		20	5.8	ug/L			08/04/15 00:26	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			08/04/15 00:26	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			08/04/15 00:26	20
1,2-Dibromoethane	ND		20	15	ug/L			08/04/15 00:26	20
1,2-Dichlorobenzene	ND		20	16	ug/L			08/04/15 00:26	20
1,2-Dichloroethane	ND		20	4.2	ug/L			08/04/15 00:26	20
1,2-Dichloropropane	ND		20	14	ug/L			08/04/15 00:26	20
1,3-Dichlorobenzene	ND		20	16	ug/L			08/04/15 00:26	20
1,4-Dichlorobenzene	ND		20	17	ug/L			08/04/15 00:26	20
2-Hexanone	ND		100	25	ug/L			08/04/15 00:26	20
2-Butanone (MEK)	ND		200	26	ug/L			08/04/15 00:26	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			08/04/15 00:26	20
Acetone	ND		200	60	ug/L			08/04/15 00:26	20
Benzene	ND		20	8.2	ug/L			08/04/15 00:26	20
Bromodichloromethane	ND		20	7.8	ug/L			08/04/15 00:26	20
Bromoform	ND		20	5.2	ug/L			08/04/15 00:26	20
Bromomethane	ND		20	14	ug/L			08/04/15 00:26	20
Carbon disulfide	ND		20	3.8	ug/L			08/04/15 00:26	20
Carbon tetrachloride	ND		20	5.4	ug/L			08/04/15 00:26	20
Chlorobenzene	ND		20	15	ug/L			08/04/15 00:26	20
Dibromochloromethane	ND		20	6.4	ug/L			08/04/15 00:26	20
Chloroethane	ND		20	6.4	ug/L			08/04/15 00:26	20
Chloroform	ND		20	6.8	ug/L			08/04/15 00:26	20
Chloromethane	ND		20	7.0	ug/L			08/04/15 00:26	20
cis-1,2-Dichloroethene	**1400**		20	16	ug/L			08/04/15 00:26	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			08/04/15 00:26	20
Cyclohexane	ND		20	3.6	ug/L			08/04/15 00:26	20
Dichlorodifluoromethane	ND		20	14	ug/L			08/04/15 00:26	20
Ethylbenzene	ND		20	15	ug/L			08/04/15 00:26	20
Isopropylbenzene	ND		20	16	ug/L			08/04/15 00:26	20
Methyl acetate	ND		50	26	ug/L			08/04/15 00:26	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			08/04/15 00:26	20
Methylcyclohexane	ND		20	3.2	ug/L			08/04/15 00:26	20
Methylene Chloride	ND		20	8.8	ug/L			08/04/15 00:26	20
Styrene	ND		20	15	ug/L			08/04/15 00:26	20
Tetrachloroethene	ND		20	7.2	ug/L			08/04/15 00:26	20
Toluene	ND		20	10	ug/L			08/04/15 00:26	20
trans-1,2-Dichloroethene	**73**		20	18	ug/L			08/04/15 00:26	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			08/04/15 00:26	20
Trichloroethene	**89**		20	9.2	ug/L			08/04/15 00:26	20
Trichlorofluoromethane	ND		20	18	ug/L			08/04/15 00:26	20
Vinyl chloride	**410**		20	18	ug/L			08/04/15 00:26	20
Xylenes, Total	ND		40	13	ug/L			08/04/15 00:26	20

Client Sample ID: GPW2

Date Collected: 07/29/15 11:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*08/04/15 00:26*	*20*
Toluene-d8 (Surr)	*104*		*71 - 126*		*08/04/15 00:26*	*20*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*08/04/15 00:26*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7.5**		0.20		mg/L		07/31/15 07:35	07/31/15 16:07	1
Antimony	ND		0.020		mg/L		07/31/15 07:35	07/31/15 16:07	1
Arsenic	ND		0.015		mg/L		07/31/15 07:35	07/31/15 16:07	1
Barium	**0.45**		0.0020		mg/L		07/31/15 07:35	07/31/15 16:07	1
Beryllium	ND		0.0020		mg/L		07/31/15 07:35	07/31/15 16:07	1
Cadmium	ND		0.0020		mg/L		07/31/15 07:35	07/31/15 16:07	1
Calcium	**165**		0.50		mg/L		07/31/15 07:35	07/31/15 16:07	1
Chromium	**0.010**		0.0040		mg/L		07/31/15 07:35	07/31/15 16:07	1
Cobalt	**0.0071**		0.0040		mg/L		07/31/15 07:35	07/31/15 16:07	1
Copper	**0.078**		0.010		mg/L		07/31/15 07:35	07/31/15 16:07	1
Iron	**9.0**		0.050		mg/L		07/31/15 07:35	07/31/15 16:07	1
Lead	ND		0.010		mg/L		07/31/15 07:35	07/31/15 16:07	1
Magnesium	**24.8**		0.20		mg/L		07/31/15 07:35	07/31/15 16:07	1
Manganese	**16.6**		0.0030		mg/L		07/31/15 07:35	07/31/15 16:07	1
Nickel	**0.030**		0.010		mg/L		07/31/15 07:35	07/31/15 16:07	1
Potassium	**11.3**		0.50		mg/L		07/31/15 07:35	07/31/15 16:07	1
Selenium	ND		0.025		mg/L		07/31/15 07:35	07/31/15 16:07	1
Silver	ND		0.0060		mg/L		07/31/15 07:35	07/31/15 16:07	1
Sodium	**754**		1.0		mg/L		07/31/15 07:35	07/31/15 16:07	1
Thallium	ND		0.020		mg/L		07/31/15 07:35	07/31/15 16:07	1
Vanadium	**0.012**		0.0050		mg/L		07/31/15 07:35	07/31/15 16:07	1
Zinc	**0.16**		0.010		mg/L		07/31/15 07:35	07/31/15 16:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00025**		0.00020		mg/L		08/06/15 10:40	08/07/15 09:44	1

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW3
Date Collected: 07/29/15 12:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			08/04/15 00:48	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			08/04/15 00:48	50
1,1,2-Trichloroethane	ND		50	12	ug/L			08/04/15 00:48	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			08/04/15 00:48	50
1,1-Dichloroethane	ND		50	19	ug/L			08/04/15 00:48	50
1,1-Dichloroethene	ND		50	15	ug/L			08/04/15 00:48	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			08/04/15 00:48	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			08/04/15 00:48	50
1,2-Dibromoethane	ND		50	37	ug/L			08/04/15 00:48	50
1,2-Dichlorobenzene	ND		50	40	ug/L			08/04/15 00:48	50
1,2-Dichloroethane	ND		50	11	ug/L			08/04/15 00:48	50
1,2-Dichloropropane	ND		50	36	ug/L			08/04/15 00:48	50
1,3-Dichlorobenzene	ND		50	39	ug/L			08/04/15 00:48	50
1,4-Dichlorobenzene	ND		50	42	ug/L			08/04/15 00:48	50
2-Hexanone	ND		250	62	ug/L			08/04/15 00:48	50
2-Butanone (MEK)	ND		500	66	ug/L			08/04/15 00:48	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			08/04/15 00:48	50
Acetone	ND		500	150	ug/L			08/04/15 00:48	50
Benzene	ND		50	21	ug/L			08/04/15 00:48	50
Bromodichloromethane	ND		50	20	ug/L			08/04/15 00:48	50
Bromoform	ND		50	13	ug/L			08/04/15 00:48	50
Bromomethane	ND		50	35	ug/L			08/04/15 00:48	50
Carbon disulfide	ND		50	9.5	ug/L			08/04/15 00:48	50
Carbon tetrachloride	ND		50	14	ug/L			08/04/15 00:48	50
Chlorobenzene	ND		50	38	ug/L			08/04/15 00:48	50
Dibromochloromethane	ND		50	16	ug/L			08/04/15 00:48	50
Chloroethane	ND		50	16	ug/L			08/04/15 00:48	50
Chloroform	ND		50	17	ug/L			08/04/15 00:48	50
Chloromethane	ND		50	18	ug/L			08/04/15 00:48	50
cis-1,2-Dichloroethene	**3100**		50	41	ug/L			08/04/15 00:48	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			08/04/15 00:48	50
Cyclohexane	ND		50	9.0	ug/L			08/04/15 00:48	50
Dichlorodifluoromethane	ND		50	34	ug/L			08/04/15 00:48	50
Ethylbenzene	ND		50	37	ug/L			08/04/15 00:48	50
Isopropylbenzene	ND		50	40	ug/L			08/04/15 00:48	50
Methyl acetate	ND		130	65	ug/L			08/04/15 00:48	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			08/04/15 00:48	50
Methylcyclohexane	ND		50	8.0	ug/L			08/04/15 00:48	50
Methylene Chloride	ND		50	22	ug/L			08/04/15 00:48	50
Styrene	ND		50	37	ug/L			08/04/15 00:48	50
Tetrachloroethene	ND		50	18	ug/L			08/04/15 00:48	50
Toluene	ND		50	26	ug/L			08/04/15 00:48	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			08/04/15 00:48	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			08/04/15 00:48	50
Trichloroethene	**83**		50	23	ug/L			08/04/15 00:48	50
Trichlorofluoromethane	ND		50	44	ug/L			08/04/15 00:48	50
Vinyl chloride	**810**		50	45	ug/L			08/04/15 00:48	50
Xylenes, Total	ND		100	33	ug/L			08/04/15 00:48	50

Client Sample ID: GPW3
Date Collected: 07/29/15 12:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*08/04/15 00:48*	*50*
Toluene-d8 (Surr)	*102*		*71 - 126*		*08/04/15 00:48*	*50*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*08/04/15 00:48*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**55.2**		0.20		mg/L		07/31/15 07:35	07/31/15 16:10	1
Antimony	ND		0.020		mg/L		07/31/15 07:35	07/31/15 16:10	1
Arsenic	**0.056**		0.015		mg/L		07/31/15 07:35	07/31/15 16:10	1
Barium	**3.3**		0.0020		mg/L		07/31/15 07:35	07/31/15 16:10	1
Beryllium	**0.0024**		0.0020		mg/L		07/31/15 07:35	07/31/15 16:10	1
Cadmium	ND		0.0020		mg/L		07/31/15 07:35	07/31/15 16:10	1
Calcium	**136**		0.50		mg/L		07/31/15 07:35	07/31/15 16:10	1
Chromium	**0.11**		0.0040		mg/L		07/31/15 07:35	07/31/15 16:10	1
Cobalt	**0.049**		0.0040		mg/L		07/31/15 07:35	07/31/15 16:10	1
Copper	**0.79**		0.010		mg/L		07/31/15 07:35	07/31/15 16:10	1
Iron	**80.4**		0.050		mg/L		07/31/15 07:35	07/31/15 16:10	1
Lead	**0.062**		0.010		mg/L		07/31/15 07:35	07/31/15 16:10	1
Magnesium	**21.8**		0.20		mg/L		07/31/15 07:35	07/31/15 16:10	1
Manganese	**98.9**		0.0030		mg/L		07/31/15 07:35	07/31/15 16:10	1
Nickel	**0.28**		0.010		mg/L		07/31/15 07:35	07/31/15 16:10	1
Potassium	**21.2**		0.50		mg/L		07/31/15 07:35	07/31/15 16:10	1
Selenium	**0.060**		0.025		mg/L		07/31/15 07:35	07/31/15 16:10	1
Silver	ND		0.0060		mg/L		07/31/15 07:35	07/31/15 16:10	1
Sodium	**702**		1.0		mg/L		07/31/15 07:35	07/31/15 16:10	1
Thallium	ND		0.020		mg/L		07/31/15 07:35	07/31/15 16:10	1
Vanadium	**0.098**		0.0050		mg/L		07/31/15 07:35	07/31/15 16:10	1
Zinc	**0.68**		0.010		mg/L		07/31/15 07:35	07/31/15 16:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0018**		0.00020		mg/L		08/06/15 10:40	08/07/15 09:45	1

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW5
Date Collected: 07/29/15 10:25
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1000	820	ug/L			08/03/15 18:04	1000
1,1,2,2-Tetrachloroethane	ND		1000	210	ug/L			08/03/15 18:04	1000
1,1,2-Trichloroethane	ND		1000	230	ug/L			08/03/15 18:04	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	310	ug/L			08/03/15 18:04	1000
1,1-Dichloroethane	ND		1000	380	ug/L			08/03/15 18:04	1000
1,1-Dichloroethene	ND		1000	290	ug/L			08/03/15 18:04	1000
1,2,4-Trichlorobenzene	ND		1000	410	ug/L			08/03/15 18:04	1000
1,2-Dibromo-3-Chloropropane	ND		1000	390	ug/L			08/03/15 18:04	1000
1,2-Dibromoethane	ND		1000	730	ug/L			08/03/15 18:04	1000
1,2-Dichlorobenzene	ND		1000	790	ug/L			08/03/15 18:04	1000
1,2-Dichloroethane	ND		1000	210	ug/L			08/03/15 18:04	1000
1,2-Dichloropropane	ND		1000	720	ug/L			08/03/15 18:04	1000
1,3-Dichlorobenzene	ND		1000	780	ug/L			08/03/15 18:04	1000
1,4-Dichlorobenzene	ND		1000	840	ug/L			08/03/15 18:04	1000
2-Hexanone	ND		5000	1200	ug/L			08/03/15 18:04	1000
2-Butanone (MEK)	ND		10000	1300	ug/L			08/03/15 18:04	1000
4-Methyl-2-pentanone (MIBK)	ND		5000	2100	ug/L			08/03/15 18:04	1000
Acetone	ND		10000	3000	ug/L			08/03/15 18:04	1000
Benzene	ND		1000	410	ug/L			08/03/15 18:04	1000
Bromodichloromethane	ND		1000	390	ug/L			08/03/15 18:04	1000
Bromoform	ND		1000	260	ug/L			08/03/15 18:04	1000
Bromomethane	ND		1000	690	ug/L			08/03/15 18:04	1000
Carbon disulfide	ND		1000	190	ug/L			08/03/15 18:04	1000
Carbon tetrachloride	ND		1000	270	ug/L			08/03/15 18:04	1000
Chlorobenzene	ND		1000	750	ug/L			08/03/15 18:04	1000
Dibromochloromethane	ND		1000	320	ug/L			08/03/15 18:04	1000
Chloroethane	ND		1000	320	ug/L			08/03/15 18:04	1000
Chloroform	ND		1000	340	ug/L			08/03/15 18:04	1000
Chloromethane	ND	*	1000	350	ug/L			08/03/15 18:04	1000
cis-1,2-Dichloroethene	**25000**		1000	810	ug/L			08/03/15 18:04	1000
cis-1,3-Dichloropropene	ND		1000	360	ug/L			08/03/15 18:04	1000
Cyclohexane	ND		1000	180	ug/L			08/03/15 18:04	1000
Dichlorodifluoromethane	ND		1000	680	ug/L			08/03/15 18:04	1000
Ethylbenzene	ND		1000	740	ug/L			08/03/15 18:04	1000
Isopropylbenzene	ND		1000	790	ug/L			08/03/15 18:04	1000
Methyl acetate	ND		2500	1300	ug/L			08/03/15 18:04	1000
Methyl tert-butyl ether	ND		1000	160	ug/L			08/03/15 18:04	1000
Methylcyclohexane	ND		1000	160	ug/L			08/03/15 18:04	1000
Methylene Chloride	ND		1000	440	ug/L			08/03/15 18:04	1000
Styrene	ND		1000	730	ug/L			08/03/15 18:04	1000
Tetrachloroethene	ND		1000	360	ug/L			08/03/15 18:04	1000
Toluene	ND		1000	510	ug/L			08/03/15 18:04	1000
trans-1,2-Dichloroethene	ND		1000	900	ug/L			08/03/15 18:04	1000
trans-1,3-Dichloropropene	ND		1000	370	ug/L			08/03/15 18:04	1000
Trichloroethene	**1700**		1000	460	ug/L			08/03/15 18:04	1000
Trichlorofluoromethane	ND		1000	880	ug/L			08/03/15 18:04	1000
Vinyl chloride	**1900**		1000	900	ug/L			08/03/15 18:04	1000
Xylenes, Total	ND		2000	660	ug/L			08/03/15 18:04	1000

