NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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August 2, 2019

Town of Clarkson
Paul Kimball
3710 Lake Road
PO Box 858
Clarkson, NY 14430

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter

Former Service Station, Clarkson
Monroe County, Site No.: E828143

Dear Paul Kimball:

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for following period: November 21, 2017 to November 21, 2018. The Department has the following comments:

1. Please ensure the PRR is a searchable PDF document.
2. The Site Wide Inspection Form states MW-04 is damaged and needs repair or replacement. Please complete any maintenance as necessary prior to the next sampling event.

The Department hereby accepts the PRR and associated Certification. The frequency of Periodic Reviews for this site is 1 year, your next PRR is due on December 23, 2019. You will receive a reminder letter and updated certification form 45-days prior to the due date. Regardless of receipt or not, of the reminder notice, the next PRR including the signed certification form, is still due on the date specified above.

If you have any questions, or need additional forms, please contact me at 585-226-5349 or e-mail: danielle.miles@dec.ny.gov.

Sincerely,

Danielle Miles
Project Manager

ec: Julia Kenney, NYSDOH
Frank Sowers, NYSDEC
Greg Andrus, Lu Engineers

Periodic Review Report – 2017/2018

Environmental Restoration Program
Former Service Station Site #E828143
8264 Ridge Road West
Town of Clarkson
Monroe County, New York

Prepared For:

Town of Clarkson
P.O. Box 858
Clarkson, New York 14430

Prepared by:

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL
339 East Avenue Suite 200
Rochester, New York 14604

December 2018

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Executive Summary

The Former Service Station Site #E828143 (hereinafter referred to as the "Site"), located at 8264 Ridge Road West in the Town of Clarkson, Monroe County, New York is a 0.71-acre parcel (Figure 1). The Town of Clarkson acquired the Site through foreclosure in 2008 and is the current owner. The Site was historically used as an automotive service and gasoline station for at least 50 years and contained four (4) abandoned underground storage tanks (USTs). All structures and USTs were removed in May 2009 as interim remedial measures (IRMs) as part of a Remedial Investigation (RI). This Periodic Review Report (PRR) covers events and activities conducted at the Site in 2017 to 2018.

The effectiveness of the remedial program as outlined in the Site Management Plan (SMP) has been monitored through annual groundwater sampling, soil and stone cover system monitoring, and a Site-wide inspection. Post-remedial groundwater sampling results indicate that residual levels of dissolved phase volatile organics persist in groundwater down-gradient of the former USTs.

Laboratory analysis of groundwater samples collected during this reporting period detected concentrations of three (3) volatile organic compounds (VOCs) (1,3,5-trimethylbenzene, isopropylbenzene, and n-propylbenzene) in exceedance of 6 NYCRR Part 703.5 Class GA Groundwater Standards at one (1) sample location (MW-04). A complete summary of analytical results can be found in Table 1.

Implemented remedies to manage residual contamination are effective, protective, and are progressing towards the remedial action objectives. The Institutional and Engineering Controls (ICs and ECs) and procedures outlined in the Monitoring Plan and Operation and Maintenance Plan were complied with during this reporting period.

1.0 Periodic Review Report

This PRR was prepared by Lu Engineers, on behalf of the Town of Clarkson, in accordance with the requirements set forth in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 and the guidelines provided by the NYSDEC. The first PRR was required eighteen (18) months after the issuance of the Release and Covenant. The reporting period for this PRR is from November 21, 2017 to November 21, 2018. The following items are included in this PRR:

- Identification, assessment, and certification of all ECs/ICs required by the remedy for the Site;
- Results of the Site inspection and sampling events including applicable inspection forms and other records generated for the Site during the reporting period;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables of groundwater contaminants of concern by media;
- Laboratory analysis results, and the required laboratory data deliverables for each sample collected during the reporting period have been and will continue to be submitted electronically in a NYSDEC-approved EQuIS format;
- A Site evaluation, which includes the following:
    I. The compliance of the remedy with the requirements of the Site-specific Record of Decision (ROD);
    II. The operation and the effectiveness of each treatment unit, including identification of any needed repairs or modifications;
    III. Any new conclusions or observations regarding Site contamination based on inspection or lab data generated during the monitoring events;
    IV. Recommendations regarding any necessary changes to the remedy and/or SMP; and
    V. The overall performance and effectiveness of the remedy to date.

2.0 Site Overview

The Site is located in the Town of Clarkson, Monroe County, New York and is identified as block 0.54.14 and Lot 21 on the Town of Clarkson Tax Map. The Site is a 0.697-acre parcel bounded by undeveloped land to the north, Ridge Road West (NYS Route 104) to the south, a residence to the east, and a drainage ditch and commercial property to the west (Figure 1).

From 1930 to the early 1970s, the Site was used as a retail gas station which included underground storage of petroleum. The masonry body shop/garage was constructed in the 1930s or 1940s and was used for vehicle maintenance operations until the late 1990s. Prior owners of the Site include: Webaco Oil Company (1953-1974), Charles C. Thomas (1974-2002), and Commercial Property Holdings, LLC (2002-2008). The Town of Clarkson acquired the Site during a foreclosure in April 2008.

Several Recognized Environmental Conditions (RECs) were identified during a Phase I Environmental Site Assessment (ESA) completed by Lu Engineers for the Town of Clarkson in February 2007. A Remedial Investigation (RI) was conducted by Lu Engineers between 2009-2010 to characterize the nature and extent of contamination at the Site. Three (3) 2,000-gallon gasoline USTs, located on the southwest corner of the Site, and one (1) 1,000-gallon UST were identified during the investigation. The tanks were partially filled with a water/gasoline mixture. A 275-gallon aboveground fuel tank was located adjacent to the garage.

Subsurface soil analytical results detected concentrations of polycyclic aromatic hydrocarbons (PAHs) and metals (arsenic, barium, copper, lead, and mercury) exceeding 6 NYCRR Part 375-6.8(b) Commercial Use Soil Cleanup Objectives (SCOs). The source of the PAHs and metals was attributed to historical fill material placed on the Site. Petroleum impacts are inferred to extend off-Site into the Route 104 right-of-way. Areas of soil and sediment in exceedance of Commercial Use SCOs were covered as an IRM during the investigation.

