ROUX

Periodic Review Report

Former Paragon Paint and Varnish Site
5-43 to 5-49 46th Avenue and
45-38 to 45-40 Vernon Boulevard
Long Island City, New York

Site No. C241108

May 17, 2019

Prepared for:

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Executive Summary

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan recently amended per the NYSDEC's letter dated January 12, 2018 (Appendix F):

Site Identification:	Site Identification No. C241108 Paragon Paint and Varnish Corp. 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, Queens, New York

Institutional Controls:	1. The property may be used for restricted residential, commercial and/or industrial use only.
	2. Environmental Easement
	3. Performance of soil vapor intrusion evaluation in event of redevelopment.
	4. All ECs must be inspected at a frequency and in a manner defined in the SMP.
Engineering Controls:	1. Cover system
	2. Light Non-Aqueous Phase Liquid (LNAPL) Recovery System
	3. *In-situ* Chemical Oxidation (ISCO) Injections

Inspections:	Frequency
1. Cover inspection	Annually
2. LNAPL recovery system inspection	As Needed
Monitoring:	**Frequency**
1. Gauging of LNAPL recovery wells	Quarterly
2. Gauging of Monitoring wells – Groundwater	Quarterly
3. Sampling of Monitoring Wells – Groundwater	Annually (Can be increased if groundwater results support need to adjust frequency)
Maintenance:	**Frequency**
1. LNAPL pump maintenance	As Needed
2. LNAPL recovery drum change-out	As Needed
Reporting:	**Frequency**
1. Quarterly Progress Report (Ongoing)	Quarterly
2. Groundwater Monitoring Results	Annually
3. Periodic Review Report	Annually

1. Introduction

This Periodic Review Report (PRR) was prepared by Roux Environmental Engineering and Geology D.P.C. (Roux)[1] on behalf of CSC 4540 Property Co LLC (current Site Owner) and serves as a required element of the remedial program for the Former Paragon Paint and Varnish site located in Long Island City, New York (hereinafter referred to as the Site). A Site plan is provided in Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241108, which is administered by the New York State Department of Environmental Conservation (NYSDEC).

On June 29, 2007, 549 46th Avenue LLC applied to the BCP as a Volunteer. Subsequent key dates related to the Volunteer's application to the BCP are below:

- September 4, 2008: The NYSDEC signed the Brownfield Cleanup Agreement (BCA) with 549-46th Avenue LLC as Volunteer.
- July 6, 2010: Anable Beach Inc. applied to amend the BCA to be added as a Volunteer.
- August 17, 2010: The NYSDEC executed the BCA Amendment #1.
- July 18, 2011: Vernon 4540 Realty LLC applied to amend the BCA a second time to be added as a third Volunteer (BCA Amendment #2).
- July 29, 2011: The NYSDEC executed BCA Amendment #2.
- December 15, 2016: The NYSDEC issued a Certificate of Completion (COC) for the Site to 549-46th Avenue LLC, Anable Beach Inc. and Vernon 4540 Realty LLC.
- April 24, 2019: The NYSDEC modified the COC to add CSC 4540 Property Co, LLC and remove Anable Beach, Inc. as a COC holder.

As part of being in the BCP, a Site investigation was performed that revealed high levels of Benzene, Ethylbenzene, Isopropylbenzene (Cumene), and Xylene contamination in soil and groundwater at the Site. In addition, Roux also confirmed that there were two distinct LNAPL plumes located at the Site – one plume in the center of the courtyard and the other at the southwestern edge of the Site located within the driveway. A Track 4 cleanup was proposed and implemented in accordance with the Remedial Action Work Plan submitted to the NYSDEC on October 7, 2015.

The Site Management Plan (SMP), dated August 2015, was approved by NYSDEC on December 7, 2016 (refer to Appendix E). On January 12, 2018, NYSDEC approved of the following modifications:

1. All Site monitoring wells will be gauged for the presence of light non-aqueous phase liquid (LNAPL) on a quarterly basis in lieu of gauging select wells on a monthly basis. The first quarterly gauging event occurred in March 2018.
2. Monthly progress reports are no longer required. A quarterly report will be submitted that details the performance of gauging or sampling events performed at the Site.
3. The groundwater sampling frequency may be reduced to annual, with the next sampling event in June 2018.
4. A formal groundwater monitoring report will be replaced with a tabular summary of groundwater data and a short evaluation of conditions when data is generated. This may be applied to the recent

[1] Prior to March 1, 2018, Roux Environmental Engineering and Geology, D.P.C. performed work as Remedial Engineering P.C. and Roux Associates, Inc. Remedial Engineering P.C. is a New York State professional service corporation organized primarily for the purpose of providing engineering services for clients of Roux Associates, Inc.

groundwater sampling event performed at the Site in December 2017. The results should be discussed in greater detail in the subsequent Periodic Review Report (PRR).