Client Sample ID: GPW5

Date Collected: 07/29/15 10:25
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*08/03/15 18:04*	*1000*
Toluene-d8 (Surr)	*103*		*71 - 126*		*08/03/15 18:04*	*1000*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*08/03/15 18:04*	*1000*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**25.4**		0.20		mg/L		07/31/15 07:35	07/31/15 16:13	1
Antimony	ND		0.10		mg/L		07/31/15 07:35	08/03/15 11:15	5
Arsenic	**0.029**		0.015		mg/L		07/31/15 07:35	07/31/15 16:13	1
Barium	**2.9**		0.0020		mg/L		07/31/15 07:35	07/31/15 16:13	1
Beryllium	ND		0.010		mg/L		07/31/15 07:35	08/03/15 11:15	5
Cadmium	ND		0.010		mg/L		07/31/15 07:35	08/03/15 11:15	5
Calcium	**170**		0.50		mg/L		07/31/15 07:35	07/31/15 16:13	1
Chromium	**0.074**		0.0040		mg/L		07/31/15 07:35	07/31/15 16:13	1
Cobalt	ND		0.020		mg/L		07/31/15 07:35	08/03/15 11:15	5
Copper	**0.14**		0.050		mg/L		07/31/15 07:35	08/03/15 11:15	5
Iron	**43.6**		0.050		mg/L		07/31/15 07:35	07/31/15 16:13	1
Lead	ND		0.050		mg/L		07/31/15 07:35	08/03/15 11:15	5
Magnesium	**36.7**		1.0		mg/L		07/31/15 07:35	08/03/15 11:15	5
Manganese	**180**	^	0.015		mg/L		07/31/15 07:35	08/03/15 11:15	5
Nickel	**0.053**		0.050		mg/L		07/31/15 07:35	08/03/15 11:15	5
Potassium	**10.5**		0.50		mg/L		07/31/15 07:35	07/31/15 16:13	1
Selenium	ND		0.13		mg/L		07/31/15 07:35	08/03/15 11:15	5
Silver	ND		0.030		mg/L		07/31/15 07:35	08/03/15 11:15	5
Sodium	**198**		1.0		mg/L		07/31/15 07:35	07/31/15 16:13	1
Thallium	ND		0.10		mg/L		07/31/15 07:35	08/03/15 11:15	5
Vanadium	**0.053**		0.025		mg/L		07/31/15 07:35	08/03/15 11:15	5
Zinc	**0.32**		0.010		mg/L		07/31/15 07:35	07/31/15 16:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00039**		0.00020		mg/L		08/06/15 10:40	08/07/15 09:47	1

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW6
Date Collected: 07/29/15 13:45
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/04/15 01:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/04/15 01:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/04/15 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/04/15 01:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/04/15 01:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/04/15 01:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/04/15 01:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/04/15 01:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/04/15 01:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/04/15 01:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/04/15 01:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/04/15 01:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/04/15 01:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/04/15 01:11	1
2-Hexanone	ND		5.0	1.2	ug/L			08/04/15 01:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/04/15 01:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/04/15 01:11	1
Acetone	ND		10	3.0	ug/L			08/04/15 01:11	1
Benzene	ND		1.0	0.41	ug/L			08/04/15 01:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/04/15 01:11	1
Bromoform	ND		1.0	0.26	ug/L			08/04/15 01:11	1
Bromomethane	ND		1.0	0.69	ug/L			08/04/15 01:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/04/15 01:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/04/15 01:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/04/15 01:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/04/15 01:11	1
Chloroethane	ND		1.0	0.32	ug/L			08/04/15 01:11	1
Chloroform	ND		1.0	0.34	ug/L			08/04/15 01:11	1
Chloromethane	ND		1.0	0.35	ug/L			08/04/15 01:11	1
cis-1,2-Dichloroethene	**20**		1.0	0.81	ug/L			08/04/15 01:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/04/15 01:11	1
Cyclohexane	ND		1.0	0.18	ug/L			08/04/15 01:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/04/15 01:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/04/15 01:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/04/15 01:11	1
Methyl acetate	ND		2.5	1.3	ug/L			08/04/15 01:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/04/15 01:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/04/15 01:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/04/15 01:11	1
Styrene	ND		1.0	0.73	ug/L			08/04/15 01:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/04/15 01:11	1
Toluene	ND		1.0	0.51	ug/L			08/04/15 01:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/04/15 01:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/04/15 01:11	1
Trichloroethene	**11**		1.0	0.46	ug/L			08/04/15 01:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/04/15 01:11	1
Vinyl chloride	**6.7**		1.0	0.90	ug/L			08/04/15 01:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/04/15 01:11	1

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW6
Date Collected: 07/29/15 13:45
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		08/04/15 01:11	1
Toluene-d8 (Surr)	102		71 - 126		08/04/15 01:11	1
4-Bromofluorobenzene (Surr)	100		73 - 120		08/04/15 01:11	1

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Client Sample ID: GPW2

Date Collected: 07/29/15 11:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	256804	08/04/15 00:26	GTG	TAL BUF
Total/NA	Prep	3005A			256278	07/31/15 07:35	CMM	TAL BUF
Total/NA	Analysis	6010C		1	256635	07/31/15 16:07	AMH	TAL BUF
Total/NA	Prep	7470A			257332	08/06/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	257619	08/07/15 09:44	JRK	TAL BUF

Client Sample ID: GPW3

Date Collected: 07/29/15 12:15
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	256804	08/04/15 00:48	GTG	TAL BUF
Total/NA	Prep	3005A			256278	07/31/15 07:35	CMM	TAL BUF
Total/NA	Analysis	6010C		1	256635	07/31/15 16:10	AMH	TAL BUF
Total/NA	Prep	7470A			257332	08/06/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	257619	08/07/15 09:45	JRK	TAL BUF

Client Sample ID: GPW5

Date Collected: 07/29/15 10:25
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	256667	08/03/15 18:04	JWG	TAL BUF
Total/NA	Prep	3005A			256278	07/31/15 07:35	CMM	TAL BUF
Total/NA	Analysis	6010C		1	256635	07/31/15 16:13	AMH	TAL BUF
Total/NA	Prep	3005A			256278	07/31/15 07:35	CMM	TAL BUF
Total/NA	Analysis	6010C		5	256850	08/03/15 11:15	LMH	TAL BUF
Total/NA	Prep	7470A			257332	08/06/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	257619	08/07/15 09:47	JRK	TAL BUF

Client Sample ID: GPW6

Date Collected: 07/29/15 13:45
Date Received: 07/29/15 17:23

Lab Sample ID: 480-84764-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	256804	08/04/15 01:11	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

Method Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Standard Portable:Site# C907030A

TestAmerica Job ID: 480-84764-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-84764-1	GPW2	Water	07/29/15 11:15	07/29/15 17:23
480-84764-2	GPW3	Water	07/29/15 12:15	07/29/15 17:23
480-84764-3	GPW5	Water	07/29/15 10:25	07/29/15 17:23
480-84764-4	GPW6	Water	07/29/15 13:45	07/29/15 17:23

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228
(716) 691-2600 phone
(716) 691-7991 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	**Project Manager: Eric Popken (GES)**	**Site Contact: Jennifer Clay (GE**	**Date:** 7/29/15	COC No:
David Locey (NYSDEC - Region 9)	**Tel/Fax: (800) 287-7857 ext. 4345**	**Lab Contact: Brian J Fischer**	**Carrier:**	1 of 1 COCs
270 Michigan Ave.	**Analysis Turnaround Time**			Sampler:
Buffalo, NY 14203	☑ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
(716) 851-7220 Phone	TAT if different from Below _____			Walk-in Client:
Fax	☑ 2 weeks			Lab Sampling:
Project Name: Mayville (Standard Portable Site)	☐ 1 week			
Site: C907030A	☐ 2 days			Job / SDG No.:
PO #:	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCL VOCs via 8260C	TAL Metals via 6010C, 7470A	Sample Specific Notes:
										480-060093
GPW2	7/29/15	11:15	G	W	4	N		X	X	
GPW3		12:15	G	W	4	N		X	X	
~~GPW4~~			~~G~~	W		~~N~~		X		
GPW5		10:25	G	W	4	N		X	X	
GPW6		13:45	G	W	3	N		X		
Trip Blank	↓	-	-	W		-		X		

480-84764 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Send lab report to epopken@gesonline.com & buffalolabs@gesonline.com

SAME DAY, WOW!, CE

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 4.8	Corr'd:	Therm ID No.: #1	
Relinquished by:	Company: GES	Date/Time: 7/29/15 17:23	Received by:	Company:	Date/Time: 7/29/15	1723
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:	

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

8/7/2015

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-84764-1

Login Number: 84764 **List Source: TestAmerica Buffalo**
List Number: 1
Creator: Kinecki, Kenneth P

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	6.8 C, same day with ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix B

HEI Routine Progress Report July 2015

HAZARD EVALUATIONS

HAZARD EVALUATIONS, INC. · 3752 N. BUFFALO ROAD · ORCHARD PARK, NEW YORK 14127
PHONE (716) 667-3130 · FAX (716) 667-3156 · www.hazardevaluations.com

February 26, 2016

David Locey, Project Manager
New York State Department of Environmental Conservation
Division of Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203

Re: **Routine Progress Report – September 2015 to February 2016;**
Standard Portable Site, 13 West Lake Road, Mayville, New York
BCA #C907030

Dear Mr. Locey:

This sixty first Routine Progress Report (RPR) has been prepared in accordance with Section XI of the Brownfield Cleanup Agreement (BCA) between the New York State Department of Environmental Conservation (NYSDEC) and Jo Lyn Enterprises, Ltd (Jo Lyn; d/b/a Standard Portable) for the Standard Portable Site at 13 West Lake Road in Mayville, New York (subject site) as shown on the Locus Plan included in Attachment A. This RPR describes the most recent activities at the above-referenced site. The following information and referenced attachments summarize the activities completed from September 2015 to February 2016.

Activities Performed During April through August 2015

- Injection and extraction activities are still ceased since the end of October 2014. The system was shut down at the request of NYSDEC following a test injection that included wells on the subject site wells, as well as at off-site locations. NYSDEC experimental activities have expired, however the system is still non-operational. Therefore, no site visits were performed from September 2015 through February 2016.

- HEI completed soil borings and soil sampling on March 26-27, 2015 as well as groundwater sampling on July 29 and 30, 2015. The information collected from the soil and groundwater sampling and analysis is summarized on the following figures and tables attached.
  - Figure 1 – Locus Plan
  - Figure 2 – Soil Boring/Monitoring Well Location Plan
  - Figure 3 – Groundwater Contour Map – July 2015
  - Figure 4 – TCE Concentration Isopleth in Soil (4-12' deep) – March 2015
  - Figure 5 – TCE Isopleth in Groundwater – April 2013
  - Figure 6 – TCE Isopleth in Groundwater – October 2014
  - Figure 7 – TCE Isopleth in Groundwater – July 2015
  - Table 1 – Summary of Groundwater Measurements and Elevations
  - Table 2 – Analytical Sample Summary Table
  - Table 3 – Surface and Subsurface Soil Analytical Testing Results
  - Table 4 – Groundwater Analytical Testing Results

- Table 5 – Historical Groundwater Analytical Testing Results

Anticipated Activities for the remainder of 2016

Injection and extraction activities remain ceased due to off-site remedial efforts which utilized on-site monitoring wells.

- Groundwater samples were last collected in July 2015. If requested, HEI can develop a cost estimate to sample/analyze groundwater samples in Summer of 2016.

Reports and Deliverables

The following reports and deliverables will be submitted as indicated:

- Routine e-mail updates will be sent to the NYSDEC as necessary.
- Routine Progress Reports will be submitted as needed, based upon completion of work.

Schedule

The long term schedule related to this site will be guided by the OM&M Plan.

Citizen Participation

The Citizen Participation Plan (CPP) was submitted in draft to NYSDEC in December, 2006. The CPP was approved by NYSDEC on December 8, 2006. The CPP addresses establishment of document repositories at the NYSDEC's Buffalo office and the Mayville Public Library. Copies of all relevant project documents were submitted to the repositories and are recorded in a CPP Document Repository Index, which is included as Attachment 3. Both future reports that are submitted to NYSDEC and Fact Sheets produced by NYSDEC will be provided to the repositories to provide interested persons with updated information regarding site activities.

The information presented above summarizes remedial efforts for the Standard Portable site since the last Routine Progress Report. If you have comments or questions regarding the contents of this Routine Progress Report, please contact me directly.

Very truly yours,
HAZARD EVALUATIONS, INC.

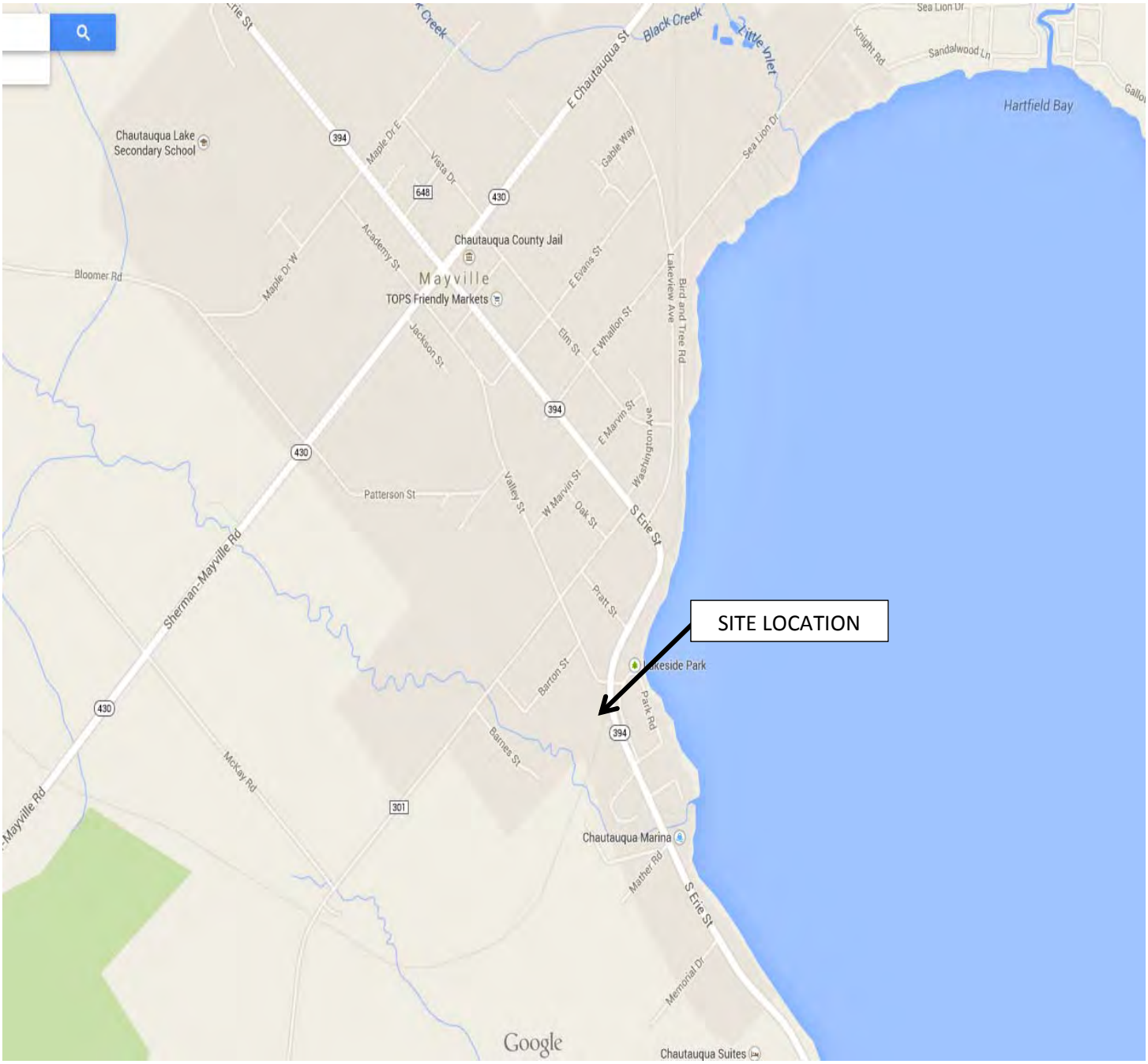
Michele M. Wittman, P.G.
Director of Site Services

Attachments

cc: D. Locey (NYSDEC Region 9)
M. Jaworski (Phillips Lytle)
J. Baraniewicz (Jo Lyn)

Attachment A

Figures



THIS DRAWING IS FOR ILLUSTRATIVE AND INFORMATIONAL PURPOSES ONLY
AND WAS ADAPTED FROM GOOGLE MAPS.