Petroleum-related VOCs (benzene, toluene, ethylbenzene, and xylene) associated with the former gas station and USTs were detected during the September 2009 baseline groundwater sampling event, in three (3) on-Site wells (MW-01, MW-02, MW-04), on the southwest portion of the Site at concentrations exceeding NYS Part 703.5 Class GA AWGS. The highest levels were detected in MW-04, which is located down-gradient from the former USTs. Pesticide concentrations were identified in groundwater at levels exceeding 6 NYCRR Part 703 Class GA drinking water standards in two (2) wells. Based on the findings of the RI, it is inferred that no off-Site groundwater contamination has occurred.

Remedial activities were completed at the Site between 2009 and 2010 in accordance with the NYSDEC-approved Interim Remedial Measures Work Plan, dated January 2009, and the IRM Work Plan Addendum Letter dated September 2, 2010. The IRM consisted of the following:

- Hazardous material removal/disposal;
- Asbestos abatement;
- Building demolition, slab removal, and hydraulic lift removal;
- Pump island removal;
- Removal of three (3) 2,000-gallon and one (1) 1,000-gallon gasoline USTs;
- Excavation and disposal of 368 tons of petroleum-impacted soil;
- Placement of soil cover system to prevent human exposure to contaminated soil/fill; and

- Placement of a stone cover system in the adjoining creek bed to prevent human exposure and off-Site migration of contaminated drainage channel sediments at the Site.

No potential soil vapor intrusion pathways were identified during the investigation; therefore, vapor intrusion sampling was not conducted.

The SMP requires Institutional Controls (ICs) in the form of an environmental easement that entails a) limiting the use and development of the Site to commercial or industrial use; b) compliance with the approved SMP; c) restriction on the use of groundwater as a source of potable water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH); and d) the Site owner or remedial party to complete and submit an annual certification of Institutional and Engineering Controls (ICs/ECs).

Long term management of the remaining contamination, as required by the Record of Decision (ROD) include the following plans for ECs; 1) Monitoring; 2) Operation and maintenance; and 3) Reporting. The specific ECS implemented at the Site include: a) annual groundwater sampling of monitoring wells MW-01, MW-03, MW-04 for VOCs; and b) management and inspection of the existing soil cover system.

3.0 Remedy Performance, Effectiveness, and Protectiveness

Post-remedial groundwater sampling indicates that low-level residual groundwater contamination persists at the Site since completion of the IRM. Five (5) annual post-remedial sampling events were conducted in accordance with and as outlined in the SMP on:

- September 16, 2009
- May 19, 2015
- October 26, 2016
- September 19, 2017
- November 20, 2018

Table 1 (refer to attachments) illustrates concentrations of VOC, semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides present in groundwater before and following implementation of the remedial program in May 2009. Figure 2 shows analytical exceedances and the groundwater contour for the annual sampling event documented in this report. Concentrations in groundwater samples were compared to the applicable 6 NYCRR Part 703.5 Class GA Groundwater Standards. Analytical reports are provided in Attachment C.

VOC concentrations at the Site have historically fluctuated. Decreased VOC concentrations were observed in the May 2015 and October 2016 post-remedial groundwater sampling events when compared to results obtained from September 2009 baseline sampling. Samples from MW-01 and MW-04 exhibited increased benzene concentrations during the September 2017 round of groundwater sampling. VOC concentrations at MW-04, specifically 1,3,5-

trimethylbenzene, isopropylbenzene, and n-propylbenzene, increased to levels in exceedance of6 NYCRR Part 703.5 Class GA Groundwater Standards between the 2017 and 2018 sampling rounds.

Groundwater samples have not been analyzed for metals, SVOCs, pesticides, or PCBs since 2015 in accordance with the NYSDEC approved SMP. It is noted that MW-02 appeared to be destroyed during the Site cover activities conducted in 2015. Attempts to locate MW-02 during the May 2015 groundwater sampling event were unsuccessful; therefore, MW-03 has been sampled in subsequent sampling events.

The ICs established for the Site have generally been and continue to be in compliance with the SMP. Though residual contamination exists in soil and groundwater, these controls reduce the potential for human exposure. The ECs established for the Site are also effective in limiting the potential for human exposure to known Site contaminants.

4.0 Institutional Controls/Engineering Control Plan Compliance

Since remaining contaminated soil and groundwater exists beneath the Site, ICs/ECs are required to protect public health and the environment. The IC/EC Plan is one (1) component of the SMP and is subject to revision by NYSDEC.

Institutional Controls (ICs)
A series of ICs is required by the Record of Decision (ROD) to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to commercial and industrial uses only. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under the Site Management Plan. These requirements are:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of Site restrictions. Adherence to these ICs is required by the Environmental Easement. These ICs include:

- The property may only be used for commercial or industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted or residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable; and
- Annual groundwater monitoring will be conducted to assess the performance and effectiveness of the remedy, in accordance with the SMP.

Engineering Controls (ECs)

- Soil Cover System (Cap) – Exposure to remaining contamination in subsurface soil/fill at the Site is prevented by a soil cover system placed over the Site (the "Cap"). This cover system is comprised of clean soil, asphalt pavement, and/or stone. Procedures for maintaining the Cap are documented in the Operation and Maintenance Plan in Section 4 of the SMP.

  The Excavation Work Plan (EWP) in Appendix A of the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection, maintenance and monitoring of this cover are provided in the Monitoring Plan included in Section 4 of the SMP.

In general, the Cap was in good condition as indicated on the Site Inspection Form (Attachment A). The Clarkson Highway Department replaced the creek bed lining and added a new surge stone cover in December, 2015 with full replacement completed in January, 2016.

The Site inspection for November 2018 showed the creek bed lining to be in fair condition and in compliance with the SMP requirements. No structures have been constructed on Site since the previous inspection and no change of use has occurred on Site since the last certification (Attachment A & E).

Based on the 2018 Site Inspection, the Site Cap and creek bed lining are in compliance with the SMP requirements

The required IC/EC certification has been completed as a component of this report and a copy is included as Attachment D.

5.0 Monitoring Plan Compliance Report

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected Site media identified in the table below.

Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Groundwater Monitoring	Annual	Groundwater	EPA Method 8260 VOCs
Cover System Monitoring	Annual	Soil/Stone Cover System (creek bed)	Visual Inspection; determine whether maintenance is required

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

Monitoring activities completed during this reporting period (2017/2018) included the following:

- Annual groundwater sampling of Site wells MW-01, MW-03, and MW-04
- Annual inspection of the Site soil/stone cover system

Groundwater Sampling

The following table summarizes the details of the groundwater sampling program to be completed during each annual sampling event.

Media Sampling and Analysis Summary

Sample Type	Sample Location	Analytical Parameters	Frequency	QA/QC	Total
Groundwater	MW-01, MW-03, MW-04	TCL VOCs plus CP-51 list compounds by EPA Method 8260	Annual	N/A	3

Site wells were sampled on November 20, 2018 using low flow sampling methods per procedures outlined in the SMP. Groundwater quality measurements including temperature, turbidity, pH, conductivity and oxidation reduction potential (ORP) were collected during the purging process at each well. Purge water from each well was released to the ground surface near the well. At each well, samples were collected for analysis of TCL VOCs plus CP-51 list compounds by EPA Method 8260B. Groundwater sampling logs are included as Attachment B of this report.

Samples were analyzed by Paradigm Environmental Services, Inc., a New York State Department of Health Environmental Laboratory Approval Program (ELAP) - certified laboratory located in Rochester, New York. Sampling methods and QA/QC measures were adhered to as outlined in the approved SMP.

6.0 Results

Results of the groundwater sampling conducted during this period are summarized in Table 1 and in Figure 2. Table 1 presents analytical results of constituents detected in groundwater since the September 2009 baseline groundwater sampling event in comparison to applicable 6 NYCRR Part 703.5 standards. Figure 2 illustrates detected analytical exceedances from each sample collected during this reporting period. Figure 2 also presents groundwater contours based on water level measurements collected at each monitoring well. It is noted groundwater generally flows to the north.

The following sections summarize the analytical results for each year within this reporting period as well as previous periods for reference:

<u>2009</u>
Elevated concentrations of petroleum-related VOCs in September 2009 were detected in MW-01, MW-02, and MW-04 with MW-04 having the highest concentrations. Concentrations of metals, including barium, exceeding NYS Ambient Groundwater Standard or applicable NYSDEC guidance value were identified in all wells. Sample results from MW-01 and MW-03 indicated elevated concentrations of pesticides exceeding NYSDEC Guidance Values. Phenol was detected

in MW-04 at a level not exceeding NYSDEC guidance values. PCBs were not detected in any of the wells.

2015
VOC concentrations declined between September 2009 and May 2015 in MW-01, MW-03, and MW-04. Concentration levels of petroleum-related VOCs in MW-04 continue to exceed applicable groundwater standards. MW-02 was not located and therefore not sampled during this event. In addition, wells were not sampled for SVOCs, PCBS, metals, and pesticides per the SMP.

2016
VOC concentrations declined between May 2015 and October 2016 in MW-01, MW-03, and MW-04. Concentration levels of two (2) petroleum-related VOCs (benzene and sec-butylbenzene) in MW-04 continue to exceed groundwater standards; however, the levels have shown a significant decrease since previous sample results with the exception of a slight increase in sec-butylbenzene. It is noted that wells were not sampled for SVOCs, PCBs, metals, or pesticides.

2017
The concentration level of benzene, a petroleum-related VOC, in MW-04 continued to exceed NYS Groundwater Standards and had increased slightly between October 2016 and September 2017. Benzene concentrations in MW-01, previously non-detect, was also detected in exceedance of NYS Groundwater Standards. It is noted the 2017 benzene detection in MW-01 was higher than levels previously observed in baseline sampling. No exceedances were detected in MW-03. It is noted that wells were not sampled for SVOCs, PCBs, metals, or pesticides per the SMP.

2018
Previously observed benzene exceedances detected at MW-01 and MW-04 in September 2017 were not present during November 2018 sampling. MW-01 and MW-03 exhibited no 6 NYCRR Part 703.5 exceedances; samples collected from MW-04 contained concentrations of 1,3,5-trimethylbenzene, isopropylbenzene, and n-Propylbenzene above 6 NYCRR Part 703.5 standards.

All laboratory analytical data is included as Attachment C of this report. Analytical results of groundwater sampling conducted during this period are summarized in Table 1 and in Figure 2.

7.0 Operation and Maintenance Plan Compliance Report

ECs in place at the Site are the soil cover system, referred to as the "Cap." Operation and maintenance is limited to periodic inspection of the Cap, which is documented using the Site Inspection Form. Copies of the Site Inspection Form are included as Attachment A in this report. The Operation and Maintenance Plan located in the SMP describes the measures necessary to

operate, monitor and maintain the mechanical components of the remedy selected for the Site. Descriptions of the Cap inspections and conditions are provided in Section 4.0 of this report.

8.0 Conclusions and Recommendations

IC/EC Compliance
The requirements and regulations set forth in the SMP for ICs were complied with during this reporting period. This includes the following:

Land Use Restriction – The Site is currently vacant and has met the requirements of this restriction in this reporting period.

Groundwater Use Restriction – The Site is currently vacant and does not use Site groundwater in any capacity, therefore meeting the requirements of this restriction in this reporting period.

Site Management Plan (SMP) – The Site is currently in compliance with all components of the Site-specific SMP and all requirements have been met during this reporting period.

The requirements set forth in the SMP for all ECs were met during this reporting period. This includes the following:

Soil Cover System (Cap) – The Site Cap was in compliance with the SMP during this reporting period. The Site Inspection Form and associated photographs illustrating compliance are included as Attachments A and E, respectively, of this report.

Due to historical fluctuation of VOC concentrations at the site, it is recommended that no action be taken to address the elevated concentrations observed in 2018 until the 2019 sampling results can be reviewed for comparison. It is also recommended MW-01 be repaired or replaced.

The previously discussed Site-specific ICs and ECs for the Site continue to meet the remedial objectives while establishing protection of public health and the environment. The continued effectiveness of the ICs/ECs have allowed the remedial objectives at the Site to be met for this reporting period.

It is recommended that the next PRR be submitted approximately one (1) year from submittal of this PRR and anticipated sampling event during the fourth quarter of 2019.