The required Site-wide inspection and quarterly O&M inspections were completed during this SMP monitoring phase. The components, data, and rationale included in this PRR demonstrate that the engineering and institutional controls are performing as designed, are effective, and are compliant with specifications described in the SMP. No additional changes to the monitoring plan are recommended by Roux at this time.

Site Management activities, reporting, and Institutional Control (IC)/ Engineering Control (EC) certification are scheduled on a certification period basis. This certification is based on the submission of a PRR (included herein), submitted to the NYSDEC every year beginning fifteen months after the COC was issued. These PRRs will identify and assess all of the IC/ECs required by the remedy for the Site, any environmental monitoring data and/or information generated during the reporting period, and a complete Site evaluation which discusses the overall performance and effectiveness of the previous remedy.

2. Site Overview

2.1 Site Description and History

The Site is located in Long Island City, Queens County, New York and is identified as Block 26 and Lot 4 on the Long Island City Tax Map. The Site is an approximately 0.76-acre area and is bounded by a one-story commercial property and Anable Basin to the north, 46th Avenue to the south, Vernon Boulevard and multi-story residential/commercial buildings to the east, and a two-story warehouse to the west. The owner of the Site is CSC 4540 Property Co, LLC.

The Site consists of a four-story former paint factory, a three-story former garage and office, a three-story former warehouse, a concrete access road off 46th Avenue and a concrete rear courtyard that fronts approximately 50 feet of the Anable Basin. The Site is zoned industrial and is currently vacant. The properties adjoining the Site and, in the neighborhood, surrounding the Site primarily include commercial and residential properties.

2.2 Summary of Remedial Action

Following the BCP Remedial Investigation Report, and the Department's approval of the Remedial Action Work Plan, Volunteers began remediation at the Site in 2015. Since then, Volunteers have fully implemented and completed the approved remedial program. All remedial work was done with oversight, understanding, and direction from the NYSDEC.

Based on the results of the Remedial Investigation Report, the Decision Document identified the following Remedial Action Objectives (RAOs) for this Site.

Remedial Action Objectives

Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the Site.

The cleanup consisted of the following:

- Excavation and off-Site disposal of grossly contaminated soil in the courtyard LNAPL source area, including:
  - Grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u)
  - Soil containing LNAPL
  - Soil containing total SVOCs exceeding 500 parts per million (ppm)
  - Soils which exceeded the PoGW SCOs as defined by 6 NYCRR Part 375-6.8 for those contaminants found in Site groundwater above standards
  - Soils that created a nuisance condition, as defined in NYSDEC Commissioner Policy CP-51 Section G
- Closure of USTs by removal or, as a contingency, closure in place
- Excavation and disposal of subsurface piping
- Air monitoring of potential airborne VOCs and particulates during all ground intrusive and soil handling activities
- Implementation of erosion and sediment controls
- Installation of five autonomous LNAPL recovery pumps at property boundary areas where LNAPL plume extends off-Site
- Installation of a Site cover system
- *In situ* chemical oxidation (ISCO) injections for treatment of VOCs in soil and groundwater underneath the brick warehouse building on-Site.

2.3 Remaining Contamination

The Remedial Alternative (RA) was designed to reduce the concentration of Site contaminants in groundwater through excavation of grossly contaminated soil in the LNAPL source area within the courtyard followed by product recovery at the edges of the LNAPL plumes that extended off-site from the courtyard area and the driveway.

Due to limits of the Support of Excavation (SOE), structural engineering concerns associated with the onsite buildings and other Site constraints, all soil contamination was not removed as part of the performance of the remedial action. As a result, soil contamination remains at several locations across the Site that exceeds the NYSDEC PoG SCOs for one or more of the four VOCs of concern (benzene, ethylbenzene isopropylbenzene and total xylenes).

2.3.1 Soil

The RA addressed grossly contaminated soil in the LNAPL source areas within the courtyard and driveway through excavation, low-level VOCs underneath the Warehouse through ISCO, and limiting contact with potentially-contaminated soil by installing a composite cover over the rest of the Site. Though the grossly contaminated soil was removed from the LNAPL source areas in the courtyard and driveway, soil contamination remains to the east of the excavation towards the four-story paint factory building and within the driveway excavation. This material, which potentially extends beneath Site buildings, could not be removed due to the SOE limitations.

The south extent of the excavation in the courtyard was extended to as near the warehouse and garage as a 1:1 slope would allow. Excavation and post-excavation sampling determined the presence of grossly contaminated material towards the three-story building and beneath the concrete slab where former 20,000 USTs had been staged on. The bottom sample collected from the middle of the driveway excavation at 17.5 ft showed evidence of gross contamination.