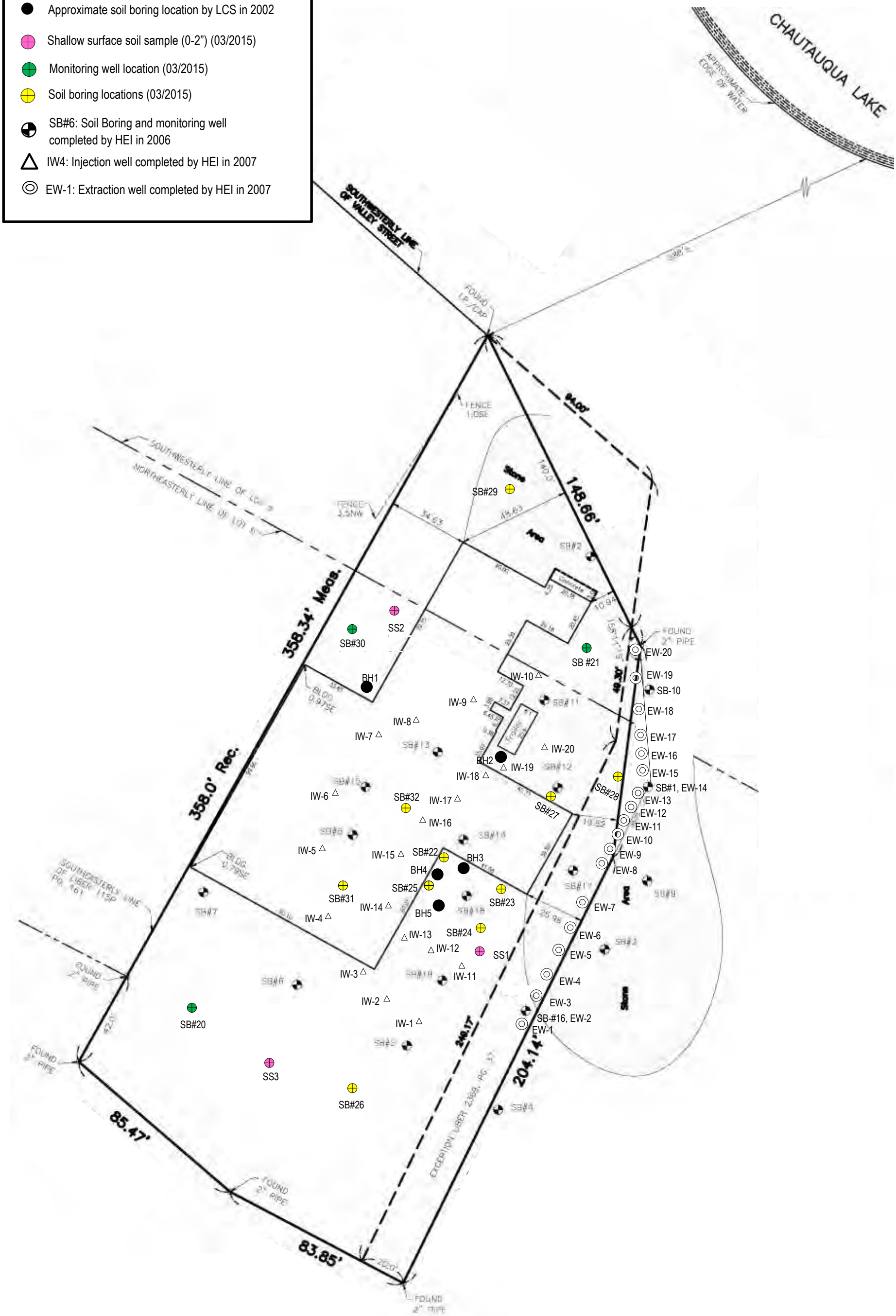
N

HAZARD EVALUATIONS, INC.
Phase I/II Audits – Site Investigations – Facility Inspections

JOLYN ENTERPRISES LTD.
21 VALLEY STREET
MAYVILLE, NEW YORK 14757

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: 24512
CHECKED BY: MW	DATE: 3/15	FIGURE NO: 1

- Approximate soil boring location by LCS in 2002
- Shallow surface soil sample (0-2") (03/2015)
- Monitoring well location (03/2015)
- Soil boring locations (03/2015)
- SB#6: Soil Boring and monitoring well completed by HEI in 2006
- IW4: Injection well completed by HEI in 2007
- EW-1: Extraction well completed by HEI in 2007



HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

SOIL BORING/MONITORING WELL LOCATION MAP

JO LYN ENTERPRISES, LTD.

MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24512
CHECKED BY: MW	DATE: 04/15	FIGURE NO: 2

Legend

- Approximate soil boring location by LCS in 2002
- Shallow surface soil sample (0-2") (03/2015)
- Monitoring well location (03/2015)
- Soil boring locations (03/2015)
- SB#6: Soil Boring and monitoring well completed by HEI in 2006
- IW4: Injection well completed by HEI in 2007
- EW-1: Extraction well completed by HEI in 2007

CHAUTAUQUA LAKE

APPROXIMATE EDGE OF WATER

SOUTHWESTERLY LINE OF VALLEY STREET

FOUND I.P. / CAP

94.00'

148.66'

358.34' Meas.

358.0' Rec.

FENCE LOSE

SOUTHWESTERLY LINE OF LOT 9

NORTHEASTERLY LINE OF LOT 9

FENCE 1.2NW

34.63

45.63

Stone

Area

SB#2

95

94

96

97

SB#29

SS2

SB#30

BH1

SB #21

IW-10

IW-9

IW-8

IW-7

IW-20

BH2

IW-19

IW-18

IW-6

SB#32

IW-17

IW-16

SB#28

SB#27

IW-5

IW-15

SB#22

BH3

BH4

SB#25

SB#23

SB#31

IW-14

BH5

IW-4

IW-13

SB#24

IW-12

SS1

IW-3

IW-11

IW-2

IW-1

SB#20

SS3

SB#26

SB-#16, EW-2

EW-1

EW-20

EW-19

SB-10

EW-18

EW-17

EW-16

EW-15

SB#1, EW-14

EW-13

EW-12

EW-11

EW-10

EW-9

EW-8

EW-7

EW-6

EW-5

EW-4

EW-3

49.30'

240.17'

204.14'

EXCEPTION LIBER 2369, PG

85.47'

83.85'

FOUND 2" PIPE

BLDG. 0.97SE

BLDG. 0.79SE

SOUTHEASTERLY LINE OF LIBER 1159 PG. 161

42.01'

20.00'

Groundwater Elevations
July 2015

Well	Groundwater Elevation
SB-2	-
SB-6	96.60
SB-8	95.47
SB-11	95.46
SB-12	97.44
SB-13	96.04
SB-14	96.58
SB-18	94.80
SB-19	97.95
SB-20	95.66
SB-21	94.76
SB-30	95.56
EW-2 (SB-16)	95.43
EW-7	95.11
EW-14 (SB-1)	95.67
EW-20	93.96

N

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

GROUNDWATER CONTOUR MAP – July 2015

JO LYN ENTERPRISES, LTD.

MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24512
CHECKED BY: MW	DATE: 0924500/15	FIGURE NO: 3

Legend

- Approximate soil boring location by LCS in 2002
- Shallow surface soil sample (0-2") (03/2015)
- Monitoring well location (03/2015)
- Soil boring locations (03/2015)
- SB#6: Soil Boring and monitoring well completed by HEI in 2006
- IW4: Injection well completed by HEI in 2007
- EW-1: Extraction well completed by HEI in 2007

Soil TCE Isopleth Concentration (ppb)

- 1,000 ppb
- 10,000 ppb
- 100,000 ppb
- 250,000 ppb
- 500,000 ppb

CHAUTAUQUA LAKE

APPROXIMATE EDGE OF WATER

SOUTHWESTERLY LINE OF VALLEY STREET

FOUND LP / CAP

94.00'

148.66'

FENCE LOSE

SOUTHWESTERLY LINE OF LOT 5

NORTHEASTERLY LINE OF LOT 5

358.34' Meas.

358.0' Rec.

SOUTHEASTERLY LINE OF LIBER 1152 PG. 161

FOUND 2" PIPE

42.0'

85.47'

83.85'

FOUND 2" PIPE

FOUND 2" PIPE

EXCEPTION LIBER 2369, PG. 31

204.14'

SB#29, SB#30, SB#31, SB#20, SB#26, SS2, SS3, SS1, SB#21, SB#32, SB#22, SB#25, SB#23, SB#24, SB#27, SB#28, SB#1, EW-14, BH1, BH2, BH3, BH4, BH5, IW-1, IW-2, IW-3, IW-4, IW-5, IW-6, IW-7, IW-8, IW-9, IW-10, IW-11, IW-12, IW-13, IW-14, IW-15, IW-16, IW-17, IW-18, IW-19, IW-20, EW-1, EW-2, EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, EW-9, EW-10, EW-11, EW-12, EW-13, EW-15, EW-16, EW-17, EW-18, EW-19, EW-20, SB-10, SB-#16, EW-2

1,000

10,000

100,000

250,000

500,000

1,000

10,000

100,000

N

TCE Soil Concentration (ppb)			
Date	Location	Depth	Concentration
May-02	SB5	8-12	706
	SB8	4-8	1,980
	SB10	8-122	4,040
	SB11	4-8	1,820
	SB13	4-8	2,560
	SB16	8-12	2,110
	SB17	8-12	6,510
	SB18	8-12	8,720
Mar-15	SB20	8-12	29
	SB21	8-10	ND
	SB22	4-6	1,000,000
	SB23	8-10.5	760
	SB24	9-11	2,200
	SB25	6-8	21,000
	SB26	10-12	51
	SB27	8-12	220,000
	SB28	10-12	380,000
	SB29	8-12	1.3
	SB30	10-12	ND
	SB31	8-10	ND
	SB37	9.5-11.5	1,600

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

TCE CONCENTRATION ISOPLETH IN SOIL (4-12' DEEP)
MARCH 2015
JO LYN ENTERPRISES, LTD.
MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24517
CHECKED BY: MW	DATE: 09/2015	FIGURE NO: 4

KEY

SB#6: Soil Boring and monitoring well completed by HEI in 2006

IW4: Injection well completed by HEI in 2007

EW-1: Extraction well completed by HEI in 2007

GW TCE Isopleth Concentration (ppb)

- 1,000 ppb
- 2,500 ppb
- 100,000 ppb
- 250,000 ppb
- 500,000 ppb

CHAUTAUQUA LAKE

APPROXIMATE EDGE OF WATER

SOUTHWESTERLY LINE OF VALLEY STREET

FOUND I.P. / CAP

94.00'

148.66'

FENCE LOSE

SOUTHWESTERLY LINE OF LOT 9

NORTHEASTERLY LINE OF LOT 9

358.34' Meas.

358.0' Rec.

BLDG. 0.97SE

BLDG. 0.79SE

SOUTHEASTERLY LINE OF LIBER 1152 PG. 161

FOUND 2" PIPE

42.0'

85.47'

83.85'

20.0'

240.17'

204.14'

EXCEPTION LIBER 2369, PG. 31

FOUND 2" PIPE

SB#1, EW-14

SB#2

SB#3

SB#4

SB#5

SB#6

SB#7

SB#8

SB#9

SB#10

SB#11

SB#12

SB#13

SB#14

SB#15

SB#16

SB#17

SB#18

EW-1

EW-2

EW-3

EW-4

EW-5

EW-6

EW-7

EW-8

EW-9

EW-10

EW-11

EW-12

EW-13

EW-15

EW-16

EW-17

EW-18

EW-19

EW-20

SB-10

IW-1

IW-2

IW-3

IW-4

IW-5

IW-6

IW-7

IW-8

IW-9

IW-10

IW-11

IW-12

IW-13

IW-14

IW-15

IW-16

IW-17

IW-18

IW-19

IW-20

1,000

2,500

100,000

250,000

500,000

TCE GWConcentration (ppb) April 10, 2013	
Location	Concentration
SB1/EW14	790,000
SB2	NT
SB6	NT
SB8	44
SB11	35
SB12	260,000
SB13	170
SB14	NT
SB16/EW2	6.2
SB18	1,110
SB19	NT
SB20	N/A
SB21	N/A
SB30	N/A
EW7	120,000
EW16	340,000
EW20	6,400

*Concentrations are in ppb

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

TCE ISOPLETH IN GROUNDWATER – APRIL 2013

JO LYN ENTERPRISES, LTD.

MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24517
CHECKED BY: MW	DATE: 09/15	FIGURE NO: 5

KEY

SB#6: Soil Boring and monitoring well completed by HEI in 2006

IW4: Injection well completed by HEI in 2007

EW-1: Extraction well completed by HEI in 2007

GW TCE Isopleth Concentration (ppb)

- 1,000 ppb
- 2,500 ppb
- 100,000 ppb
- 250,000 ppb

CHAUTAUQUA LAKE

APPROXIMATE EDGE OF WATER

SOUTHWESTERLY LINE OF VALLEY STREET

FOUND LP / CAP

94.00'

148.66'

358.34' Meas.

358.0' Rec.

FENCE LOSE

SOUTHWESTERLY LINE OF LOT 5

NORTHEASTERLY LINE OF LOT 5

FENCE 1.2NW

34.63

45.63

140.0

Stone

Area

SB#2

Concrete

10.94

BLDG. 0.97SE

SB#11

IW-10

IW-9

IW-8

IW-7

SB#13

IW-20

IW-19

IW-18

SB#12

SB#15

IW-6

IW-17

IW-16

SB#9

SB#14

IW-5

IW-15

BLDG. 0.79SE

SOUTHEASTERLY LINE OF LIBER 1152 PG. 161

SB#7

IW-14

SB#16

IW-4

IW-13

IW-12

IW-11

IW-3

SB#10

SB#18

IW-2

IW-1

SB#8

FOUND 2" PIPE

42.0'

85.47'

FOUND 2" PIPE

83.85'

FOUND 2" PIPE

EXCEPTION LIBER 2369, PG. 31

240.17'

204.14'

SB#4

SB#3

SB#17

SB#1

EW-20

EW-19

SB-10

EW-18

EW-17

EW-16

EW-15

SB#1, EW-14

EW-13

EW-12

EW-11

EW-10

EW-9

EW-8

EW-7

EW-6

EW-5

EW-4

EW-3

SB-#16, EW-2

EW-1

1,000

2,500

100,000

250,000

TCE GWConcentration (ppb) Sept. 31-Oct. 1, 2014	
Location	Concentration
SB1/EW14	480,000
SB2	NT
SB6	0.51
SB8	49
SB11	32
SB12	270,000
SB13	96
SB14	2,000
SB16/EW2	110
SB18	3,100
SB19	25
SB20	N/A
SB21	N/A
SB30	N/A
EW7	140,000
EW16	NT
EW20	3,500

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

TCE ISOPLETH IN GROUNDWATER – OCTOBER 2014

JO LYN ENTERPRISES, LTD.

MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24517
CHECKED BY: MW	DATE: 09/15	FIGURE NO: 6

Legend

- Approximate soil boring location by LCS in 2002
- Shallow surface soil sample (0-2") (03/2015)
- Monitoring well location (03/2015)
- Soil boring locations (03/2015)
- SB#6: Soil Boring and monitoring well completed by HEI in 2006
- IW4: Injection well completed by HEI in 2007
- EW-1: Extraction well completed by HEI in 2007

GW TCE Isopleth Concentration (ppb)

- 1,000 ppb
- 5,000 ppb
- 10,000 ppb
- 25,000 ppb

CHAUTAUQUA LAKE

APPROXIMATE EDGE OF WATER

SOUTHWESTERLY LINE OF VALLEY STREET

FOUND LP / CAP

148.66'

94.00'

FENCE LOSE

SOUTHWESTERLY LINE OF LOT 6

NORTHEASTERLY LINE OF LOT 6

358.34' Meas.

358.0' Rec.

SOUTHEASTERLY LINE OF LIBER 1152 PG. 161

FOUND 2" PIPE

42.0'

85.47'

83.85'

240.17'

204.14'

EXCEPTION LIBER 2369, PG. 37

SB#29, SB#30, SB#20, SB#31, SB#32, SB#22, SB#25, SB#24, SB#23, SB#27, SB#28, SB#21, SB#1, EW-14, SB-10, SB#26, SS1, SS2, SS3

BH1, BH2, BH3, BH4, BH5

IW-1, IW-2, IW-3, IW-4, IW-5, IW-6, IW-7, IW-8, IW-9, IW-10, IW-11, IW-12, IW-13, IW-14, IW-15, IW-16, IW-17, IW-18, IW-19, IW-20

EW-1, EW-2, EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, EW-9, EW-10, EW-11, EW-12, EW-13, EW-14, EW-15, EW-16, EW-17, EW-18, EW-19, EW-20

SB#16, EW-2

1,000
5,000
10,000
25,000

TCE GWConcentration (ppb) July 29-30, 2015	
Location	Concentration
EW7	17,000
EW16	NT
EW20	180

N

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

TCE ISOPLETH IN GROUNDWATER - JULY 2015

JO LYN ENTERPRISES, LTD.