Tables

Former Service Station Site (#E828143)
Summary of Validated Analytical Results

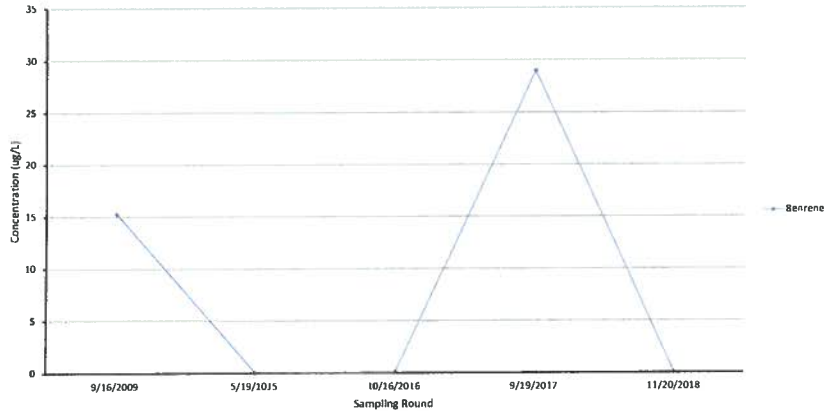
Table 1- Groundwater Results

Detected Parameters[1]	NYS Groundwater Standard[2]	MW-01 9/16/2009	MW-01 5/19/2015	MW-01 10/26/2016	MW-01 9/19/2017	MW-01 11/20/18	MW-02 9/17/2009	MW-02 5/19/2015	MW-02 10/26/2016	MW-02 9/19/2017	MW-02 11/20/18	MW-03 9/16/2009	MW-03 5/19/2015	MW-03 10/26/2016	MW-03 9/19/2017	MW-03 11/20/18	MW-04 9/16/2009	MW-04 5/19/2015	MW-04 10/26/2016	MW-04 9/19/2017	MW-04 11/20/18
EPA 8260 - Volatile Organics																					
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND					0.76 J	ND	ND	ND	ND	16.0 J	3.37	1.41 J	ND	3.66
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	2.17	1.80 J	ND	9.7
Acetone	50*	ND	ND	ND	ND	ND	10.0 J					ND	ND	ND	ND	ND	78.7 J	ND	ND	ND	ND
Benzene	1	15.3	ND	ND	29	ND	2.09					ND	ND	ND	ND	ND	35.3	14.5	12.4	22.7	ND
Bromodichloromethane	50*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone (2-butanone)	50*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	2.72					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chloroethyl vinyl ether	N/A	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	N/A	ND	ND	ND	46.1	ND	ND					ND	ND	ND	ND	ND	ND	ND	24.3	7.12 J	70
Dibromochloromethane	50*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	3.2	ND	ND					ND	ND	ND	ND	ND	30.2	3.91	1.70 J	2.56	3.89
2-Hexanone	50*	ND	ND	ND	ND	ND	ND					4.23 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	2.97	ND	ND					ND	ND	ND	ND	ND	10.0 J	12.4	4.73	1.82 J	8.82
m/p-Xylenes	N/A	ND	ND	ND	1.9 J	ND	ND					ND	ND	ND	ND	ND	25.2	3.04	1.91 J	1.32 J	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	ND	ND	ND	ND	ND	ND					3.78 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	N/A	ND	ND	ND	26.8	ND	ND					ND	ND	ND	ND	ND	ND	ND	23.4	3.48	102
Methyl-Tert-Butyl Ether (MTBE)	10*	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	3.15	ND	ND					ND	ND	ND	ND	ND	8.00 J	14.4	4.23	1.91 J	11.5
Naphthalene	10	1.04 J,B	ND	ND	ND	ND	ND					2.24 J,B	ND	ND	ND	ND	ND	ND	ND	ND	6.79
o-Xylene	N/A	ND	ND	ND	ND	ND	ND					0.53 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	2.32	ND	ND					ND	ND	ND	ND	ND	ND	7.71	5.08	1.20 J	4.79
Styrene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	2.83	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	1.39	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	20.3	ND	ND	1.67 J	ND
Toluene	5	ND	ND	ND	2.19	ND	ND					ND	ND	ND	ND	ND	ND	2.1	1.10 J	ND	3.48
p-Isopropyltoluene	N/A	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	26.8	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	5	ND	ND	ND	ND	ND	ND					ND	ND	ND	ND	ND	25.2	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND			ND	ND					ND	ND			ND	ND	ND			ND
trans-1,2-Dichloroethene	5	ND	ND			ND	ND					ND	ND			ND	ND	ND			ND

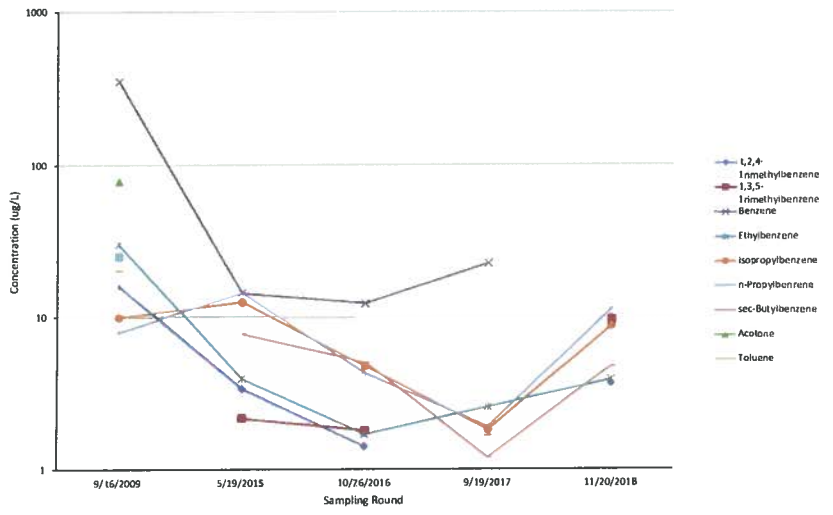
t: all values shown in micrograms per liter (ug/L)
1: NYS Ambient Groundwater Standard (6 NYCRR Part 703.5)
*: NYSDEC Guidance Value (TOGS 1.1.1)
J: value is estimated
B: compound detected in associated method blank

N: compound was "tentatively identified"
M: matrix spike recoveries outside QC limits; matrix bias indicated
ND: compound not detected
well not sampled/analysis not performed at this location
value detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

MW-01 Benzene Concentration Trend



MW-04 VOC Concentration Trend



Former Service Station Site (#E828143)
Town of Clarkson
Summary of Valldated Analytical Results