A total of 11 USTs was encountered during the RA, with five (5) in the southeast corner of the courtyard excavation and the remaining six (6) located inside the garage excavation footprint. All 11 tanks and their chambers encountered during the RA were emptied, cleaned and were either removed (the five (5) courtyard excavation USTs) or abandoned in place (the six (6) garage excavation USTs). Compliance UST samples were collected from the soil surrounding the courtyard and garage and the presence of residual contamination was present. This material could not be removed due to SOE limitations.

The residual soil contamination, as originally presented in the Final Engineering Report (FER) dated November 22, 2016, is also presented in this PRR as Figures 4 and 5. Further remedies to address this residual contamination will be evaluated in the Site redevelopment plan.

2.3.2 Groundwater

The RA addressed groundwater through removal and/or treatment of soil with VOCs above PoG SCOs. A component of the RAWP was an ISCO injection program to treat VOCs in groundwater and soil where excavation could not be completed during the RA, namely the soils under the basement of the Warehouse. As documented in the FER, the initial ISCO injection program marginally improved groundwater quality as all Site's contaminants of Concern (benzene, ethylbenzene, isopropylbenzene, m,p-xylene, and o-xylene) remain above their respective NYSDEC ambient water quality guidance and standard values (AWQSGV) at various monitoring well locations across the Site.

All post-remediation groundwater analytical results are summarized in Appendix C with COC-specific data depicted on Figure 2.

Based upon the continued presence of residual VOCs in groundwater following the initial injection treatment event in the warehouse area and residual VOCs in soil after excavation of impacted soil in the courtyard during the Remedial Action, additional ISCO treatment was performed during this reporting period. Further details concerning the performance of that injection event are discussed in Section 3.3.2.

2.3.3 Soil Vapor

The RA addressed soil vapor through removal and/or treatment of soil containing VOCs above the PoG SCOs. During redevelopment, the need for soil vapor mitigation in new structures will be evaluated. New buildings with occupancy and slab-on-grade design may require a vapor barrier and a sub-slab depressurization system.

2.4 Engineering and Institutional Controls

Since residual contamination remains beneath the Site, ICs/ECs have been incorporated into the Site remedy as part of the NYSDEC-approved SMP, to provide proper management of residual contamination in the future and ensure protection of public health and the environment.

2.4.1 Engineering Controls

The Site has ECs consisting of:

- Site Cover System (refer to Figure 3);
- ISCO Injections; and
- LNAPL Recovery System.

The purpose of each EC is described below:

- The Site Cover System prevents exposure to remaining contamination in soil/ fill at the Site.
- The ISCO Injections, if effective, destroy the residual VOCs in groundwater and soil that were present after completion of the excavation remedy.
- The LNAPL Recovery System removes any residual LNAPL that may be present at the water table.

The LNAPL Recovery and Site Cover System ECs are fully in place and effective at meeting their objectives.

2.4.2 Institutional Controls

A Site-specific Environmental Easement has been recorded with the Queens County Clerk that provides an enforceable means to manage the remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The ICs presented in the SMP consist of the following:

- The property may be used for: restricted residential, commercial or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

3. SMP Requirements and Compliance Monitoring

Since remaining contaminated soil and groundwater exists beneath the Site, ICs and ECs are required to protect human health and the environment. This section details the elements of the SMP including the inspection, monitoring, and reporting requirements, IC/ECs, whether the IC/EC requirements were met, and regulatory notification and certification requirements. The various subsections below also include an evaluation of the remedy performance, effectiveness, and protectiveness.

3.1 IC/EC Plan Compliance Report

Since remaining contamination exists beneath the Site, ICs and ECs are required to protect human health and the environment and are described in detail in Section 2.4. On an annual basis, required certifications must be made for these Site-specific ICs and ECs to ensure that the required IC/ ECs are in place, are performing properly, and remain effective; and to confirm that they are continuing to be protective of human health and the environment. The respective IC/EC Certification Form for the controls that are currently in place for the Site is provided in Appendix A.

3.1.1 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, along with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

3.2 Inspections

All inspections were conducted at the frequency specified in the Executive Summary. Specific details of requirements and completed inspections are provided in the following sections. Inspections of remedial components are also conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as power interruption or fire that may affect the ECs. The inspections will determine and document the following:

- IC/ECs are in place, are performing properly, and remain effective;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

3.3 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 Site cover system, and all affected Site media identified below. Components of the Monitoring Plan are:

- Sampling and analysis of all appropriate media (e.g., groundwater).
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil.
- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.
- Preparing the necessary reports for the various monitoring activities.

Monitoring of the performance of the remedy and overall reduction in contamination onsite will be conducted for the periods specified for each matrix listed in table below. The frequency is subject to change in consultation with NYSDEC and based on reports submitted showing contaminant trends.