MAYVILLE, NEW YORK

DRAWN BY: LSH	SCALE: 1" = 40'	PROJECT: 24517
CHECKED BY: MW	DATE: 09/15	FIGURE NO: 7

Attachment B

Tables

Table 1
Summary of Groundwater Measurements and Elevations
21 Valley Street
Mayville, New York
July 2015

Well	Reference Elevation (*)	Depth to Water (**)	Depth to Product (**)	Depth to Bottom(**)	Groundwater Elevation
Monitoring Wells					
SB-2	97.60	NG	-	-	-
SB-6	101.25	4.65	-	9.45	96.60
SB-8	98.27	2.80	-	11.15	95.47
SB-11	97.98	2.50	-	7.60	95.48
SB-12	99.56	2.12	-	8.75	97.44
SB-13	99.19	3.15	-	11.30	96.04
SB-14	99.68	3.10	-	7.80	96.58
SB-18	97.60	2.80	-	8.00	94.80
SB-19	101.25	3.30	-	7.65	97.95
SB-20	100.21	4.55	-	11.30	95.66
SB-21	97.81	3.05	-	10.95	94.76
SB-30	98.16	2.60	-	6.80	95.56
Extraction Wells					
EW-1	98.40	NG	-	-	-
EW-2 (SB-16)	98.28	2.85	-	6.55	95.43
EW-3	98.10	NG	-	-	-
EW-4	98.19	NG	-	-	-
EW-5	98.16	NG	-	-	-
EW-6	98.07	NG	-	-	-
EW-7	97.96	2.85	-	13.40	95.11
EW-8	97.87	NG	-	-	-
EW-9	97.86	NG	-	-	-
EW-10	97.70	NG	-	-	-
EW-11	97.66	NG	-	-	-
EW-12	97.70	NG	-	-	-
EW-13	97.67	NG	-	-	-
EW-14 (SB-1)	97.66	1.99	-	11.09	95.67
EW-15	97.58	NG	-	-	-
EW-16	97.69	NG	-	-	-
EW-17	97.46	NG	-	-	-
EW-18	97.50	NG	-	-	-
EW-19	97.40	NG	-	-	-
EW-20	97.56	3.60	-	10.75	93.96

Notes:

* = Relative to Benchmark which is the top of the fire hydrant near the sidewalk (See June 4, 2008 Survey Data)

** = Relative to measuring point, which is top of each well casing (north side).

NG = Not Gauged

Table 2
Analytical Sample Summary Table
21 Valley Street
Mayville, New York
March 2015

Location	Depth/ Interval (bgs)	VOCs EPA Method 8260 TCL	SVOCs EPA Method 8270 TCL	Pesticides EPA METHOD 8081B TCL	Herbicides EPA Method 8151A Long List	PCBs EPA Method 8082A TCL	Metals EPA Method 6010 TAL
Soil Samples - March 2015							
SS1	0-2"	X	X	X	X	X	X
SS2	0-2"	X	X	X	X	X	X
SS3	0-2"	X	X	X	X	X	X
SB20	8'-12'	X	X	X	X	X	X
SB21	8'-10'	X	X	X	X	X	X
SB22	4'-6'	X	X	X	X	X	X
SB23	0-3'	X	X	X	X	X	X
SB23	8'-10.5'	X	X	X	X	X	X
SB24	9'-11'	X	X	X	X	X	X
SB25	6'-8'	X	X	X	X	X	X
SB26	10'-12'	X	X	X	X	X	X
SB27	8'-12'	X	X	X	X	X	X
SB28	10'-12'	X	X	X	X	X	X
SB29	8'-12'	X	X	X	X	X	X
SB29	8'-12' MS	X	X	X	X	X	X
SB29	8'-12' MSD	X	X	X	X	X	X
SB30	10'-12'	X	X	X	X	X	X
SB31	8'-10'	X	X	X	X	X	X
SB32	9.5'-11.5'	X	X	X	X	X	X
SB32	9.5'-11.5' DUP.	X	X	X	X	X	X
Ground Water Samples - July 2015							
SB1/EW14	N/A	X	X	X	X	X	X
SB6	N/A	X	X	X	X	X	X
SB8	N/A	X					
SB11	N/A	X	X	X	X	X	X
SB12	N/A	X					
SB13	N/A	X					
SB14	N/A	X					
SB16/EW2	N/A	X					
SB18	N/A	X	X	X	X	X	X
SB19	N/A	X					
SB20	N/A	X					
SB21	N/A	X					
SB30	N/A	X					
EW7	N/A	X					
EW20	N/A	X					

Notes:

1. MS = Matrix Spike
2. MSD = Matrix Spike Duplicate
3. DUP. = Duplicate
4. bgs = below ground surface
5. VOCs = Volatile Organic Compounds
6. SVOCs = Semi-Volatile Organic Compounds
7. TCL = Target Compound List
8. TAL = Total Analyte List

Table 3
Surface & Subsurface Soil Analytical Testing Results
21 Valley Street
Mayville, New York
March 2015

	Surface Soil			Subsurface Soil																
Parameter	SS1 (0-2") bgs	SS2 (0-2") bgs	SS3 (0-2") bgs	SB20 (8'-12') bgs	SB21 (8'-10') bgs	SB22 (4'-6') bgs	SB23 (0-3') bgs	SB23 (8'-10.5') bgs	SB24 (9'-11') bgs	SB25 (6'-8') bgs	SB26 (10'-12') bgs	SB27 (8'-12') bgs	SB28 (10'-12') bgs	SB29 (8'-12') bgs	SB30 (10'-12') bgs	SB31 (8'-10') bgs	SB32 (9.5'-11.5) bgs	SB 32 DUP (9.5'-11.5) bgs	Unrestricted Use	Restricted Residential	Restricted Commercial	Restricted Industrial
Volatile Organic Compounds - USEPA Method 8260C TCL (ug/kg)																						
1,1-Dichloroethane	ND	ND	ND	0.40J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270	26,000	240,000	480,000
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	110J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	680	100,000	500,000	1,000,000
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	120J	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	100,000	500,000	1,000,000
Acetone	ND	ND	ND	5.7J	6.3J	28,000J	ND	ND	160J	ND	8.1J	ND	ND	6.3J	4.8J	ND	ND	ND	50	100,000	500,000	1,000,000
Carbon disulfide	ND	ND	ND	ND	ND	ND	4,900	ND	ND	4,400	ND	22,000	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
cis-1,2-Dichloroethene	ND	ND	ND	1.9	5.6	12,000J	4,700	2,100	22J	110J	0.87J	4,700	6,100	ND	ND	ND	ND	ND	25	100,000	500,000	1,000,000
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31J	ND	ND	ND	ND	5,400J	ND	ND	NV	NV	NV	NV
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	320	ND	ND	100	41,000	390,000	780,000
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	38J	ND	ND	0.81J	ND	ND	ND	ND	170J	ND	ND	2300*	NV	NV	NV
Methyl cyclohexane	ND	ND	ND	0.35J	ND	ND	580J	ND	ND	ND	0.70J	2100J	ND	ND	ND	19,000	ND	ND	NV	NV	NV	NV
Tetrachloroethene	ND	ND	ND	ND	ND	11,000J	10,000	50J	110	440	0.50J	430J	ND	ND	ND	ND	ND	ND	1,300	19,000	150,000	300,000
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	83J	17J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190	100,000	500,000	1,000,000
Trichloroethene	3.9	ND	0.46J	29	ND	1,000,000	58,000	760	2,200	21,000	51	220,000	380,000	1.3	ND	ND	1,600	2,300	470	2,100	200,000	400,000
Vinyl chloride	ND	ND	ND	ND	1.7J	ND	ND	53J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	900	13,000	20,000
p/m-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,800	ND	ND	260**	100,000*	500,000*	1,000,000*
o-Xylene	ND	ND	ND	ND	ND	ND	ND	20J	ND	ND	ND	ND	ND	ND	ND	150J	ND	ND	260**	100,000*	500,000*	1,000,000*
Semi Volatile Organic Compounds - USEPA Method 8270D TCL (ug/kg)																						
2-Methylnaphthalene	300	180J	ND	ND	ND	ND	120J	ND	ND	ND	ND	ND	ND	ND	ND	270	ND	ND	NV	NV	NV	NV
Acenaphthene	ND	280	170J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20,000	100,000	500,000	1,000,000
Acenaphthylene	150J	740	ND	ND	ND	ND	47J	ND	ND	ND	ND	ND	ND	52J	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Anthracene	85J	1,000	120J	ND	ND	ND	47J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Benzo(a)anthracene	200	3,600	930	ND	ND	ND	220	58J	57J	ND	ND	ND	ND	100J	ND	ND	ND	ND	1,000	1,000	5,600	11,000
Benzo(a)pyrene	260	3,100	770	ND	ND	ND	240	ND	ND	ND	ND	ND	ND	120J	ND	ND	ND	ND	1,000	1,000	1,000	1,100
Benzo(b)fluoranthene	460	4,600	1,100	ND	ND	ND	360	52J	ND	ND	ND	ND	ND	160	ND	ND	ND	ND	1,000	1,000	5,600	11,000
Benzo(ghi)perylene	200	1,700	440	ND	ND	ND	170	ND	ND	ND	ND	ND	ND	78J	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Benzo(k)fluoranthen	190	1,600	420	ND	ND	ND	120	ND	ND	ND	ND	ND	ND	61J	ND	ND	ND	ND	800	3,900	56,000	110,000
Bis(2-ethylhexyl)phthalate	78J	480	100J	56J	ND	ND	ND	ND	ND	100J	53J	57J	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Carbazole	ND	1,300	76J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Chrysene	280	4,000	950	ND	ND	ND	240	73J	54J	ND	ND	ND	ND	120	ND	ND	ND	ND	1,000	3,900	56,000	110,000
Dibenzo(a,h)anthracene	53J	480	99J	ND	ND	ND	42J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	330	330	560	1,100
Dibenzofuran	84J	410	95J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Di-n-butylphthalate	ND	340	72J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48J	ND	ND	ND	ND	NV	NV	NV	NV
Fluoranthene	330	8,500	1,800	ND	ND	ND	410	ND	120	ND	ND	ND	ND	270	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Fluorene	ND	450	94J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30,000	100,000	500,000	1,000,000
Indeno(1,2,3-cd)pyrene	220	2,000	500	ND	ND	ND	210	ND	ND	ND	ND	ND	ND	94J	ND	ND	ND	ND	500	500	5,600	11,000
Naphthalene	280	390	ND	ND	ND	ND	82J	ND	ND	ND	ND	ND	ND	ND	ND	190J	ND	ND	12,000	100,000	500,000	1,000,000
Phenanthrene	180	6,200	500	ND	ND	ND	170	ND	ND	170	ND	ND	ND	78J	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Pyrene	320	6,700	1,500	ND	ND	ND	330	ND	110	ND	ND	ND	ND	210	ND	ND	ND	ND	100,000	100,000	500,000	1,000,000
Pesticides Compounds - USEPA Method 8081B TCL (ug/kg)																						
Endrin	ND	ND	ND	ND	ND	4.40	5.20	7.54	2.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	11,000	89,000	410,000
Herbicides USEPA Method 8151A Long list (mg/kg)																						

Table 3
Surface & Subsurface Soil Analytical Testing Results
21 Valley Street
Mayville, New York
March 2015

	Surface Soil			Subsurface Soil																	
Parameter	SS1 (0-2") bgs	SS2 (0-2") bgs	SS3 (0-2") bgs	SB20 (8'-12') bgs	SB21 (8'-10') bgs	SB22 (4'-6') bgs	SB23 (0-3') bgs	SB23 (8'-10.5') bgs	SB24 (9'-11') bgs	SB25 (6'-8') bgs	SB26 (10'-12') bgs	SB27 (8'-12') bgs	SB28 (10'-12') bgs	SB29 (8'-12') bgs	SB30 (10'-12') bgs	SB31 (8'-10') bgs	SB32 (9.5'-11.5) bgs	SB 32 DUP (9.5'-11.5) bgs	Unrestricted Use	Restricted Residential	Restricted Commercial	Restricted Industrial
PCB's USEPA Method 8082A TCL (ug/kg)																						
Aroclor 1260	171J	69.6	150	ND	ND	594	828	813	431	142J	ND	20.5J	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Aroclor 1268	68J	ND	ND	ND	ND	ND	418	292	145J	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
PCBs, Total	239J	69.6	150	ND	ND	703	1250	1,110	576J	142J	ND	20.5J	ND	ND	ND	ND	ND	ND	100	1,000	1,000	25,000
TAL Metals USEPA Method 6010C Total (mg/kg)																						
Aluminum, Total	9500	9100	8300	5,900	6,500	5700	12000	3,700	4,000	5,200	3,600	6,700	6,700	4,400	3200	3800	5400	5000	NV	NV	NV	NV
Antimony, Total	2.0J	ND	ND	ND	ND	ND	8.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Arsenic, Total	8.1	14	7.8	7.9	8.8	6.1	7.2	4.1	4.2	5.0	5.1	8.0	5.5	6.6	3.3	4.0	6.0	5.4	13	16	16	16
Barium, Total	99	86	47	26	42	18	80	19	13	25	15	41	29	29	13	16	22	15	350	400	400	10,000
Beryllium, Total	1.3	0.40J	0.34J	0.28J	0.28J	0.17J	1.0	0.16J	0.15J	0.22J	0.15J	0.27J	0.33J	0.19J	0.12J	0.14J	0.21J	0.18J	7.2	72	590	2,700
Cadmium, Total	ND	ND	ND	ND	ND	ND	0.36J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	4.3	9.3	60
Calcium, Total	26000	2000	1800	13,000	14,000	1100	29000	33,000	13,000	17,000	22,000	22,000	28,000	22,000	39000	2300	17000	3800	NV	NV	NV	NV
Chromium, Total	9.2	10	7.8	7.8	9.8	6.7	25	6.5	6.1	7.5	5.4	9.6	9.7	6.3	5.8	5.5	7.2	7.2	30	180	1,500	6,800
Cobalt, Total	3.6	3.7	4.6	5.2	6.7	4.6	2.1	3.5	3.7	5.6	3.2	6.6	6.5	4.4	2.6	4.6	6.1	4.3	NV	NV	NV	NV
Copper, Total	57	33	21	13	17	12	360	12	9.6	14	9	30	16	12	8.7	8.5	12	9.6	50	270	270	10,000
Iron, Total	16000	17000	14000	13,000	16,000	12000	12000	11,000	9,700	12,000	10,000	18,000	14,000	13,000	9400	9400	12000	13000	NV	NV	NV	NV
Lead, Total	30	120	30	1.9J	5.0J	2.6J	89	3.0J	2.1J	3.2J	1.4J	130	3.9J	37	0.74J	1.9J	3.1J	0.81J	63	400	1,000	3,900
Magnesium, Total	4800	1400	1800	5,600	6,200	1700	4300	3,900	3,500	6,100	4,600	8,200	9,600	4,200	4500	1600	6300	2400	NV	NV	NV	NV
Manganese, Total	850	280	420	460	320	140	1400	280	170	330	570	380	500	220	550	140	440	300	1,600	2,000	10,000	10,000
Mercury, Total	0.07J	0.4	0.15	0.02J	0.03J	0.06J	0.06J	ND	0.02J	ND	ND	0.02J	ND	0.05J	ND	ND	ND	0.02J	0.18	0.81	2.8	5.7
Nickel, Total	10	8.4	12	14	15	10	11	7.8	8.5	12	7.7	15	14	9.6	6.3	7.6	12	9.0	30	310	310	10,000
Potassium, Total	490	440	400	420	670	270	620	370	350	510	320	740	700	460	320	290	500	290	NV	NV	NV	NV
Selenium, Total	0.82J	0.98J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34J	ND	ND	ND	ND	3.9	180	1,500	6,800
Sodium, Total	170J	ND	ND	45J	71J	ND	200	50J	36J	52J	42J	88J	120J	54	56J	ND	54J	27J	NV	NV	NV	NV
Vanadium, Total	8.8	16	9.9	9.4	12	10	15	8.5	8.5	9.3	8.2	11	11	7.2	9.0	9.1	9.3	13	NV	NV	NV	NV
Zinc, Total	67	120	70	35	45	33	56	25	26	36	24	47	41	59	21	24	35	29	109	10,000	10,000	10,000

Notes:

1. Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/kg = part per billion; mg/kg = parts per million.
3. NT = not tested.
4. NV= no value.
5. ND = not detected above method detection limits.
6. Analytical results compared to NYSDEC Part 375-6; Remedial Program Soil Cleanup Objectives, Table 375-(a) Unrestricted Use Soil Cleanup Objective; and Table 375-6.8(b): Restricted Use Soil Cleanup Objectives
7. * = Analtyical results compared to NYSDEC CP-51 Table 2: Soil Cleanup Levles for Gasoline Contamianted Soils
8. Shading indicates exceedance of NYSDEC Soil Cleanup Objectives.
   - Grey shading indicates exceedance of NYSDEC Unrestricted Restricted Use Soil Cleanup Objectives.
   - Blue shading indicates exceedance of NYSDEC Restricted Residential Use Soil Cleanup Objectives.
   - Yellow shading indicates exceedance of NYSDEC Restricted Commercial Use Soil Cleanup Objectives.
   - Red shading indicates exceedance of NYSDEC Restricted Industrial Use Soil Cleanup Objectives.
9. *= Xylene (mixed) value.