Table 1- Groundwater Results

Detected Parameters[1]	NYS Groundwater Standard[2]	MW-01 9/16/2009	MW-01 5/19/2015	MW-01 10/26/2016	MW-01 9/19/2017	MW-01 11/20/18	MW-02 9/17/2009	MW-02 5/19/2015	MW-02 10/26/2016	MW-02 9/19/2017	MW-02 11/20/18	MW-03 9/16/2009	MW-03 5/19/2015	MW-03 10/26/2016	MW-03 9/19/2017	MW-03 11/20/18	MW-04 9/16/2009	MW-04 5/19/2015	MW-04 10/26/2016	MW-04 9/19/2017	MW-04 11/20/18
EPA 8270 - Semi-Volatile Organics																					
Phenol	1	ND					ND					ND					7.97 J				
3&4 Methylphenol	N/A	ND					ND					ND					ND				
Bis(2-chloroethyl)ether	1	ND					ND					ND					ND				
2-Chlorophenol	N/A	ND					ND					ND					ND				
1,3-Dichlorobenzene	3	ND					ND					ND					ND				
1,4-Dichlorobenzene	3	ND					ND					ND					ND				
Benzyl alcohol	N/A	ND					ND					ND					ND				
Benzidine	5	ND					ND					ND					ND				
Benzoic acid	N/A	ND					ND					ND					ND				
1,2-Dichlorobenzene	3	ND					ND					ND					ND				
2-Methylphenol	N/A	ND					ND					ND					ND				
Hexachloroethane	5	ND					ND					ND					ND				
N-Nitrosodi-n-propylamine	N/A	ND					ND					ND					ND				
Nitrobenzene	0.4	ND					ND					ND					ND				
Isophorone	50*	ND					ND					ND					ND				
2-Nitrophenol	N/A	ND					ND					ND					ND				
1,2,4-Trichlorobenzene	5	ND					ND					ND					ND				
Naphthalene	10*	ND					ND					ND					ND				
4-Chloroaniline	5	ND					ND					ND					ND				
Hexachlorobutadiene	0.5	ND					ND					ND					ND				
2-Methylnaphthalene	N/A	ND					ND					ND					ND				
Hexachlorocyclopentadiene	5	ND					ND					ND					ND				
2,4,6-Trichlorophenol	N/A	ND					ND					ND					ND				
2,4,5-Trichlorophenol	N/A	ND					ND					ND					ND				
2-Chloronaphthalene	10*	ND					ND					ND					ND				
2-Nitroaniline	5	ND					ND					ND					ND				
Acenaphthylene	N/A	ND					ND					ND					ND				
Dimethyl phthalate	50*	ND					ND					ND					ND				
2,6-Dinitrotoluene	5	ND					ND					ND					ND				
Acenaphthene	20*	ND					ND					ND					ND				
3-Nitroaniline	5	ND					ND					ND					ND				
2,4-Dinitrophenol	10*	ND					ND					ND					ND				
Dibenzofuran	N/A	ND					ND					ND					ND				
2,4-Dinitrotoluene	5	ND					ND					ND					ND				
4-Nitrophenol	N/A	ND					ND					ND					ND				
Fluorene	50*	ND					ND					ND					ND				
4-Chlorophenyl phenyl ether	N/A	ND					ND					ND					ND				
Hexachlorobenzene	0.04	ND					ND					ND					ND				
Pentachlorophenol	1	ND					ND					ND					ND				
Phenanthrene	50*	ND					ND					ND					ND				
Anthracene	50*	ND					ND					ND					ND				
Di-n-butyl phthalate	50	ND					ND					ND					ND				
Fluoranthene	50*	ND					ND					ND					ND				
Pyrene	50*	ND					ND					ND					ND				
Butyl benzyl phthalate	50*	ND					ND					ND					ND				
3,3'-Dichlorobenzidine	5	ND					ND					ND					ND				
Benzo[a]anthracene	0.002*	ND					ND					ND					ND				
Chrysene	0.002*	ND					ND					ND					ND				
Bis(2-ethylhexyl) phthalate	5	ND					ND					ND					ND				
Benzo[b]fluoranthene	0.002*	ND					ND					ND					ND				
Benzo[k]fluoranthene	0.002*	ND					ND					ND					ND				
Benzo[a]pyrene	N/A	ND					ND					ND					ND				
Indeno[1,2,3-cd]pyrene	0.002*	ND					ND					ND					ND				
Dibenz(a,h)anthracene	N/A	ND					ND					ND					ND				
Benzo[g,h,i]perylene	N/A	ND					ND					ND					ND				

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Former Service Station Site (#E828143)
Town of Clarkson
Summary of Validated Analytical Results