Monitoring Program	Frequency	Matrix	Analysis
Site Cover System and Site-Wide Inspection	Annually. First inspection no more than 15 months after issuance of the COC.	Soil	Visual inspection of all cover system components
Groundwater in Monitoring Wells	Quarterly gauging and annual sampling*	Groundwater	VOCs (USEPA Method 8260) for NYSDEC Target Compound List compounds
Free Product in Monitoring Wells	Quarterly gauging	LNAPL	Check for presence of LNAPL and confirm thickness, if applicable. Manual recovery of LNAPL where present and practical
LNAPL Recovery System Inspection	As Needed	LNAPL	Visual Inspection of all system components

A record of the findings of each monitoring/inspection event and maintenance activity performed as described above, where applicable, will be documented on the Site Inspection Checklists and the LNAPL Recovery System Monitoring Logs provided in Appendices B and C, respectively of the SMP. If at any time during the reporting period the Volunteers identify a failure of one or more of the ECs or non-compliance with one or more of the ICs, the remedial party must notify NYSDEC and implement corrective measures, in accordance with a Corrective Measures Work Plan (CMWP) submitted to and approved by NYSDEC and provide a periodic certification of the IC/ECs.

3.3.1 Site Cover System

Exposure to remaining contamination at the Site is prevented by a non-mechanical engineered Site composite cover system that consists of:

- Existing concrete building slabs for the Paint Factory, 1-Story Brick Building, and 3-Story Warehouse;
- Existing concrete pavement;
- Installed asphalt cap; or
- Installed minimum 2 feet of recycled concrete aggregate (RCA).

The location and details of the Site cover system are shown on Figure 3. Monitoring of the Site cover system will occur on an annual basis as long as the Environmental Easement is in effect to ensure the system's integrity. Monitoring consists of visual inspection, which evaluates the structural integrity of the slab, pavement, and asphalt; and exposure of the demarcation barrier and direction of drainage for the RCA cap.

Roux performed a Site cover system and Site-wide inspection on April 9, 2019. The completed Site Inspection Checklist is provided in Appendix B. The annual inspection determined that all Site cover system elements described herein were observed to be performing as designed during the reporting period of the PRR and are protective of human health and the environment. Photographs taken during the most recent Site-wide inspection are also provided in Appendix B.

3.3.2 Groundwater Monitoring and Sampling

Quarterly groundwater monitoring during the reporting period was performed on June, 7, 2018; August 9, 2018; November 8, 2018; and February 14, 2019. Samples were collected annually from the monitoring wells within the SMP monitoring network for Target Compound List (TCL) of VOCS using United States Environmental Protections Agency (USEPA) SW846 Method 8260. Purge water and decontamination waste water generated during the groundwater sampling was containerized in a labeled 55-gallon drum stored onsite. Groundwater analysis results for the August 2018 sampling event are provided in Appendix C. All formal groundwater monitoring reports submitted to the NYSDEC are provided in Appendix G. The sampling, sample handling, decontamination, and field instrument calibration procedures were performed in accordance with procedures detailed in the Quality Assurance Project Plan, provided in Appendix H.

The most recent round of SMP groundwater monitoring indicated detections above NYSDEC AWQSGV for seven (7) compounds, excluding the exceedances in acetone that were most likely caused by laboratory preservative methods:

- 1,3,5-Trimethylbenzene concentrations ranged from 6.4 µg/L to 96 µg/L with the highest concentration detected in MW-45;
- One benzene exceedance of 5.1 µg/L at MW-40;
- One ethylbenzene exceedance of 9.1 µg/L at MW-45;
- Isopropylbenzene concentrations ranged from 5.8 µg/L to 52 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-19;
- m,p-Xylene concentrations ranged from 6.1 µg/L to 9.6 µg/L with the highest concentration detected in MW-45;
- n-Propylbenzene concentrations ranged from 5.5 µg/L to 69 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-38;
- sec-Butylbenzene concentrations ranged from 8.4 µg/L to 28 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-38; and
- tert-Butylbenzene concentrations ranged from 5.7 µg/L (a laboratory diluted sample) to 12 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-38.

Roux does not believe ISCO or other applicable technologies, (i.e., bioventing, bioremediation, or air sparging) would effectively address groundwater and gross contamination in soil at the Site. As such, alternative treatment options (i.e., stabilization) would be further evaluated as Site redevelopment plans are finalized.

3.3.3 Soil Vapor Intrusion Monitoring

New buildings with occupancy and slab-on-grade design may require a vapor barrier and sub-slab depressurization system. Soil vapor intrusion sampling will be performed during redevelopment planning to assess the potential for intrusion into the new buildings. At this time no plans for redevelopment have been established.

3.3.4 Turbidity Curtain Removal

On December 28, 2018 Roux was notified of a potential spill in the Anable Basin by the NYSDEC that was alleged to have originated from a boom installed by the Site Owner. After further investigation, it was determined that the boom was actually a turbidity curtain installed at the Site in 2016 for the bulkhead construction work, per the Sediment Removal and Capping Plan prepared by BlueShore LLC and approved by NYSDEC. NYSDEC subsequently requested that the turbidity curtain be removed from the Anable Basin. Atlantic Response, Inc. (Atlantic Response), Roux, and Citistructure, LLC (Citistructure) mobilized to the Site on February 14, 2019 and successfully coordinated the removal and disposal of the turbidity curtain as required by the NYSDEC. Photographs of the Anable Basin confirming the turbidity curtain is no longer present are included in Appendix B. A waste manifest confirming offsite transport and disposal is included in Appendix I.