Table 4
Groundwater Analytical Testing Results
21 Valley Street
Mayville, New York
July 2015

	Groundwater															
Parameter	SB1/EW14	SB6	SB8	SB11	SB12	SB13	SB14	SB16/ EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW20	Class GA Criteria (ug/L)
Volatile Organic Compounds - USEPA Method 8260C TCL (ug/L)																
1,1-Dichloroethane	86J	ND	1.9J	ND	ND	ND	ND	0.91J	ND	ND	ND	0.20J	0.28J	ND	ND	5
2-Butanone	ND	33	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	ND	50
2- Hexanone	ND	1.9J	ND	ND	ND	ND	ND	1.3J	ND	ND	ND	ND	ND	ND	ND	50
Acetone	ND	ND	ND	ND	ND	ND	ND	1.8J	ND	ND	ND	ND	ND	ND	3.3J	50
Benzene	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	0.16J	ND	ND	ND	1
cis-1,2-Dichloroethene	79,000	ND	700	2.1J	2,500	8.8	1,200	20	1,400	ND	ND	38	ND	4,800	80	5
Chloroform	ND	ND	ND	0.95J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Cyclohexane	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Methyl cyclohexane	ND	ND	50J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Tetrachloroethene	ND	ND	ND	0.39J	6.6J	1.5	11J	1	ND	1.1	0.27J	0.85	ND	ND	0.56	5
trans-1,2-Dichloroethene	420J	ND	28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3J	5
Trichloroethene	46,000	ND	20	2.2	1,100	62	3,100	47	50	28	16	24	3.9	17,000	180	5
Vinyl chloride	4,900	ND	53	0.94J	200	ND	14J	ND	550	ND	ND	6.5	ND	99J	0.43J	2
Semi Volatile Organic Compounds - USEPA Method 8270D TCL (ug/L)																
2-Methylnaphthalene	0.21J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NV
Acetophenone	18	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NV
Anthracene	0.13J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Benzo(a)anthracene	0.32J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.002
Benzo(a)pyrene	0.20J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	ND
Benzo(b)fluoranthene	0.40J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.002
Benzo(k)fluoranthene	0.15J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.002
Bis(2-ethylhexyl)phthalate	ND	ND	NT	26	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NV
Chrysene	0.48	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.002
Fluoranthene	1.1	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Fluorene	0.15J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Indeno(1,2,3-cd)pyrene	0.09J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.002
Phenanthrene	0.75	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Pyrene	0.76	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Pesticides Compounds - USEPA Method 8081B TCL (ug/L)																
4,4'-DDT	0.024 JPI	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	0.2
Herbicides USEPA Method 8151A Long list (mg/L)																
2,4-D	3.39J	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NV

Table 4
Groundwater Analytical Testing Results
21 Valley Street
Mayville, New York
July 2015

Parameter	Groundwater															
	SB1/EW14	SB6	SB8	SB11	SB12	SB13	SB14	SB16/ EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW20	Class GA Criteria (ug/L)
PCB's USEPA Method 8082A TCL (ug/L)																
Aroclor 1254	0.26	ND	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NV
Aroclor 1260	1.74	ND	NT	ND	NT	NT	NT	NT	0.206	NT	NT	NT	NT	NT	NT	NV
PCBs, Total	2.00	ND	NT	ND	NT	NT	NT	NT	0.206	NT	NT	NT	NT	NT	NT	0.09
TAL Metals USEPA Method 6010C Total (ug/L)																
Aluminum, Total	1,600	ND	NT	5,100	NT	NT	NT	NT	410	NT	NT	NT	NT	NT	NT	100
Antimony, Total	9.6J	ND	NT	ND	NT	NT	NT	NT	19.2J	NT	NT	NT	NT	NT	NT	3
Arsenic, Total	2J	2J	NT	7	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	25
Barium, Total	199	31	NT	207	NT	NT	NT	NT	19	NT	NT	NT	NT	NT	NT	1,000
Calcium, Total	42,000	10,000	NT	70,000	NT	NT	NT	NT	96,000	NT	NT	NT	NT	NT	NT	NV
Chromium, Total	3.8J	ND	NT	7J	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Cobalt, Total	ND	ND	NT	5.4J	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	5
Copper, Total	35.9	ND	NT	23.9	NT	NT	NT	NT	10	NT	NT	NT	NT	NT	NT	200
Iron, Total	2,400	35J	NT	10,000	NT	NT	NT	NT	750	NT	NT	NT	NT	NT	NT	300
Lead, Total	23J	ND	NT	23.6	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	25
Magnesium, Total	10,000	2,300	NT	12,000	NT	NT	NT	NT	7,600	NT	NT	NT	NT	NT	NT	35,000
Manganese, Total	9,070	3.6J	NT	10,200	NT	NT	NT	NT	1,050	NT	NT	NT	NT	NT	NT	300
Nickel, Total	4.9J	ND	NT	13.2J	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	100
Potassium, Total	31,000	900J	NT	4,700	NT	NT	NT	NT	7,900	NT	NT	NT	NT	NT	NT	NV
Silver, Total	3J	ND	NT	3J	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	50
Sodium, Total	540,000	590J	NT	42,000	NT	NT	NT	NT	12,000	NT	NT	NT	NT	NT	NT	20,000
Vanadium, Total	6.4J	ND	NT	10	NT	NT	NT	NT	1.6J	NT	NT	NT	NT	NT	NT	NV
Zinc, Total	23.4J	ND	NT	57.3	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	2,000

Notes:

1. Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are pesented in this table. Refere to Appendix For the full analytical report.
2. ug/L = part per billion; mg/L = parts per million.
3. NT = not tested.
4. NV= no value.
5. ND = not detected above method detection limits.
6. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1999, January 1999 errata sheet, and April 2000 addendum.
7. Gray shading indicates exceedance of NYSDEC Class GA Criteria.
8. Qualifiers: J= Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). P= The RPD (Relative Percent Difference) between the results for the two columns exceeds the method-specified criteria. I= The lower value for the two columns has been reported due to obvious interference.

Table 5
Historical Groundwater Analytical Testing Results
21 Valley Street
Mayville, New York

Parameter	Year	SB1/EW14	SB2	SB6	SB8	SB11	SB12	SB13	SB14	SB16/ EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW16	EW20	Class GA Criteria (ug/L)
Tetrachloroethene	5/12/2006	497**	ND	NT	ND	7.08	NT	3.86	NT	NT	540	4.07	N/A	N/A	N/A	NT	NT	NT	5
	7/23/2008	NT	ND	ND	ND	ND	ND	2.99	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	5
	10/30/2008	NT	ND	ND	ND	15.4	ND	3.96	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	5
	6/24/2009	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	5
	8/9 & 8/23/2012	ND*	ND	ND	ND	5.34	ND	2.78	ND	ND	ND	ND	N/A	N/A	N/A	NT	NT	NT	5
	4/10/2013	550	NT	NT	ND	7.4	ND	2.1	NT	ND***	ND	NT	N/A	N/A	N/A	59	230	51	5
	9/31-10/1/2014	490	NT	ND	ND	7.2	ND	3	ND	1.1	ND	0.99	N/A	N/A	N/A	ND	NT	ND	5
	7/29-7/30/2015	ND	NT	ND	ND	0.39J	6.6J	1.5	11J	1	ND	1.1	0.27J	0.85	ND	ND	NT	0.56	5

Parameter	Year	SB1/EW14	SB2	SB6	SB8	SB11	SB12	SB13	SB14	SB16/EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW16	EW20	Class GA Criteria (ug/L)
Trichloroethene	5/12/2006	132,000**	14.6	NT	773	77.7	NT	552	NT	NT	151,000	86.6	N/A	N/A	N/A	NT	NT	NT	5
	7/23/2008	NT	ND	ND	690	15.9	11,900	202	2,140	NT	1,230	66.4	N/A	N/A	N/A	NT	NT	NT	5
	10/30/2008	NT	2.17	NT	294	99.4	49,000	167	289	NT	7,360	38.2	N/A	N/A	N/A	NT	NT	NT	5
	6/24/2009	1,020,000	ND	ND	271	10.2	4,850	3,500	477	NT	1,330	27.7	N/A	N/A	N/A	NT	NT	NT	5
	8/9 & 8/23/2012	432,000*	2.14	ND	21.5	13	1,790	79.2	578	35.9**	ND	52.6	N/A	N/A	N/A	NT	NT	NT	5
	4/10/2013	790,000	NT	NT	44	35	260,000	170	NT	8.2***	1,110	NT	N/A	N/A	N/A	120,000	340,000	6,400	5
	9/31-10/1/2014	480,000	NT	0.51	49	32	270,000	96	2,000	110	3,100	25	N/A	N/A	N/A	140,000	NT	3,500	5
	7/29-7/30/2015	46,000	NT	ND	20	2	1,100	62	3,100	47	50	28	16	24	4	17,000	NT	180	5

Parameter	Year	SB1/EW14	SB2	SB6	SB8	SB11	SB12	SB13	SB14	SB16/EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW16	EW20	Class GA Criteria (ug/L)
CIS-1,2-Dichloroethene	5/12/2006	18,000**	ND	NT	396	164	NT	33.4	NT	NT	10,500	ND	N/A	N/A	N/A	NT	NT	NT	5
	7/23/2008	NT	ND	ND	564	191	2,430	26.2	178	NT	2,360	6.7	N/A	N/A	N/A	NT	NT	NT	5
	10/30/2008	NT	3.43	ND	175	6.55	3,440	21	43.2	NT	8,450	3.54	N/A	N/A	N/A	NT	NT	NT	5
	6/24/2009	12,500	7.29	ND	203	92.2	1,480	487	176	NT	2,730	ND	N/A	N/A	N/A	NT	NT	NT	5
	8/9 & 8/23/2012	37,800*	3.26	ND	23.3	36	3,750	31.7	378	49.9**	4,840	4.65	N/A	N/A	N/A	NT	NT	NT	5
	4/10/2013	50,000	NT	NT	950	170	6,500	81	NT	2.3***	6,400	NT	N/A	N/A	N/A	26,000	40,000	2,400	5
	9/31-10/1/2014	29,000	NT	ND	1,200	48	14,000	33	470	64	1,900	ND	N/A	N/A	N/A	31,000	NT	4,000	5
	7/29-7/30/2015	79,000	NT	ND	700	2.1J	2,500	8.8	1,200	20	1,400	ND	ND	38	ND	4,800	NT	80	5

Table 5
Historical Groundwater Analytical Testing Results
21 Valley Street
Mayville, New York

Parameter	Year	SB1/EW14	SB2	SB6	SB8	SB11	SB12	SB13	SB14	SB16/EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW16	EW20	Class GA Criteria (ug/L)
Vinyl Chloride	5/12/2006	4,660**	ND	NT	21	6.69	NT	ND	NT	NT	335	ND	N/A	N/A	N/A	NT	NT	NT	2
	7/23/2008	NT	ND	ND	ND	8.55	ND	ND	ND	NT	375	ND	N/A	N/A	N/A	NT	NT	NT	2
	10/30/2008	NT	ND	ND	11.1	ND	ND	ND	ND	NT	264	ND	N/A	N/A	N/A	NT	NT	NT	2
	6/24/2009	ND	ND	ND	7.44	5.08	ND	ND	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	2
	8/9 & 8/23/2012	ND*	ND	ND	ND	ND	356	ND	ND	ND**	423	ND	N/A	N/A	N/A	NT	NT	NT	2
	4/10/2013	ND	NT	NT	96	4.7	ND	ND	NT	ND***	140	NT	N/A	N/A	N/A	420	3,900	ND	2
	9/31 & 10/1/2014	1,800	NT	ND	210	1.4	ND	ND	ND	ND	580	210	N/A	N/A	N/A	2,100	NT	200	2
	7/29-7/30/2015	4,900	NT	ND	53	0.94J	200	ND	14J	ND	550	ND	ND	6.5	ND	99J	NT	0.43J	2

Parameter	Year	SB1/EW14	SB2	SB6	SB8	SB11	SB12	SB13	SB14	SB16/EW2	SB18	SB19	SB20	SB21	SB30	EW7	EW16	EW20	Class GA Criteria (ug/L)
1,1,2- Trichloroethane	5/12/2006	1,210**	ND	NT	NT	ND	NT	ND	NT	NT	1,550	ND	N/A	N/A	N/A	NT	NT	NT	1
	7/23/2008	NT	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	1
	10/30/2008	NT	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	1
	6/24/2009	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	N/A	N/A	N/A	NT	NT	NT	1
	8/9 & 8/23/2012	ND*	ND	ND	ND	ND	ND	ND	ND	ND**	ND	ND	N/A	N/A	N/A	NT	NT	NT	1
	4/10/2013	210	NT	NT	ND	ND	ND	ND	NT	ND***	ND	NT	N/A	N/A	N/A	4.2	ND	ND	1
	9/31 & 10/1/2014	82	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	ND	NT	ND	1
	7/29-7/30/2015	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	1

Notes:

1. Analytical results from "Routine Progress Report- September& October 2014; BCA # C907030, Standard Portable Site, 13 West Lake Road, Mayville, New York & completed by HEI dated October 30, 2014.
2. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1999, January 1999 errata sheet, and April 2000 addendum.
3. ug/L = part per billion
4. NT = not tested; NV = no value.
5. ND = not detected
6. Shading indicates exceedance of NYSDEC Class GA Criteria
7. Quailifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value
8. DL= Diluted.
9. * = sampled on August 23,2012.
10. **= Result does not include free product portion of sample.
11. *** EW-1 was sampled as a substitute for SB-16/EW-2 due to the cover being dislodged on that well upon arrival at the site; sample date (4/10/2013).
12. N/A = Not Available; (monitoring well not installed).

FIELD NOTE COVER SHEET

Scanned By : Jennifer Clay

Field Event Date : 7/29/15

Scannned Date/Time : 7/30/15 15:20

Number of Pages : 16
(including cover)

	CHECK IF APPLICABLE yes	no
Did you collect samples on this day?	☑	☐
Did you generate waste on this day?	☐	☑
Is this a re-scan?	☐	☑

PM approval if notesscanned later than 24 hrs of event. _____
(pm signature)

Project Name: Mayville

Project Number: 0901406

Scope of Work: GWS

Number of COC : 1

Number of _____ : _____
(stockpiles, drums, etc.)

COMMENTS:

Groundwater Environmental Services, Inc.
WORK ORDER FOR FIELD SERVICES
Printed 7/1/2015

Client	NYSDEC	Job Number	0901406	
Site Number	Mayville	Project Manager	Eric Popken	Ext. 4345
Site Location	25 West Lake Rd	Case Manager/Engineer	Eric Popken	Ext. 4345
	Mayville, NY	Client Representative	David Locey	
Dealer Name		Client Phone Number	(716) 851-7220	
Dealer Phone		UFPO Number		

Laboratory	TestAmerica	Date of Work	7/29/15
Lab Code		Requested Personnel	Field Techs
GW Category	See CoC	Work Approved by PM	Date
Scope	GWS		

Task	Task Description	✓	Phase Code	Task Code	Activity Code	Billable Hours	Hours Worked
1	Review entire work order and gather necessary equipment, supplies, and site-specific HASP. *This task should be done before leaving the office.*	✓	05	201		NA	
2	If needed, schedule Detail Officer and/or notify all interested parties of when work will be conducted	✓	05	201		NA	
3	Travel to the site	✓	05	201		NA	
4	Read and sign HASP. If working with subcontractor, conduct tailgate safety meeting	✓	05	201		NA	
5	Perform site walk-over and record all observations in field notes	✓	05	201		NA	
6	Inspect conditions of site wells. Record conditions in notes	✓	05	201		NA	
7	Record which wells require gripper plugs, bolts, and/or locks	✓	05	201		NA	
8	Set up proper safety barriers and calibrate equipment	✓	05	201		NA	
9	Note any safety hazards that should be addressed	✓	05	201		NA	
10	Record 5-gas readings during the intial opening of the monitoring wells. Lower tubing into well and record highest readings for O2, % LEL, H2S, VOCs, and CO	✓	05	201		NA	
11	Gauge and record YSI readings for EW-14, EW-16, EW-20, EW-7, SB-12, GPW2, GPW3, GPW4, GPW5, and GPW6.	✓	05	201		NA	
12	Collect DO (mg/L), pH, Conductivity (µS/cm), ORP, and Temperature (°C) readings from YSI 600 meter. Decon with liquinox between wells.	✓	05	201		NA	
13	Bail 3 vol. Collect samples from GPW2, GPW3, GPW4, GPW5, and GPW6.	✓	05	201		NA	
14	Fill out chain of custody. Analyze all samples for VOCs via 8260C. Analyze GPW2, GPW3, and GPW5 for metals via 6010C and 7470A.	✓	05	201		NA	
15	Deliver samples to Test America.	✓	05	201		NA	
Totals			NA	NA	NA	NA	

Work completed by: Jennifer Clay 7/29/15
Field Personnel Date

Reviewed by:
Field Ops Manager Date

Reviewed by:
Project Manager Date

* This field requires that field personnel initial that they have completed each listed task

Location Mayville, NY Date 7/29/15

Project / Client NYSDEC

JC GWS Sunny 80s 1/2

8:00 - arrive onsite
- 2 Hazards crew looking for wells, covered by gravel/dirt

Vapors

Well ID	O2	% LEL	CO	H_2S	VOC	
SB-12	20.9	0	0	0	6.8	
EW-7	20.9	0	0	0	0.0	
EW-14	18.5	0	0	0	470	
EW-16	19.5	0	0	0	99.6	
EW-20	20.9	0	0	0	open 0.0	hazard (75 ppm)
GPW-2	20.9	0	0	0	0.4	
GPW-3	20.5	0	0	0	15.7	
GPW-4	~~18.5~~	0	0	0	~~0.1~~	spike not located
GPW-5	17.6	0	0	0	22.6	
GPW-6	18.5	0	0	0	0.1	

Well sampling

Well ID	Purge Vol. (gal)	Time	Notes
GPW-2	full of soil 0 poor recharge	11:15	cap missing, plug broken, soil inside
GPW-3	1	12:15	
GPW-4	NOT LOCATED		possibly buried/destroyed
GPW-5	0.9	10:25	
GPW-6	0.6	13:45	

12:30 - 30 min lunch / cooldown / ice breaks

Location Mayville, NY Date 7/29/15

Project / Client NYSDEC

JC GWS Sunny 80s 2/2

Water Quality mg/L µS/cm °C

Well ID	DTW'	TD'	DO	Cond	pH	ORP	Temp
SB-12	2.12'	8.75'	4.08	187	7.30	146.1	17.61
EW-7	2.85'	13.40'	3.30	376	6.92	196.5	21.90
EW-14	1.99'	11.09'	5.73	1207	7.52	206.2	22.31
EW-16	3.42'	13.00'	2.64	734	7.15	214.9	22.81
EW-20	3.60'	10.75'	6.18	266	7.82	155.3	19.58
GPW-2	4.17'	7.00'	well went dry too much dirt				
GPW-3	3.07'	11.99'	2.19	2793	7.87	34.6	22.64
GPW-4	Not located						
GPW-5	4.36'	11.60'	2.97	14	7.29	156.1	20.71
GPW-6	6.24'	11.20'	5.24	814	7.18	125.6	19.13

10:00 - GPW-2 well lid & ring are not attached to pad, pad is broken, casing intact, no cap, alot of coarse sediment inside well & around casing, called PM
- slow recharge will try sampling later