Table 1- Groundwater Results

Detected Parameters[1]	NYS Groundwater Standard[2]	MW-01 9/16/2009	MW-01 5/19/2015	MW-01 10/26/2016	MW-01 9/19/2017	MW-01 11/20/18	MW-02 9/17/2009	MW-02 5/19/2015	MW-02 10/26/2016	MW-02 9/19/2017	MW-02 11/20/18	MW-03 9/16/2009	MW-03 5/19/2015	MW-03 10/26/2016	MW-03 9/19/2017	MW-03 11/20/18	MW-04 9/16/2009	MW-04 5/19/2015	MW-04 10/26/2016	MW-04 9/19/2017	MW-04 11/20/18
TAL Metals																					
Aluminum	N/A	ND					11,800					ND					ND				
Antimony	3	<0.60					<0.060					<0.060					<0.060				
Arsenic	25	<0.005					<0.005					<0.005					<0.005				
Barium	1,000	1,060					1,380					856					1,510				
Beryllium	3*	<0.005					<0.005					<0.005					<0.005				
Cadmium	5	<0.005					<0.005					<0.005					<0.005				
Calcium	N/A	186,000					198,000					133,000					155,000				
Chromium	50	ND					10					ND					ND				
Cobalt	N/A	<0.010					<0.010					<0.010					<0.10				
Copper	200	<0.010					<0.010					<0.010					<0.10				
Iron	300	ND					16,100					ND					366				
Lead	25	ND					9.000					ND					ND				
Magnesium	35,000*	46,700					38,700					23,600					27,900				
Manganese	300	580					1,300					ND					5,450				
Mercury	0.7	<0.002					<0.0002					<0.0002					<0.0002				
Nickel	100	<0.040					<0.040					<0.040					<0.040				
Potassium	N/A	35,000 N,M					20,900 N					10,700 N					19,500 N				
Selenium	10	<0.005					<0.005					<0.005					<0.005				
Silver	50	<0.010					<0.010					<0.010					<0.010				
Sodium	20,000	465,000					253,000					262,000					514,000				
Thallium	0.5*	ND					ND					7					9				
Vanadium	N/A	ND					22					ND					ND				
Zinc	2,000*	<0.020					<0.020					<0.020					<0.020				
EPA 8082 - PCBs (none detected above laboratory detection limits)																					
EPA 8081 - Pesticides																					
4,4'-DDD	0.3	0.069 J,B										ND									
4,4'-DDE	0.2	ND										0.055 J									
4,4'-DDT	0.2	0.083 J										0.072 J									
Aldrin	ND	0.053 J										ND									
alpha-BHC	N/A	ND (M)										ND									
alpha-Chlordane	0.1	0.041 J										ND									
beta-BHC	N/A	ND										ND									
Chlordane	0.05	ND										ND									
delta-BHC	N/A	ND (M)										ND									
Dieldrin	0.004	0.039 J										0.036 J									
Endosulfan I	N/A	ND										ND									
Endosulfan II	N/A	ND										0.039 J,B									
Endosulfan Sulfate	N/A	0.049 J										ND									
Endrin	ND	0.034 J										ND									
Endrin aldehyde	5	0.061 J										ND									
Endrin ketone	5	ND										ND									
gamma-BHC (Lindane)	N/A	0.033 J										ND									
gamma-Chlordane		0.088 J,B										0.075 J,B									
Heptachlor	0.04	ND										ND									
Heptachlor epoxide	0.03	ND										ND									
Methoxychlor	35	0.058 J,B										0.035 J,B									
Toxaphene	0.06	ND										ND									

1 all values shown in micrograms per liter (ug/1)
2 NYS Ambient Groundwater Standard (6 NYCRR Part 703.5)
* - NYSDEC Guidance Value (TOGS 1.1.1)
J- value is estimated
B- compound detected in associated method blank

N- compound was "tentatively identified"
M- matrix spike recoveries outside QC limits, matrix bias indicated
ND - compound not detected
well not sampled/analysis not performed at this location
value detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

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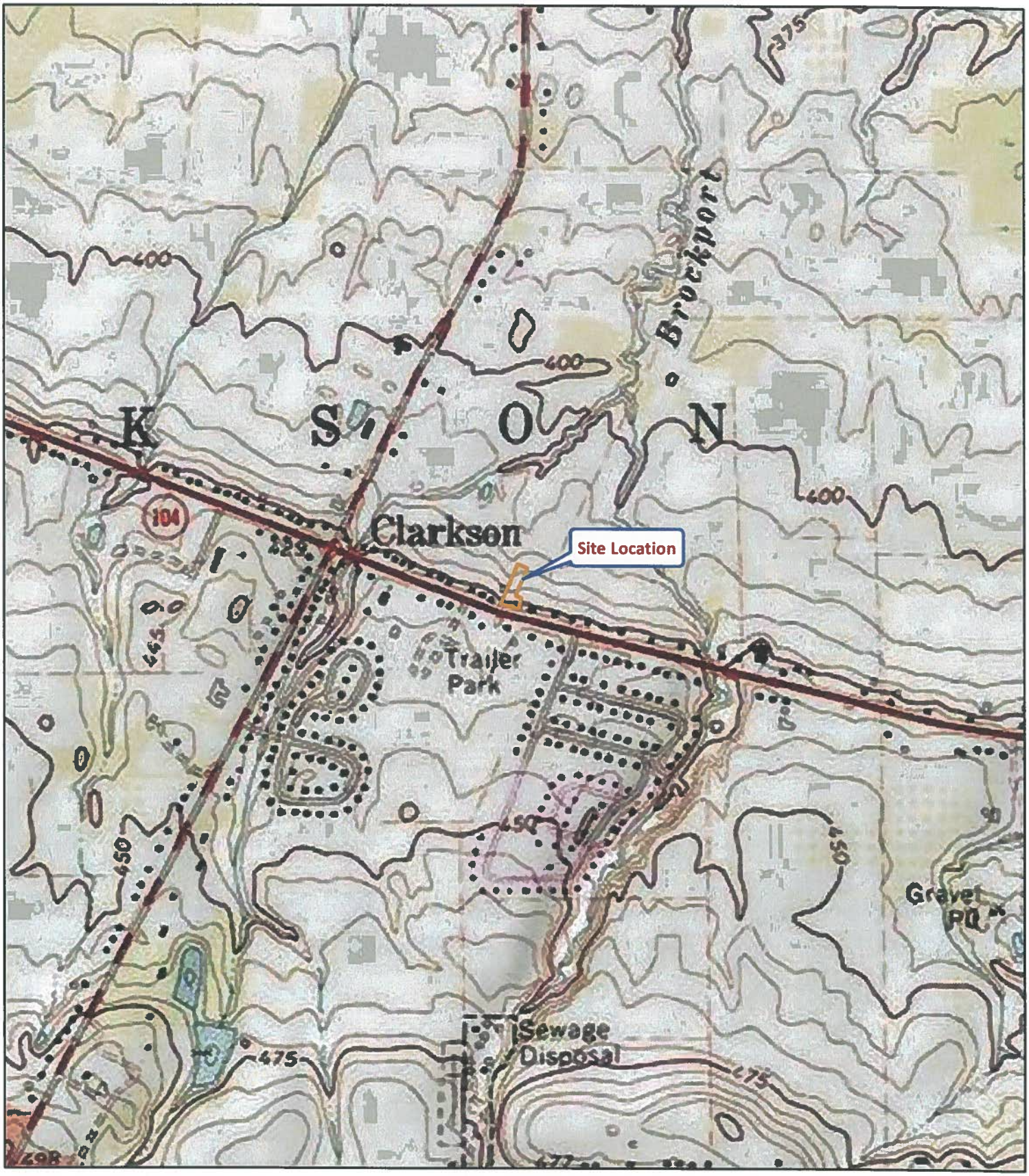
Figures