3.4 Operation and Maintenance Plan Compliance Report

The O&M Plan provided in the SMP:

- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the LNAPL recovery system;
- Includes troubleshooting as referenced in the equipment manual(s); and
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS is operated and maintained;

The LNAPL recovery system consists of a Geotech AC Sipper connected to five recovery wells (RW-1 through RW-5). The system operates when product is present within the recovery well. To date, the Sipper has recovered approximately 3.3 gallons of LNAPL. Due to the lack of presence of detectable LNAPL, the recovery system has not been running since March 30, 2017. Complete details of the NYSDEC-approved LNAPL recovery system including as-built drawings and startup procedures are presented in the SMP.

3.4.1 LNAPL Recovery System Operation Monitoring

All mechanical aspects of the product recovery system are visibly inspected to ensure proper function. Inspection activities include making sure that power supply is functioning, verifying no leaks are present in any of the recovery tubing, hoses or connections. The 55-gallon product storage drum was also checked during each visit to determine if disposal arrangements needed to be made.

Free product levels within the wells located in the area were monitored and recorded to determine if the system needed to be restarted. Wells were gauged quarterly in accordance with the Site’s IC/EC requirements. The system will remain in-place in the event that future monitoring events identify recoverable LNAPL. The system will be decommissioned upon Site redevelopment.

Moving forward, any LNAPL that is observed in monitoring wells at the Site during routine gauging events that are not within the capture zone of these existing recovery wells will continue to be manually recovered, to the extent practical, on a quarterly basis.

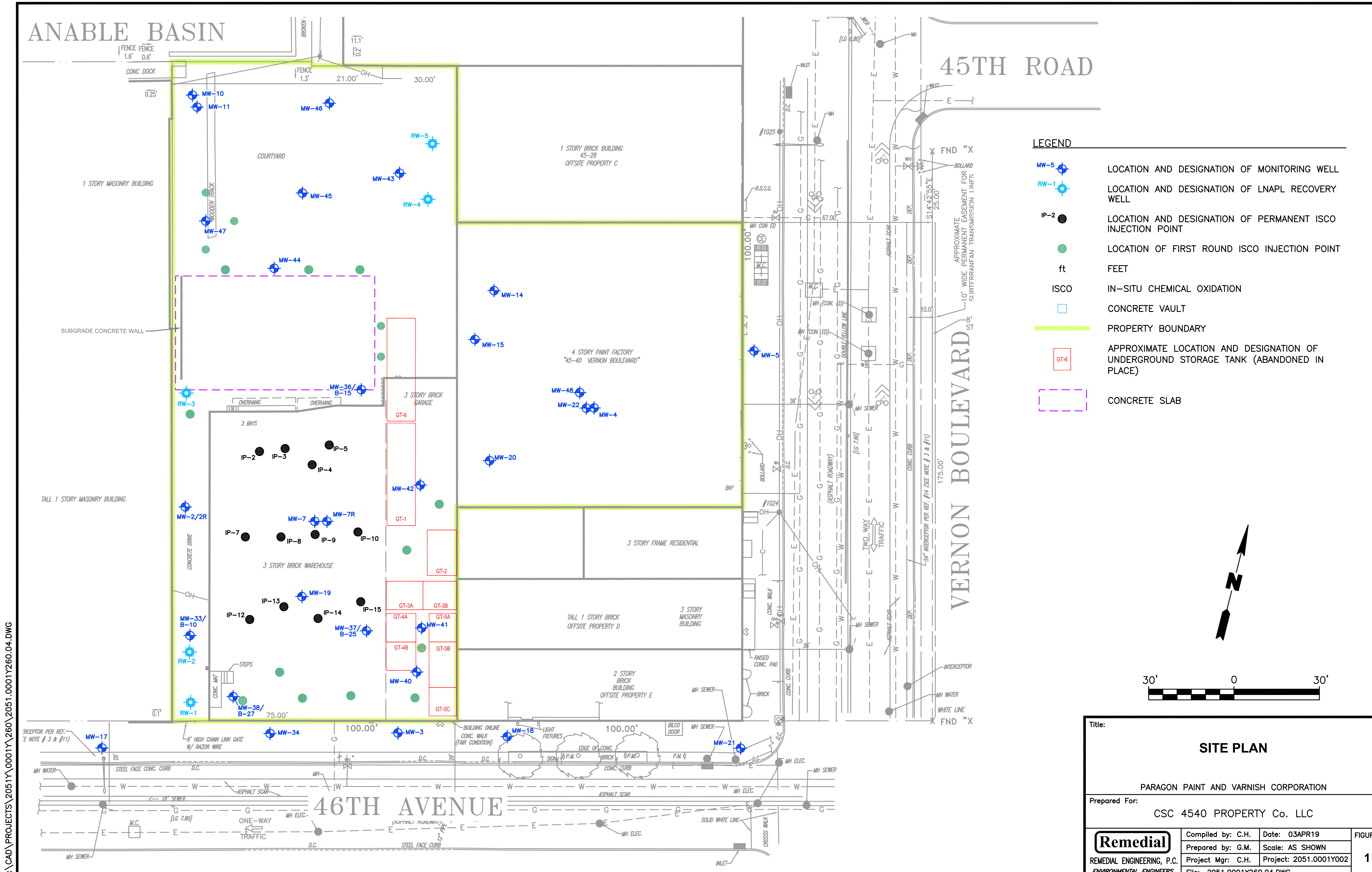
The required LNAPL Recovery System Monitoring Logs that were completed during the reporting period are provided in chronological order in Appendix D. O&M activities described herein determined that the O&M Plan was carried out as designed during the reporting period of the PRR and it is protective of human health and the environment.