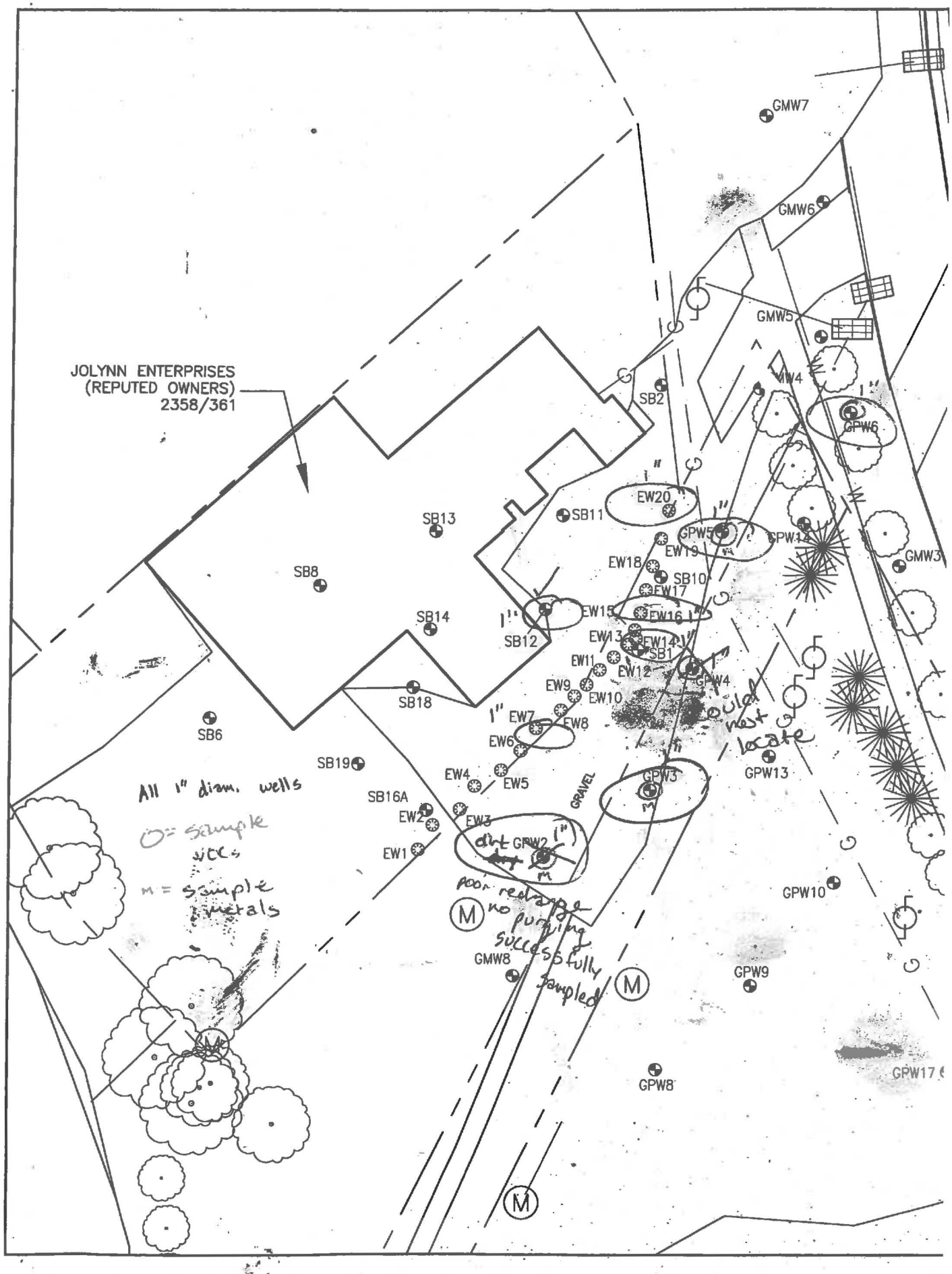
11:20 - GPW-2 sample collected w/out purging

14:00 - Cannot locate GPW-4, called PM
- may be missing/destroyed

~~14:15~~ - try to purge more sediment from GPW-2

14:25 - PM says to skip GPW-4, no substitute

14:45 - pack up, leave site


JOLYNN ENTERPRISES
(REPUTED OWNERS)
2358/361
GMW7
GMW6
GMW5
GMW4
GMW3
SB2
SB13
SB11
SB8
SB14
SB12
SB18
SB6
SB19
SB16A
SB10
SB1
EW20
EW19
EW18
EW17
EW16
EW15
EW14
EW13
EW12
EW11
EW10
EW9
EW8
EW7
EW6
EW5
EW4
EW3
EW2
EW1
GPW6
GPW5
GPW4
GPW3
GPW2
GPW13
GPW10
GPW9
GPW8
GPW17
GMW8
1"
GRAVEL
dirt
All 1" diam. wells
O= sample wells
M = sample metals
could not locate
poor recharge
no purging
successfully sampled
M

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228
(716) 691-2600 phone
(716) 691-7991 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Eric Popken (GES)	Site Contact: Jennifer Clay (GE	Date: 7/29/15	COC No:
David Locey (NYSDEC - Region 9)	Tel/Fax: (800) 287-7857 ext. 4345	Lab Contact: Brian J Fischer	Carrier:	1 of 1 COCs
270 Michigan Ave.	Analysis Turnaround Time			Sampler:
Buffalo, NY 14203	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(716) 851-7220 Phone	TAT if different from Below _____			Walk-in Client:
Fax	☑ 2 weeks			Lab Sampling:
Project Name: Mayville (Standard Portable Site)	☐ 1 week			
Site: C907030A	☐ 2 days			Job / SDG No.:
PO #:	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCL VOCs via 8260C	TAL Metals via 6010C, 7470A	Sample Specific Notes:
GPW2	7/29/15	11:15	G	W	4	N		X	X	
GPW3		12:15	G	W	4	N		X	X	
~~GRW4~~			~~G~~	~~W~~		~~N~~		X		
GPW5		10:25	G	W	4	N		X	X	
GPW6		13:45	G	W	3	N		X		
Trip Blank	↓	-	-	W		-		X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Send lab report to epopken@gesonline.com & buffalolabs@gesonline.com

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:
Relinquished by:	Company: GES	Date/Time: 7/29/15 17:23	Received by:	Company:	Date/Time: 7/29/15 1723
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

- Purge 3 well volumes

= water column x 0.041 gal/ft (1" well)
W c ft x 0.1631 gal/ft (2" well)

GROUNDWATER ELEVATION DATA

STANDARD PORTABLE, INC.
ISCO REMEDIATION SYSTEM

DATE: 04/10/13 **PERSONNEL:** JJK

Well Diam.

Well	Reference Elevation (ft)	Depth to Water (ft**)	Height of Ground Surface Above Ref. Elev.	Depth to Water from Ground Surface	Depth to Product (ft**)	Depth to Bottom (ft**)	Product Thickness	Groundwater Elevation	
Monitoring Wells									
SB-2	97.60	NG	0.46	-	-	-	-	-	
SB-6	101.25	NG	0.10	-	-	-	-	-	
SB-8	98.27	2.12	0.19	2.31	-	14.80	-	95.96	
SB-11	97.98	1.84	0.17	2.01	-	8.48	-	95.97	
SB-12	99.56	1.21	0.38	1.59	-	9.69	-	97.97	1"
SB-13	99.19	2.76	0.15	2.91	-	12.66	-	96.28	
SB-14	99.68	NG	0.27	-	-	-	-	-	
SB-18	97.60	1.81	0.06	1.87	-	7.53	-	95.73	
SB-19	101.25	NG	0.21	-	-	-	-	-	
Extraction Wells									
EW-1	98.40	0.80	0.67	1.47	-	12.69	-	96.93	
EW-2 (SB-16)	98.28	NG	NG	-	-	-	-	-	
EW-3	98.10	NG	NG	-	-	-	-	-	
EW-4	98.19	NG	NG	-	-	-	-	-	
EW-5	98.16	NG	NG	-	-	-	-	-	
EW-6	98.07	NG	NG	-	-	-	-	-	
EW-7	97.96	1.85	0.60	2.45	-	13.70	-	95.51	1"
EW-8	97.87	NG	NG	-	-	-	-	-	
EW-9	97.86	NG	NG	-	-	-	-	-	
EW-10	97.70	NG	NG	-	-	-	-	-	
EW-11	97.66	NG	NG	-	-	-	-	-	
EW-12	97.70	NG	NG	-	-	-	-	-	
EW-13	97.67	NG	NG	-	-	-	-	-	
EW-14 (SB-1)	97.66	6.98	0.74	7.72	-	8.41	-	89.94	4"
EW-15	97.58	NG	NG	-	-	-	-	-	
EW-16	97.69	6.10	0.41	6.51	-	13.39	-	91.18	1"
EW-17	97.46	NG	NG	-	-	-	-	-	
EW-18	97.50	NG	NG	-	-	-	-	-	
EW-19	97.40	NG	NG	-	-	-	-	-	
EW-20	97.56	3.08	0.63	3.71	-	11.70	-	93.85	1"

Notes:
* = Relative to Benchmark which is the top of the fire hydrant near the sidewalk (See June 4, 2008 Survey Data)
** = Relative to measuring point, which is top of each well casing (north side).
NG = Not Gauged

DTW	Well ID	TD (7/2011)	Well Diam. (inch)	TD - DTW	Total Purge vol. (3 well vols.) gal
4.17	GPW2	~~12.62~~ 12.57	1" (0.041)	~3'	x3= 0.369
3.07	GPW3	~~12.68~~	1" (0.041)	~9'	x3= ~1
	GPW4	~~11.20~~	1" (0.041)	NOT LOCATED ?	x3=
4.36	GPW5	~~12.05~~	1" (0.041)	~7'	x3= ~0.9
6.24	GPW6	~~11.60~~	1" (0.041)	~5'	x3= ~0.6

The required flow rate would be about 1 gpm per well in both scenarios. HEI has historically injected at around the .5 gpm per well range, so the 1 gpm per well estimate is not out of the range of feasibility. However, higher flow rates would be preferred during a full scale injection and during the pilot test a maximum flow rate will be investigated during the injection event. It is not anticipate that the flow rates will exceed 5 gpm per well but it is anticipated that the maximum flow rate will fall in the 2-3 gpm per well range.

4.1 Health and Safety Considerations

Due to the nature of the chemical oxidation reactions, potential safety risks may develop. Additionally, preferential flow paths to porous and/or non-native soils, and fill material may develop during the injection process. To manage these potential risks, GES will conduct the following activities during the injection event:

- A detailed account of specific health and safety precautions taken during implementation of this technology will be summarized in the site specific Health and Safety Plan (HASP), the Job Safety Analysis worksheets (JSAs), the Spill Contingency Plan, and the site-specific Contingency Plan, all of which will be available on-site during the execution of the proposed scope of work.
- Groundwater depth will periodically be monitored in selected monitoring wells to determine if excessive groundwater mounding develops during the injection procedure. Further details regarding data collection procedures and methods are provided in **Section 4.2**, below.

4.2 Water Quality Parameter Monitoring

Prior to initiating injection activities, GES will collect baseline parameters including dissolved oxygen (DO), oxidation/reduction potential (ORP), pH, temperature, and conductivity from each of the injection wells and all monitoring wells within 25 feet of the injection wells. These parameters will also be collected on a daily basis from selected wells before, during and immediately following the injection of the permanganate solution. An YSI 600 multi-parameter water quality meter/probe, with a minimum 25-foot long cable will be used to collect these parameters. The probe will be decontaminated between each measurement by rinsing it thoroughly with a solution of Liquidnox, followed by a de-ionized water rinse. These wells will also be field tested for Manganese using the Hach Pocket Colorimeter II Manganese HR System and USEPA periodate oxidation method #8034. A detailed description of this method is provided in **Appendix A**. Additional wells may be added to this monitoring program if the observed Radius of Influence is observed to be greater than 25 feet.

These water quality parameters will also be collected from all of the monitoring wells in the vicinity of the injection after approximately one week, two months, four months and nine months from the conclusion of the proposed injection activities. The water quality parameter data will be evaluated to assess overall distribution of the oxidant and determine an estimated decay rate of the sodium permanganate. This decay rate will be

used to co-ordinate the timing of the post-injection groundwater sampling event as out lined in **Section 4.6.**

4.3 Sodium Permanganate Injection

It is unknown the actual volume of 10% sodium permanganate solution necessary to address the off-site impacts. Additional soil data is required in order to develop an accurate estimation.

During the injection process, a stainless steel wellhead injection assembly (fitted with a flow control valve, check valve, and pressure gauge) will be used to connect to the top of each 2-inch injection well casing. The injection flow rate of the oxidant solution will initially be limited to 0.5 gallons per minute (gpm). The flow rate will then gradually be increased up to a maximum of 3 gpm, depending on the observed well pressures and other field observations. Flow rates will be decreased if well pressures are observed to exceed 15 pounds per square inch (psi), or if excessive groundwater mounding is observed in the surrounding monitoring wells. Groundwater mounding will be monitored periodically in the identified wells in order to adjust injection flow rates if necessary, and to ensure that the sodium permanganate solution does not break through to the surface.

4.4 Injection Equipment Decontamination Procedures

At the completion of injection activities, all oxidant injection process lines and wellheads will be rinsed by flushing each line with water. Any unused oxidant solution will be removed by the chemical vendor at the end of each day. Sodium permanganate will not be stored overnight on-site in any quantity.

4.5 Coordination of Current Onsite System Operation

In order to fully evaluate the effects of the above mentioned Pilot Test, It is recommended that the current groundwater extraction system be shut down for the duration of the pilot test. Coordination with the current system operators in order to protect equipment should be initiated prior to the start of the pilot test program. It is anticipated that the groundwater extraction system will need to remain off-line for a period of at least nine months. Once the lack of presence of sodium permanganate in the extraction well area is confirmed and follow-up groundwater samples are collected, GES and the NYSDEC will inform the property owners that the on-site groundwater extraction system can be reactivated. The current sub slab SVE system should remain operational during the pilot test program. The current ISCO Injection System could remain operational or could be deactivated at the owner's discretion during this pilot test study. It is not anticipated that the potassium permanganate injection would influence the injection area under study.

4.6 Pre-injection and Post-injection Groundwater Sampling

Pre-injection groundwater samples will be collected. Sampling will be conducted prior to mobilization for the injection activities. Post-injection groundwater samples will be collected from the monitoring wells after the permanganate has reacted and is not detected in the well. This is estimated to be between four and nine months following the

injection activities. This estimated time frame will be updated as described in **Section 4.2**, but will be confirmed prior to groundwater sampling. Additional monitoring events as described in **Section 4.2** may be required.

Sampling will consist of measuring depth to water and purging three well volumes from each well prior to sampling. Collected samples will be submitted for laboratory analysis for Full List VOC's via NYSDEC TOGS 1.1.1., and three wells will be selected in the field for analysis of Target Analyte List (TAL) Metals. The wells to be sampled for TAL Metals will be selected during the pre-injection sampling event. The same three wells will be sampled for TAL Metals during the final full round post-injection sampling event. Water quality parameters as described in **Section 4.2** will also be measured at each monitoring location during the groundwater sampling event. The pre-injection and final post-injection sample event will consist of a full round of sampling all offsite monitoring wells.

5.0 SCHEDULE AND REPORTING

The post-injection groundwater quality and parameter data will be used to assess the overall performance of the ISCO application. Upon completion of the first post injection groundwater sampling event, GES will prepare a detailed report summarizing all data collected during the pilot test and subsequent visits.

This report will include recommendations and costs for future remedial work for the site. Additional recommendations that may also be considered include the addition of monitoring wells, adjustments to the assumptions used to calculate oxidant volumes, and modifications to air monitoring and health and safety procedures.

GES is currently finalizing an implementation schedule for this work plan. Once completed, the schedule will be submitted to the NYSDEC under separate cover.

6.0 IN-SITU CHEMICAL OXIDATION PILOT TEST COST ESTIMATES

Presented below is an anticipated cost estimate for the completion of the ISCO application and associated coordination, sampling and reporting. Please note costs do not include applicable taxes.

Job Safety Analysis (JSA)

JSA Title: Groundwater Sampling - Bailer

Date Developed: 2/8/2005	**Revised Date:** 11/7/2014
Initial Development Team: Scott Martin, Case Manager	
Latest Revision by: Julius Pachy, RHSSE	
Quality Review by: Lisa Leclair, LLHSO	

Revision #: 005

This JSA has been fully reviewed with all staff members and all activity job steps, hazards, work practices, and PPE are clearly understood and have been implemented. All necessary revisions have been written on this JSA.

REQUIRED PPE: ☐Air Purifying Respirator; ☐Ear Muffs; ☐Ear Plugs; ☐Face Shield; ☐Fire Retardant Clothing; ☐Gloves (Chemical Resistant, Cut Resistant, Leather, Nitrile, Other); ☐Goggles; ☐Hard Hat; ☐Safety Glasses; ☐Safety-toed Boots; ☐Shirt (Highly-Visible Short/Long Sleeve); ☐Tychem Suit; ☐Tyvek Suit; ☐Vest (Highly Visible Reflective Striped); ***Other:*** Enter other required PPE.

TASK-SPECIFIC TOOLS AND EQUIPMENT: Click here to enter tools and equipment.