1 inch = 1,000 feet

0 500 1,000 2,000

Feet

N

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FIGURE 1. Site Location Plan
Former Service Station
8264 Ridge Road West
Town of Clarkson Monroe County, NY

DATE: December 2018
PROJECT #: 40503
DRAWN/CHECKED: BGS/GLA
DATA SOURCE: ESRI online basemap

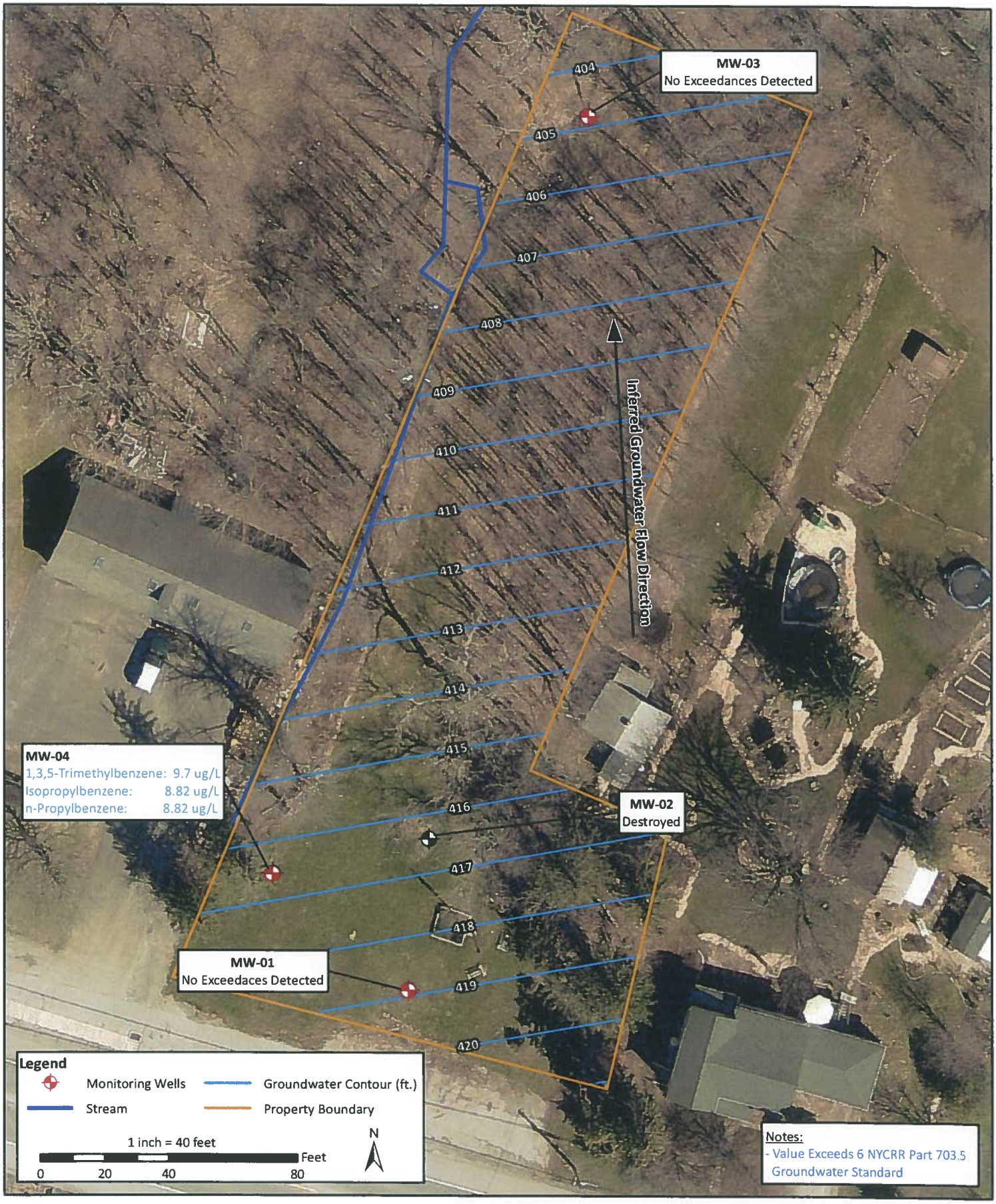

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FIGURE 2. Groundwater Analytical Results November 2018
Former Service Station
8264 Ridge Road West
Town of Clarkson Monroe County, NY

DATE: November 2018
PROJECT #: 40503
DRAWN/CHECKED: BGS/GLA
DATA SOURCE: Pictometry

SITE-WIDE INSPECTION FORM

Former Service Station Site E828143
Town of Clarkson, Monroe County

NAME OF INSPECTOR: Ben Seifert

COMPANY OF INSPECTOR: Lu Engineers

DATE OF INSPECTION: 11/20/2018

CURRENT USE OF SITE: Veterans park

HAS A CHANGE OF USE OCCURRED SINCE THE LAST CERTIFICATION?
_____ **YES** __X__ **NO**
IF YES, THEN EXPLAIN: _____

GENERAL DESCRIPTION OF COVER: Well maintained grass, healthy appearance

HAS THE COVER BEEN PENETRATED? __X__ **YES** _____ **NO**
IF YES, THEN EXPLAIN: 2' diameter (approximate) hole was dug in order to locate & sample MW-01. Material was replaced following sampling

HAVE ANY STRUCTURES BEEN CONSTRUCTED ON THE SITE SINCE THE LAST INSPECTION? _____ **YES** __X__ **NO**
IF YES, THEN EXPLAIN: _____

HAVE COVER CONDITIONS CHANGED SINCE THE LAST INSPECTION?
_____ **YES** __X__ **NO**
IF YES, THEN EXPLAIN: _____

IS ANY MAINTENANCE OF THE COVER REQUIRED?