4. Overall Conclusions and Recommendations

The following section presents conclusions from inspections and monitoring activities and recommendations.

- The ICs and ECs are performing as designed, are effective, and are compliant with specifications described in the SMP. No changes to the monitoring plan are recommended at this time.

FIGURES


ANABLE BASIN
45TH ROAD
VERNON BOULEVARD
46TH AVENUE
COURTYARD
1 STORY MASONRY BUILDING
SUBGRADE CONCRETE WALL
TALL 1 STORY MASONRY BUILDING
3 STORY BRICK WAREHOUSE
3 STORY BRICK GARAGE
1 STORY BRICK BUILDING 45-28 OFFSITE PROPERTY C
4 STORY PAINT FACTORY "45-40 VERNON BOULEVARD"
3 STORY FRAME RESIDENTIAL
TALL 1 STORY BRICK OFFSITE PROPERTY D
3 STORY MASONRY BUILDING
2 STORY BRICK BUILDING OFFSITE PROPERTY E
CONCRETE DRIVE
3 BAYS
OVERHANG
STEPS
MW-10
MW-11
MW-46
RW-5
MW-43
RW-4
MW-45
MW-47
MW-44
MW-36/ B-15
RW-3
IP-2
IP-3
IP-4
IP-5
MW-42
MW-2/2R
MW-7
MW-7R
IP-7
IP-8
IP-9
IP-10
MW-19
IP-12
IP-13
IP-14
IP-15
MW-33/ B-10
RW-2
MW-37/ B-25
MW-41
MW-40
RW-1
MW-38/ B-27
MW-14
MW-15
MW-48
MW-22
MW-4
MW-20
MW-5
MW-17
MW-34
MW-3
MW-18
MW-21
GT-6
GT-1
GT-2
GT-3A
GT-3B
GT-4A
GT-5A
GT-4B
GT-5B
GT-5C
30.00'
21.00'
100.00'
75.00'
175.00'
ONE-WAY TRAFFIC
TWO WAY TRAFFIC
FND "X
LEGEND
LOCATION AND DESIGNATION OF MONITORING WELL
LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL
LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
LOCATION OF FIRST ROUND ISCO INJECTION POINT
ft FEET
ISCO IN-SITU CHEMICAL OXIDATION
CONCRETE VAULT
PROPERTY BOUNDARY
APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
CONCRETE SLAB
N
30' 0 30'
Title:
SITE PLAN
PARAGON PAINT AND VARNISH CORPORATION
Prepared For:
CSC 4540 PROPERTY Co. LLC
Remedial
REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS
Compiled by: C.H.
Prepared by: G.M.
Project Mgr: C.H.
File: 2051.0001Y260.04.DWG
Date: 03APR19
Scale: AS SHOWN
Project: 2051.0001Y002
FIGURE
1
V:\CAD\PROJECTS\2051\0001Y\260\2051.0001Y260.04.DWG

MW-11	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U

MW-10	09/26/2017	12/21/2017	12/21/2017	08/09/2018
COCs			DUP	
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U