Activity/Sequence of Job Tasks	Potential Hazards	Risk Control Measures
Please ensure that all necessary JSAs associated with your work scope have been identified and reviewed.		
A. Locate and Open Onsite Well 1. Locate wells	**1a.** Hand and arm fractures or contusions as a result of tripping and falling when walking or working on uneven surfaces **1b.** Fractures /contusions due to contact with moving vehicles.	**1a.** Inspect the work area and look for uneven areas that may create a tripping hazard. ➢ Plan walking path through work area to avoid the uneven areas ➢ If the path of travel is obstructed (lighting, over growth, clutter...) utilize a walking stick and probe ahead, walk slowly and use caution. ➢ Don safety boots with skid / puncture resistant soles that comply with GES requirements. **1b.** Utilize cones/barricades/safety fence to establish the work zone – Comply with GES Traffic Control program. ➢ Position work vehicle between work area and on-coming traffic. ➢ Do not permit access to work zone by non-essential personnel. ➢ Inform facility personnel of work (restricted) area. ➢ Use "spotter" to warn personnel of approaching vehicles in high traffic areas. ➢ Don high visible sleeved shirt or outerwear, such as high visible traffic vests or clothing. ➢ If working alongside an active roadway, where vehicular traffic is heavy, dawn/dusk hours, or if weather if overcast or rainy, high visible outwear with reflective stripping must be worn.
2. Open wells	**2a.** Cuts or contusions to the hands, fingers, arms or other body parts due to contact with sharp edges of well, well lid or well box **2b.** Back/body sprain/strain from lifting, moving well lids/covers **2c.** Shoulder/body sprain/ resulting from using a socket wrench to loosen and remove bolts from the lid **2d.** Cuts, contusions to knees or legs when kneeling on hard surfaces when opening well.	**2a.** Remove well / manhole covers so that they do not pinch fingers. ➢ Keep body parts (hands, fingers) out from between the lid and well opening. ➢ Use a screwdriver or crowbar to remove the lid or cap. ➢ Don Level II cut resistant gloves **2b.** Ensure path is level and clear of debris/obstacles. ➢ When lifting, bend at the knees; not the waist, keep back and torso straight; don't twist. ➢ When carrying, keep load close to the body. ➢ Items over 50 lbs. or large/awkward items require team lift or mechanical assistance. ➢ Minimize distance over which items must be carried/pushed/pulled by placing equipment/material storage w/in 15' of work area **2c.** Ensure your wrists are straight when using a wrench. ➢ Be sure that the opening of the socket is in full contact with the bolt before you apply pressure. ➢ Pull, don't push. Use a slow, steady motion. If the bolt cannot be loosened with normal force, contact office to discuss options. ➢ Kneel on a solid surface with one foot planted firmly on the floor and don't lean into the work. ***Note:*** *Never use hand sockets with power or impact wrenches. Replace sockets showing cracks or wear.* **2d.** Inspect and eliminate any debris found on the ground prior to kneeling. ➢ If possible, avoid kneeling on ground or hard surface instead crouch down bending at the knees. ➢ Use kneeling pads when kneeling on hard surfaces.
B. Conduct Liquid Gauging 1. Insert interface probe into well and record liquid level reading in site log book	**1a.** Respiratory or skin irritation/inflammation, headache, nausea, dizziness, caused by exposure to site contaminants / organic	**1a.** Do not splash purged water on clothing or skin. ➢ Discuss and implement monitoring and action levels requirements stated in the HASP ➢ If organic vapors are present, replace the well cap and do not proceed until a PID is obtained to scan the atmosphere ensuring that concentrations are below the HASP action levels. ➢ If respirator upgrade is required, contact office LHSO, Site Operations/Project Management before proceeding. ➢ Don required PPE (safety glasses, long pants, nitrile sampling gloves, sleeved shirts).

Hazard Categories: Exposure, Caught (in, under, between, by), Strain/Overexertion, Contact, Falls, Energy Sources

	vapors	***Note:** Be aware that there may be elevated levels of gasoline or product vapors in the wells.*
C. Purge Monitoring Well 1. Set up of equipment; insert bailer into monitoring well and purge water into container at surface NOTE: The use of utility and / or personal knives (i.e., Stanley knives, box cutters, pocket knives) is STRICTLY PROHIBITED.	**1a.** Respiratory or skin irritation/inflammation, headache, nausea, dizziness, caused by exposure to site contaminants/ organic vapors. **1b.** Cuts or contusions to the hands, arms or other body parts due to contact with sharp edges of cutting tools while cutting bailer string **1c.** Back/body sprain / strain from bailing purge water **1d.** Back/body sprain / strain from lifting cooler other equipment	**1a.** Monitor work area with PID and comply with action levels document in HASP table 1 if organic vapors are present. ➢ Read and Comply with all requirements stated in the SDS/MSDS ➢ Do not splash purged water on clothing or skin. ➢ Don required PPE (safety glasses, long pants, nitrile sampling gloves, sleeved shirts). **1b.** Ensure the cutting instrument(s) used are the approved tool for the job, ➢ Individual is trained on the safe usage and are equipped with "self-retracting" blades that CANNOT be overridden by the user (i.e. held out or locked open) or blades that are guarded and do not allow the blade to come in contact with the user. ➢ Ensure blades are sharp and all guards are in place before starting a cut. ➢ Inspect the cutting equipment prior to start of cut. ➢ Cut away from your body and keep hands out of the path of cutting tools. ➢ Don Kevlar Level II Cut Resistant Gloves. **1c.** Take frequent breaks as needed to prevent fatigue to shoulder and arm muscles caused by bailing water. ➢ Be aware of the signs and symptoms of repetitive stress injuries and report all symptoms immediately **1d.** Determine whether the items must be lifted - can it be left in place or pushed/pulled into place? ➢ Ensure path is level and clear of debris/obstacles. ➢ When lifting, bend at the knees; not the waist, keep back and torso straight; don't twist. ➢ When carrying, keep load close to the body. ➢ Items over 50 lbs. or large/awkward items require team lift or mechanical assistance. ➢ Minimize distance over which items must be carried/pushed/pulled by placing equipment/material storage w/in 15' of work area
D. Conduct Groundwater Sampling 1. Insert disposable bailer into monitoring well to collect water	**1a.** Irritation or burns to hand, arms and other body parts that result from skin contact with site contaminants	**1a.** Do not splash purged water on clothing or skin. ➢ Don required PPE (safety glasses, long pants, nitrile sampling gloves, sleeved shirt)
2. Collect groundwater in sampling container	**2a.** Irritation or burns to eyes, hand, arms and other body parts that result from skin contact with site contaminants and preservatives **2b.** Cuts or contusions to the hands, arms or other body parts due to contact with sharp edges of glassware	**2a.** Do not splash purged water on clothing or skin. ➢ Sample preservative may have leaked from a container or multiple containers; sample preservatives consist of various types of acids that include HCL, HNO_3, and H_2SO_4 – hand and skin protection is necessary ➢ Where handling preservatives, review MSDS/SDS and understand signs/symptoms of exposure and first aid measures. ➢ Don PPE (safety glasses, long pants, nitrile sampling gloves, sleeved shirt) **2b.** Ensure glassware is free of sharp edges and is not broken prior to filling sample. ➢ If glassware is broken, discard. ➢ Ensure threads of vial do not contain small pieces of silt or sand. ➢ When securing cap on vial, do not over tighten or vial could break. ➢ Don Kevlar Level II Cut Resistant Gloves.
E. Decontamination 1. Soak/spray durable equipment to prevent cross-contamination between multiple well locations	**1a.** Irritation or burns to hand, arms, eyes and other body parts that result from skin contact with decontamination materials	**1a.** Avoid splashing decontamination material or purge water on clothing or skin. ➢ When cleaning equipment do not spray decontamination material into the wind or near face/eyes. ➢ Don required PPE (safety glasses, long pants, nitrile sampling gloves, sleeved shirt)
F. Replace Well Cap and Cover 1. Replace well cap and cover	**1a.** Cuts or contusions to the hands, arms or other body parts due to contact with sharp edges of well, well lid or well box	**1a.** Replace manhole covers so that they do not pinch fingers. ➢ Keep body parts (hands, fingers) out from between the lid and well opening. ➢ Use a screwdriver or crowbar to remove the lid or cap. ➢ Use kneeling pads when kneeling on hard surfaces. Don cut resistant gloves
On-site edits:		

Hazard Categories: Exposure, Caught (in, under, between, by), Strain/Overexertion, Contact, Falls, Energy Sources

PINE

ORDER — RENTAL

Pine Environmental Services LLC
1057 East Henrietta Rd
Rochester, NY - 14623
Main: (585) 424-2140 Toll Free: (800) 242-3910
Fax: (585) 424-2166
www.pine-environmental.com

Order Date 07/24/15
Order # A023717
Shipped Date 07/28/15
Requested Date 072815
Begin Date 07/29/15
Requested Time EOB

Customer
Groundwater & Environmental Services
495 Aero Drive,Suite 3
CHEEKTOWAGA, NY - 14225
United States

Ship To
Groundwater & Environmental Services
495 Aero Drive
Cheektowaga, NY - 14225
United States
Attn: Jennifer K. Clay
Phone: 619-743-9953

Prepared By
Darin Milazzo
Email:jeclay@gesonline.com

Customer # 38132011
Project #
Payment Terms Net 30 Days
Ordered By Jennifer K. Clay
Currency USD US Dollar
Purchase Order # VERBAL JENNIFER
Delivery Method Pine Driver

Item #	Type	Description	Whse	Qty	Shipped Qty	U/M	ID#
54672	RENT	YSI 600 XL MP Sonde 1.65"	R14	1.00	0.00	EA	3247
51630	RENT	YSI 650 Display	R14	1.00	0.00	EA	R12843

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

1057 East Henrietta Rd
Rochester NY 14623
Toll Free: 800-242-3910

Pine Environmental Services, Inc.

Instrument ID 3247
Description YSI 600 XL
Calibrated 7/27/2015 10:01:50AM

Manufacturer YSI
Model Number 600 XL
Serial Number/ Lot Number 02E1382
Location Rochester, NY
Department

State Certified
Status Pass
Temp °C 22.45
Humidity % 44.29

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.00	10.00	0.00%	Pass

Group # 2
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.413	1.413	0.00%	Pass

Group # 3
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 4
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Test Performed: N/A **As Found Result:** **As Left Result:**

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

1057 East Henrietta Rd
Rochester NY 14623
Toll Free: 800-242-3910

Pine Environmental Services, Inc.

Instrument ID 3247
Description YSI 600 XL
Calibrated 7/27/2015 10:01:50AM

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
ROC 240MV ORP	ORP 240mV	Hanna	SL50005-500	6448		7/31/2018
ROC NY 1.413 CONDUCTIVITY STAND.	ROC NY COND 1.413 Conductivity Standard	AquaPhoenix Scientific	SL20014-5G	3AK273		11/30/2015
ROC NY PH 10 BUFFER SOLUTION	ROC NY PH 10 Buffer Solution	AquaPhoenix Scientific	SL10010-5G	4AD999		4/30/2016
ROC NY PH 4 BUFFER SOLUTION	ROC NY PH 4 Buffer Solution	AquaPhoenix Scientific	SL10004-5G	3AL686		12/31/2015
ROC NY PH 7 BUFFER SOLUTION	ROC NY PH 7 Buffer Solution	AquaPhoenix Scientific	SL1007-5G	4AC516		3/31/2016

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Nelson Figueroa

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

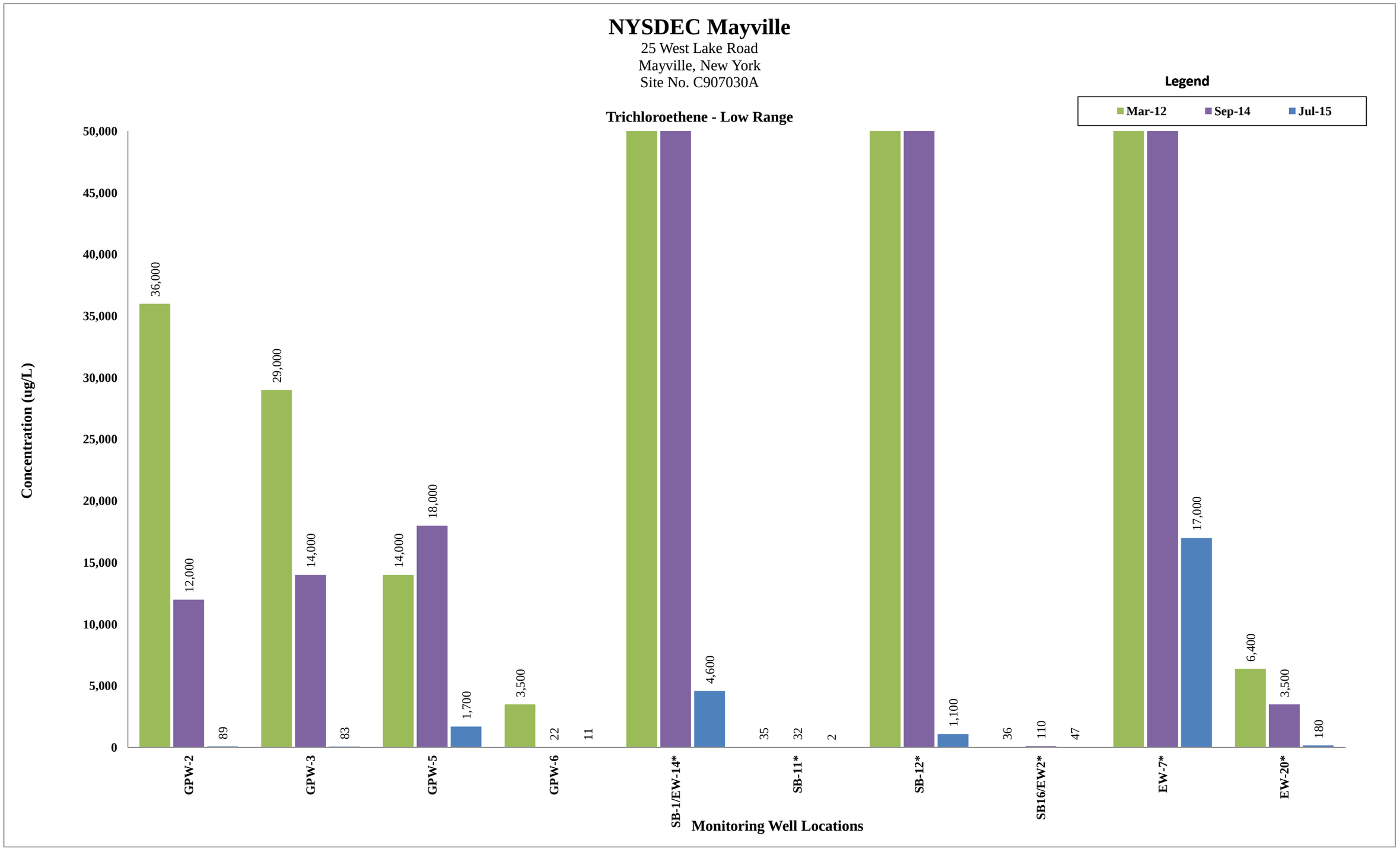
Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

Appendix C

Pre- vs Post-ISCO COC Concentration Graphs

NYSDEC Mayville

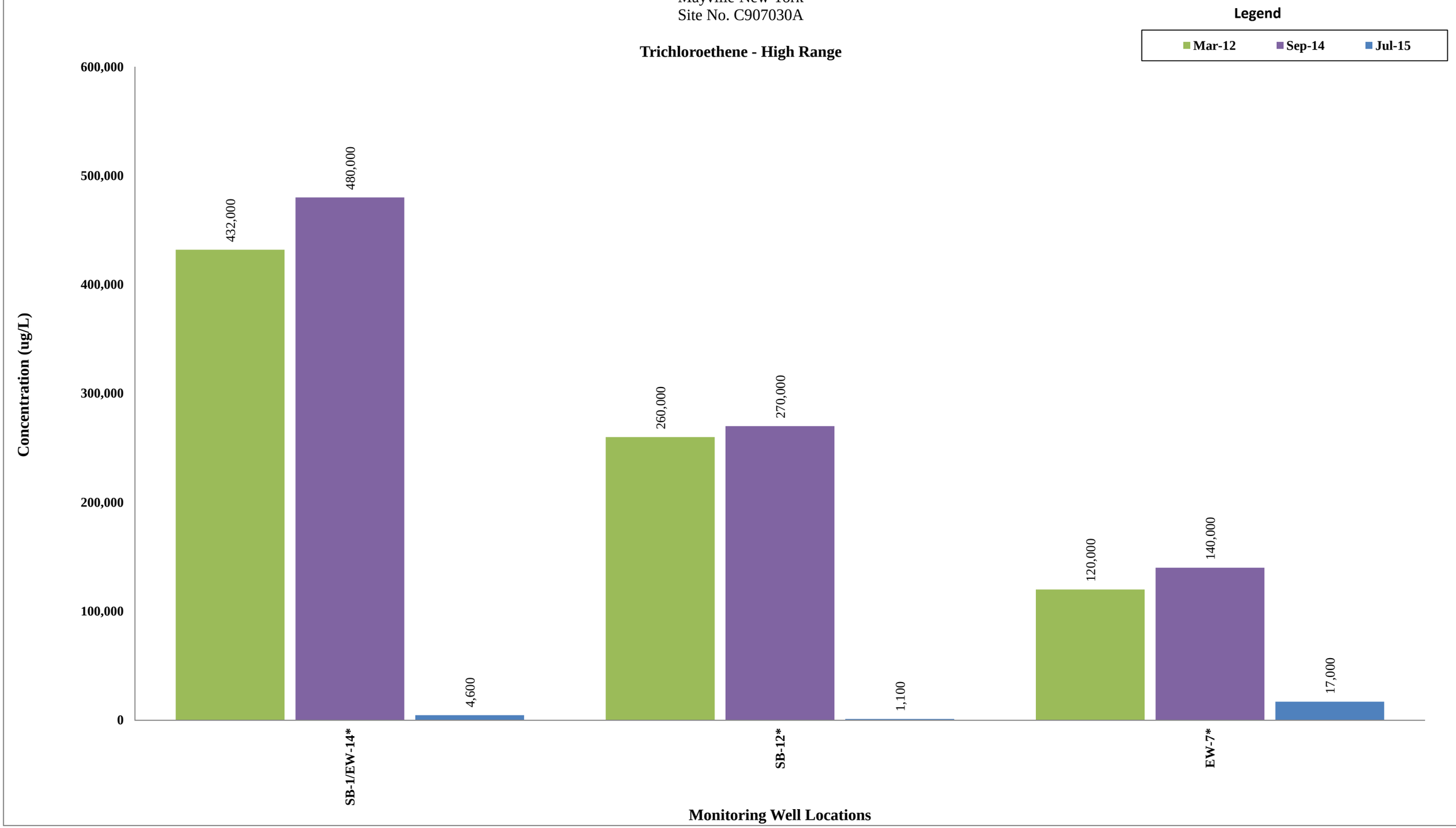
25 West Lake Road
Mayville, New York
Site No. C907030A