__X__ **YES** _____ **NO**

IF YES, THEN EXPLAIN: Periodic mowing as necessary

ADDITIONAL OBSERVATIONS, CONCLUSIONS OR RECCOMMENDATIONS:

MW-04 is damaged + needs repair or replacement

ANY CHANGES TO THE SITE OR REQUIRED MAINTENANCE SHOULD BE MARKED IN THE CORRESPONDING LOCATION ON THE ATTACHED MAP

Attachment B- Groundwater Sample Logs

Low Flow Groundwater Sampling Field Record

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Project Name Clarkson
Location ID MW-01
Activity Time 13:10

Field Sample ID MW-01-112018
Sample Time 13:30

Job # 40503
Sampling Event # __
Date 11/20/18

SAMPLING NOTES

Initial Depth to Water 9.10 feet
Final Depth to Water 9.90 feet
Screen Length ____ feet
Total Volume Purged 1.5 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 20.15 feet
Pump Intake Depth ____
PID Well Head ____

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
13:10	9.10		14.38	6.21	0.21	14.6	3.624	-65.2	
13:15	9.52		14.27	6.43	0.47	18.2	3.597	-63.1	
13:20	9.76		14.26	6.32	0.10	11.9	3.551	-63.7	
13:25	9.90		14.20	6.37	0.29	12.3	3.947	-62.9	

Purge Observations: No sheen, possible slight odor
Purge Water Containerized: No

EQUIPMENT DOCUMENTATION

Type of Pump: Geotech Geopump
Type of Tubing: ¼" HDPE
Type of Water Quality Meter: YSI Pro Plus Quatro; LaMotte 2020
Calibrated: Yes

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	
RCRA Metals		
PCBs		
Pesticides		

LOCATION NOTES

Well is in good condition, buried under ~1' of soil. Located roughly 18' off the SW corner of raised garden bed. Need metal detector to locate

Low Flow Groundwater Sampling Field Record

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Project Name Clarkson
Location ID MW-03
Activity Time 09:55

Field Sample ID MW-03-112018
Sample Time 10:15

Job # 40583
Sampling Event # --
Date 11/20/18

SAMPLING NOTES

Initial Depth to Water 10.71 feet
Final Depth to Water 10.91 feet
Screen Length ____ feet
Total Volume Purged 1.75 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 14.13 feet
Pump Intake Depth ____
PID Well Head ____

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked X
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
10:00	10.71		15.59	7.43	5.85	3.64	0.824	102	
10:05	10.79		15.41	7.34	5.07	2.87	0.820	112	
10:10	10.86		14.95	7.30	4.94	2.33	0.823	116	
10:15	10.91		14.79	7.25	4.92	2.11	0.875	118	

Purge Observations: No odor or sheen
Purge Water Containerized: No

EQUIPMENT DOCUMENTATION

Type of Pump: Geotech Geopump
Type of Tubing: ¼" HDPE
Type of Water Quality Meter: YSI Pro Plus Quatro; LaMotte 2020
Calibrated: Yes

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	
RCRA Metals		
PCBs		
Pesticides		

LOCATION NOTES

Stick up well, good condition.
Not locked

Low Flow Groundwater Sampling Field Record

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Project Name Clarkson
Location ID MW-04
Activity Time 11:15

Field Sample ID MW-04-112018
Sample Time 11:25

Job # 40503
Sampling Event # __
Date 11/20/18

SAMPLING NOTES

Initial Depth to Water 9.63 feet
Final Depth to Water 11.09 feet
Screen Length ____ feet
Total Volume Purged 1 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 18.97 feet
Pump Intake Depth ____
PID Well Head ____

Well Diameter 2"
Well Integrity:
Cap X
Casing X
Locked X
Collar X

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
11:15	9.63		13.42	6.82	4.55	13.6	1.19	-50	
11:20	10.57		13.38	6.87	4.76	13.8	1.43	-56	
11:25	10.84		13.40	6.92	4.44	18.7	1.51	-61	
11:30	11.09		13.44	6.89	4.82	11.9	1.24	-61	

Purge Observations: No visible sheen, strong sulfur like odor
Purge Water Containerized: No

EQUIPMENT DOCUMENTATION

Type of Pump: Geotech Geopump
Type of Tubing: ¼" HDPE
Type of Water Quality Meter: YSI Pro Plus Quatro; LaMotte 2020
Calibrated: Yes

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	
RCRA Metals		
PCBs		
Pesticides		

LOCATION NOTES

Well is not capped. PVC badly damaged. Open at surface, uncovered

Attachment C- Laboratory Analytical Data

Attachment D- IC/EC Certification Form

Hwy recd. 10/16/18

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

10/9/2018

~~Paul Kimball~~ Gerard Underwood
Supervisor
Town of Clarkson
3710 Lake Road
PO Box 858
Clarkson, NY 14430

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former Service Station
Site No.: E828143
Site Address: 8264 Ridge Road
Clarkson, NY 14430

Dear ~~Paul Kimball:~~

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **December 21, 2018.** Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Danielle Miles, the Project Manager, at 585-226-5349 or danielle.miles@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, NY 14414

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures
Danielle Miles, Project Manager
Bernette Schilling, Hazardous Waste Remediation Supervisor, Region 8

Lu Engineers - Greg Andrus - gregandrus@luengineers.com

Enclosure 2

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

Site Details **Box 1**

Site No. E828143

Site Name Former Service Station

Site Address: 8264 Ridge Road · Zip Code: 14430
City/Town: Clarkson
County: Monroe
Site Acreage: 0.697

Reporting Period: November 21, 2017 to November 21, 2018

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

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

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

SITE NO. E828143

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
054.14-1-21	Town of Clarkson	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
054.14-1-21	Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
☒	☐

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

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

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

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

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

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

YES	NO
☒	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. E828143

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I Gregory L. Andrus, P.G. at 339 East Avenue Rochester, NY Suite 200 14604
print name print business address

am certifying as Owner's Representative (Owner or Remedial Party)

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

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

12/20/13
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I SUSAN HILTON (print name) at 339 EAST AVE., ROCHESTER, NY (print business address).

am certifying as a Professional Engineer for the OWNER (Owner or Remedial Party)

STATE OF NEW YORK
SUSAN ADELAIDE HILTON
079942
LICENSED PROFESSIONAL ENGINEER

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

12/18/2018
Date

25510
Stamp (Required for PE)

Enclosure 3

Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Attachment E –Site Photographs

Site Photographs: November 2018

Former Service Station Site #E828143

Photo No. 1 Site facing north

Photo No. 2 Site facing northeast

Photo No. 3 Site facing northwest

Photo No. 4 Creek bed facing west

Photo No. 5 Creek bed facing north

Photo No. 6 MW-03 facing north

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Site Photographs: November 2018

Former Service Station Site #E828143

Photo No. 7 Site facing south

Photo No. 8 MW-04

Photo No. 9 MW-02

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