MW-46	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U

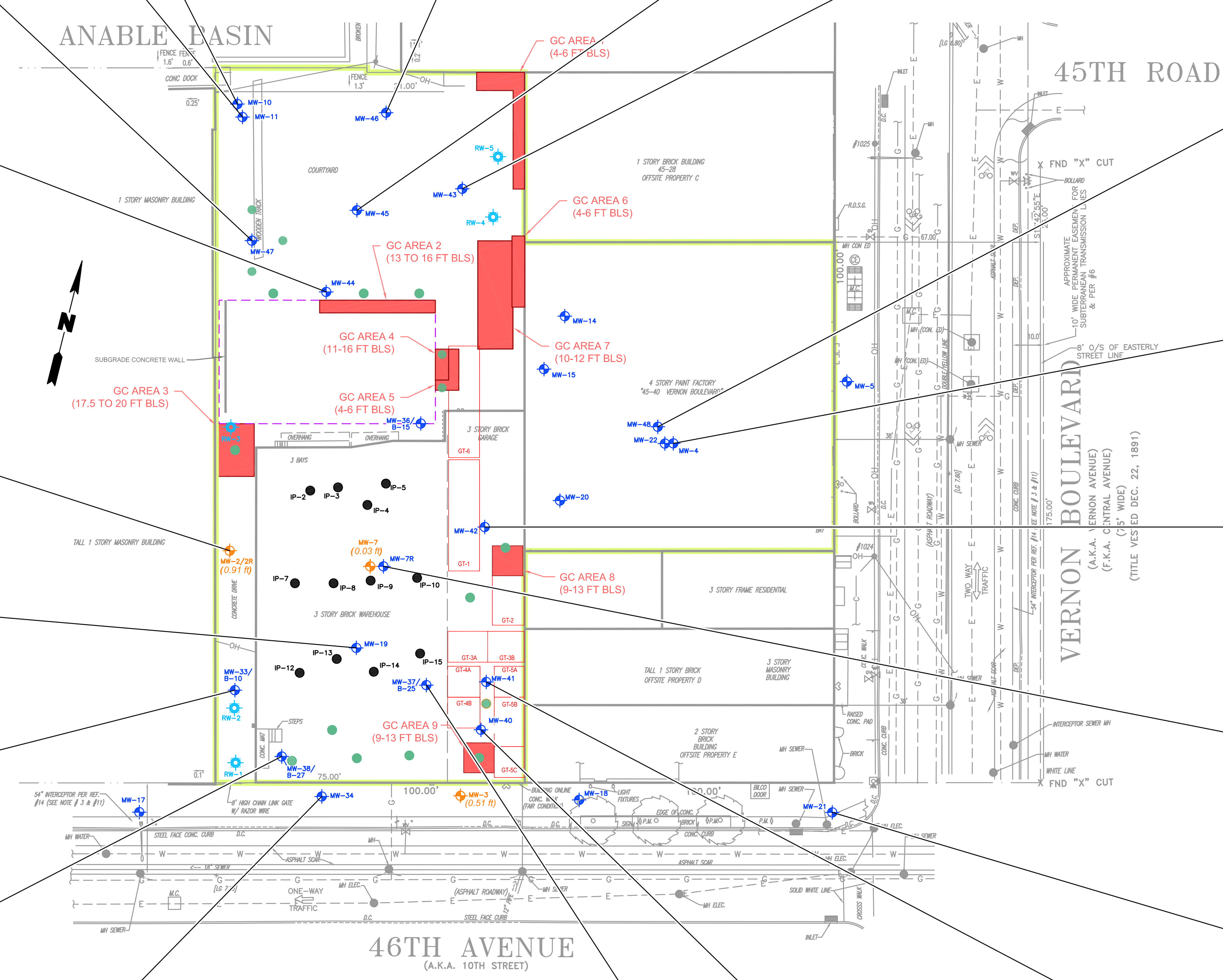
MW-45	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	NS	NS	0.42 J
Ethylbenzene	NS	NS	**9.1**
Isopropylbenzene (Cumene)	NS	NS	**27**
m,p-Xylene	NS	NS	**9.6**
O-Xylene (1,2-Dimethylbenzene)	NS	NS	4.5 J
Xylenes	NS	NS	**14 J**

MW-47	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.31 J	0.47 J	0.17 J
Ethylbenzene	**5.2**	**7.6**	2.5
Isopropylbenzene (Cumene)	**9.1**	**11**	4.6
m,p-Xylene	**13**	**19**	**6.1**
O-Xylene (1,2-Dimethylbenzene)	**8.6**	**12**	3.6
Xylenes	**22**	**31**	**9.7**

MW-43	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.69	0.45 J	0.5 U
Ethylbenzene	**5.9**	**5.4**	2.5 U
Isopropylbenzene (Cumene)	**12**	**12**	1.6 J
m,p-Xylene	**18**	**12**	0.91 J
O-Xylene (1,2-Dimethylbenzene)	**10**	**6.4**	0.75 J
Xylenes	**28**	**18**	1.7 J

MW-44	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.37 J	0.36 J	0.5 U
Ethylbenzene	**6**	4.4	1.4 J
Isopropylbenzene (Cumene)	**9.3**	**7.4**	2.7
m,p-Xylene	**15**	**13**	4.2
O-Xylene (1,2-Dimethylbenzene)	**13**	**10**	3.7
Xylenes	**28**	**23**	**7.9**

MW-48	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	1.5 J	1.2 J	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U