NYSDEC Mayville

25 West Lake Road
Mayville New York
Site No. C907030A

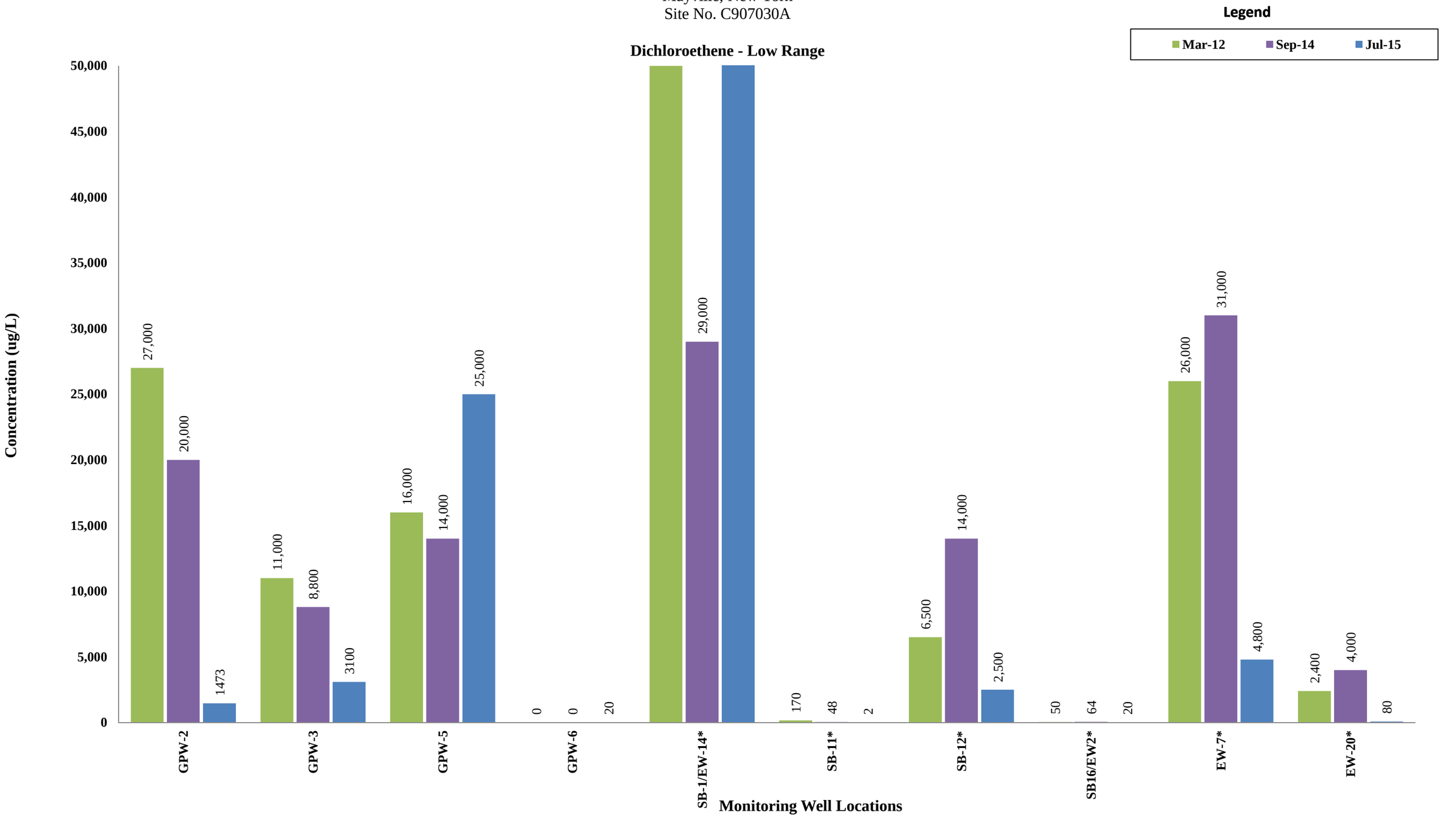
Trichloroethene - High Range



NYSDEC Mayville

25 West Lake Road
Mayville, New York
Site No. C907030A

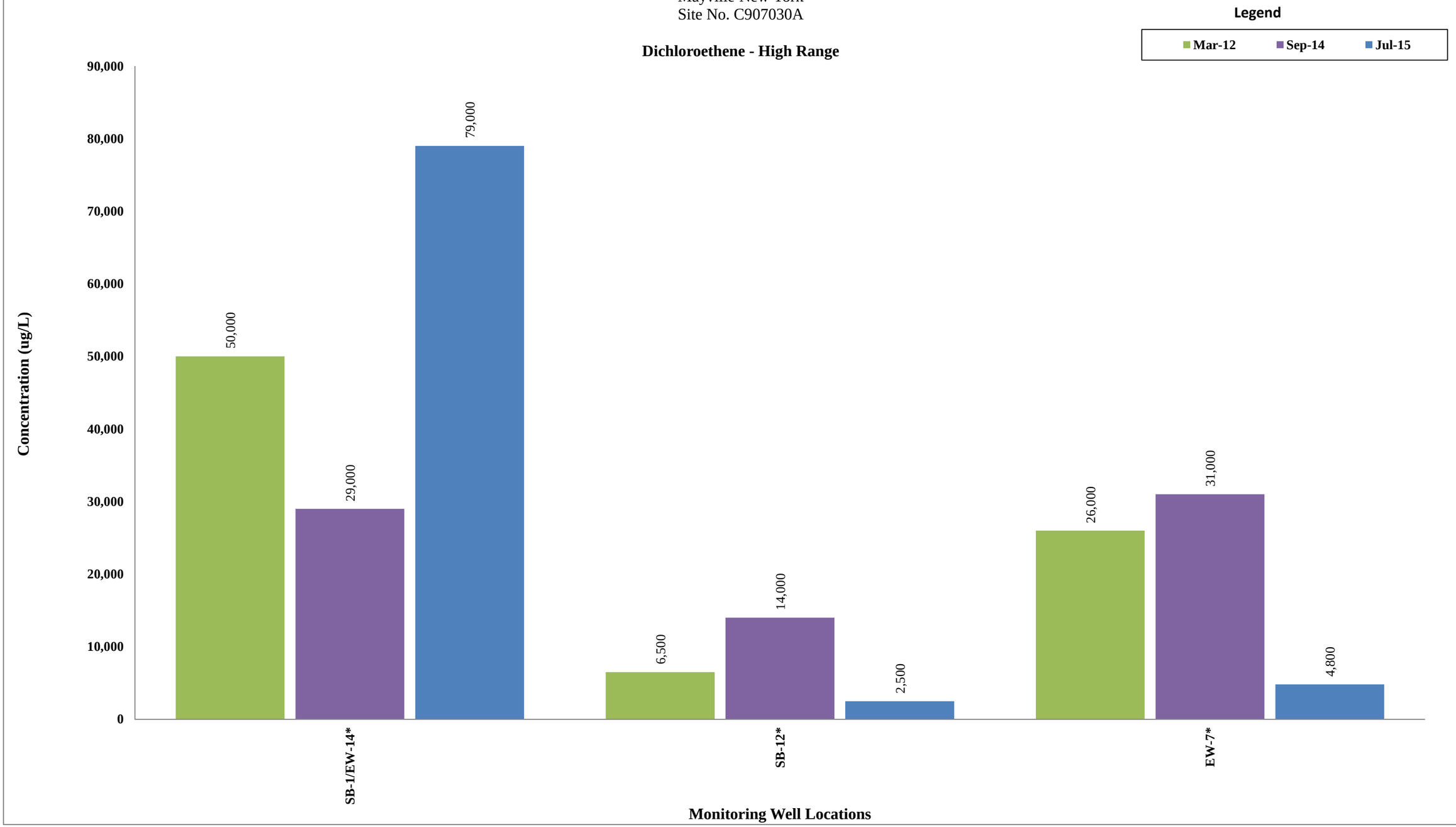
Dichloroethene - Low Range



NYSDEC Mayville

25 West Lake Road
Mayville New York
Site No. C907030A

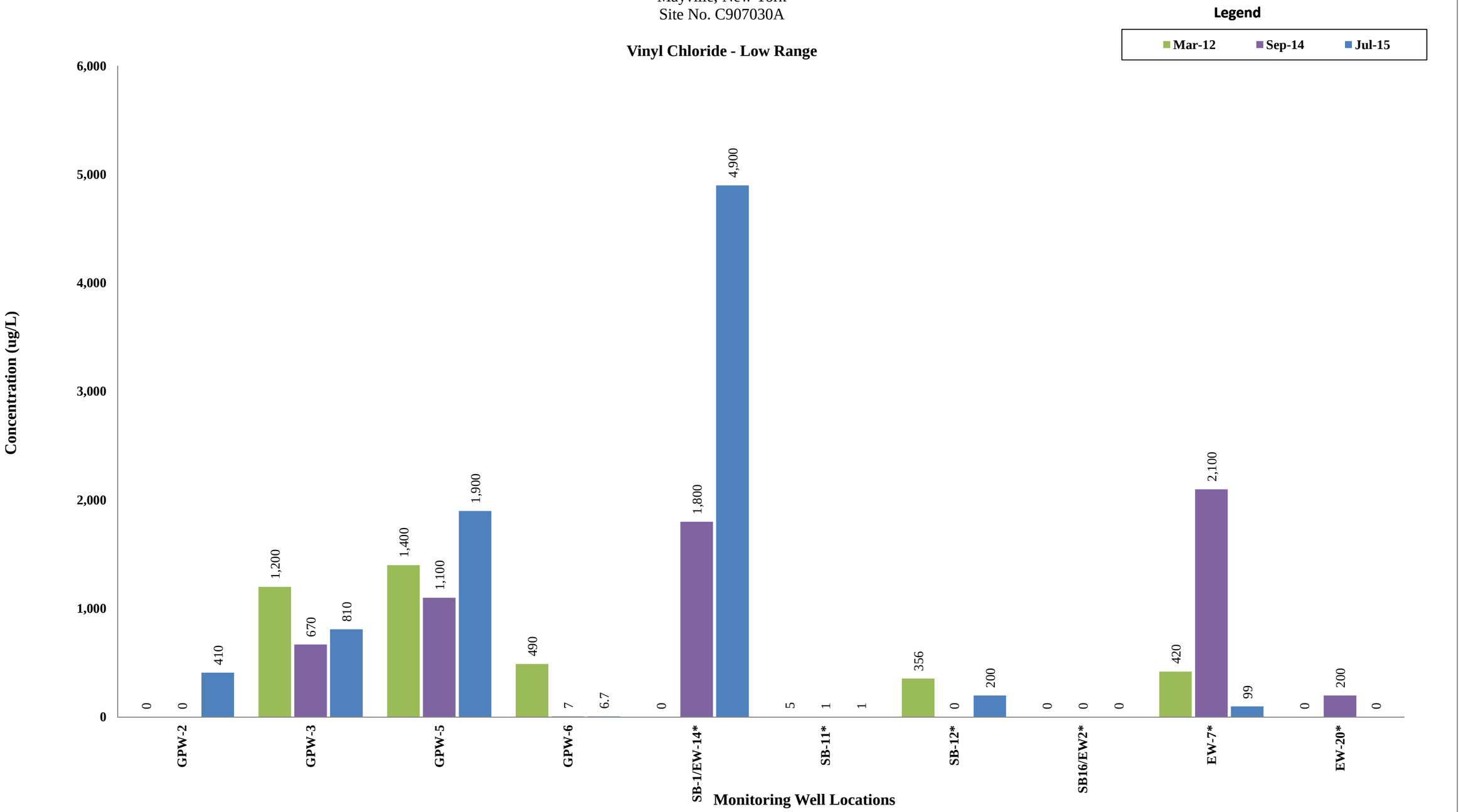
Dichloroethene - High Range



NYSDEC Mayville

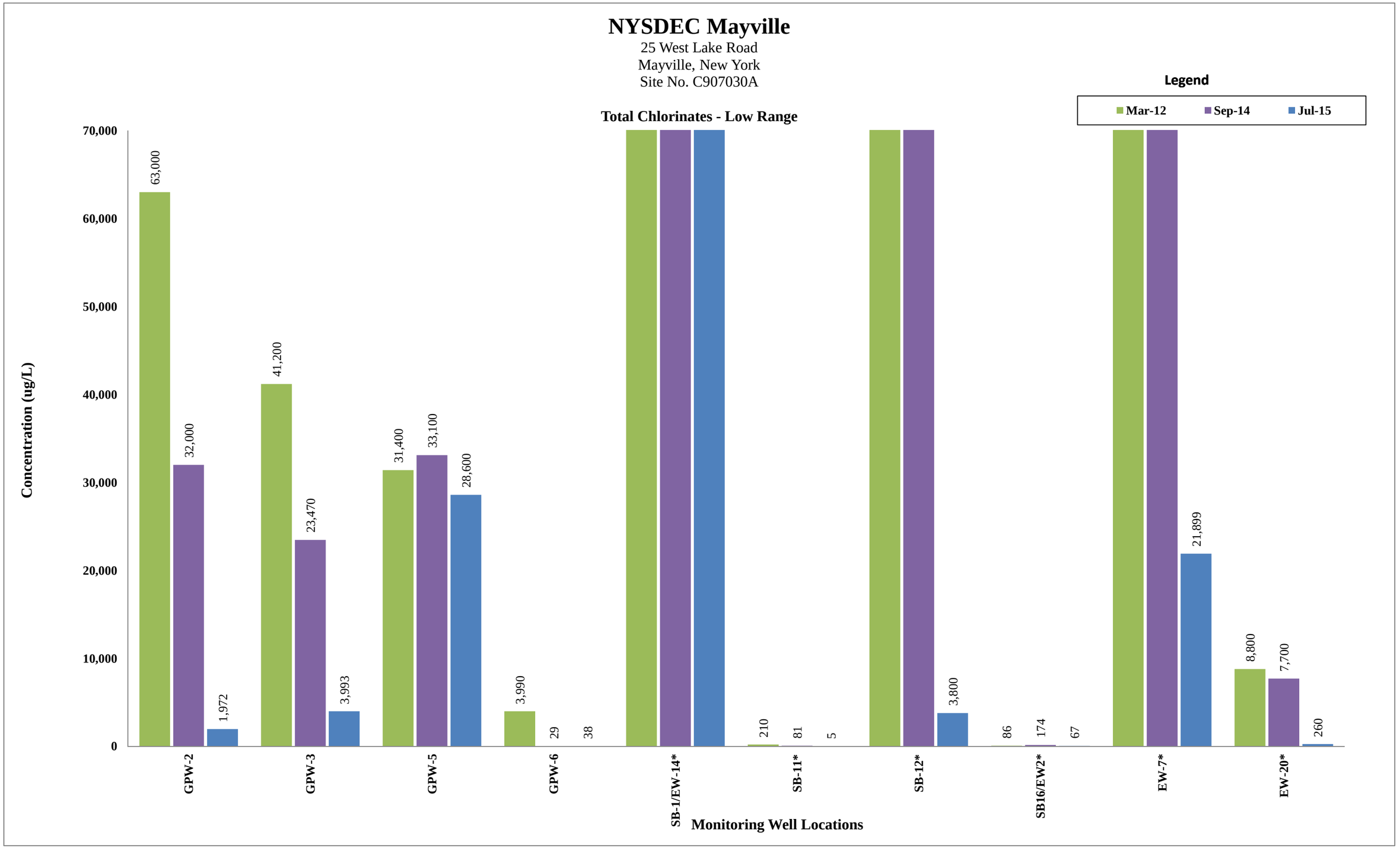
25 West Lake Road
Mayville, New York
Site No. C907030A

Vinyl Chloride - Low Range



NYSDEC Mayville

25 West Lake Road
Mayville, New York
Site No. C907030A



NYSDEC Mayville

25 West Lake Road
Mayville New York
Site No. C907030A

Total Chlorinates - High Range