MW-4	09/26/2017	09/26/2017	12/21/2017	08/10/2018
COCs		DUP		
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.89 J	0.73 J	0.74 J	2.5 U
Isopropylbenzene (Cumene)	**6.9**	**6.2**	4.7	**5.8**
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U

MW-2R	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.5 U	NS	NS
Ethylbenzene	2.5 U	NS	NS
Isopropylbenzene (Cumene)	**11**	NS	NS
m,p-Xylene	1.1 J	NS	NS
O-Xylene (1,2-Dimethylbenzene)	0.73 J	NS	NS
Xylenes	1.8 J	NS	NS

MW-42	09/26/2017	12/21/2017	08/10/2018
COCs			
Benzene	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U

MW-19	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	NS	2.5 U	1.2 U
Ethylbenzene	NS	5.3 J	6.2 J
Isopropylbenzene (Cumene)	NS	**63**	**10**
m,p-Xylene	NS	12 U	6.2 U
O-Xylene (1,2-Dimethylbenzene)	NS	12 U	6.2 U
Xylenes	NS	12 U	6.2 U

MW-7R	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	2 U	NS	NS
Ethylbenzene	10 U	NS	NS
Isopropylbenzene (Cumene)	**19**	NS	NS
m,p-Xylene	10 U	NS	NS
O-Xylene (1,2-Dimethylbenzene)	10 U	NS	NS
Xylenes	10 U	NS	NS

MW-33	09/26/2017	12/21/2017	08/09/2018	08/09/2018
COCs				DUP
Benzene	0.23 J	1.2 U	0.5 U	0.5 U
Ethylbenzene	1.3 J	1.9 J	2.5 U	2.5 U
Isopropylbenzene (Cumene)	4.2	6 J	1 J	1 J
m,p-Xylene	2.5 U	6.2 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	6.2 U	2.5 U	2.5 U
Xylenes	2.5 U	6.2 U	2.5 U	2.5 U

MW-38	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	0.62	0.36 J	5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**25**	**10**	**52**
m,p-Xylene	2.5 U	2.5 U	25 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	25 U
Xylenes	2.5 U	2.5 U	25 U

MW-21	09/26/2017	12/21/2017	8/10/2018
COCs			
Benzene	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U

MW-34	09/26/2017	12/21/2017	08/10/2018
COCs			
Benzene	NS	NS	0.5 U
Ethylbenzene	NS	NS	2.5 U
Isopropylbenzene (Cumene)	NS	NS	**29**
m,p-Xylene	NS	NS	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	2.5 U
Xylenes	NS	NS	2.5 U

MW-37	09/26/2017	12/21/2017	08/09/2018
COCs			
Benzene	NS	NS	0.5 U
Ethylbenzene	NS	NS	2.5 U
Isopropylbenzene (Cumene)	NS	NS	**13**
m,p-Xylene	NS	NS	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	2.5 U
Xylenes	NS	NS	2.5 U

MW-40	09/26/2017	12/21/2017	08/10/2018
COCs			
Benzene	NS	**8.4**	**5.1**
Ethylbenzene	NS	2.5 U	2.5 U
Isopropylbenzene (Cumene)	NS	**32**	**44**
m,p-Xylene	NS	0.8 J	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	2.5 U	2.5 U
Xylenes	NS	0.8 J	2.5 U

MW-41	09/26/2017	12/21/2017	08/10/2018
COCs			
Benzene	0.62	**1.2**	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	1.4 J	1.4 J	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U

LEGEND

- MW-5 LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
- MW-3 LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
- RW-1 LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
- IP-2 LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
- LOCATION OF FIRST ROUND ISCO INJECTION POINT
- (0.38 ft) LNAPL THICKNESS
- GC AREA 1 (4-6 FT BLS) DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING
- ft FEET
- LNAPL LIGHT NON-AQUEOUS PHASE LIQUID
- ISCO IN-SITU CHEMICAL OXIDATION
- CONCRETE VAULT
- PROPERTY BOUNDARY
- GT-6 APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. → MW-48 | 12/01/2016 ← SAMPLE DATE

ANALYTES — | — CONCENTRATIONS (IN $\mu g/L$)

MW-48	12/01/2016
COCs	
Benzene	0.5 U
Ethylbenzene	2.5 U
Isopropylbenzene (Cumene)	4
m,p-Xylene	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U
Xylenes	2.5 U

PARAMETER	STANDARDS*
Benzene	1
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
O-Xylene (1,2-Dimethylbenzene)	5
Xylenes	5

CONCENTRATIONS IN $\mu g/L$

$\mu g/L$ – MICROGRAMS PER LITER
* – NYSDEC AWQSGVs
NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AWQSGVs – AMBIENT WATER-QUALITY STANDARDS AND GUIDANCE VALUES
– – NO NYSDEC AWQSGV AVAILABLE
DUP – DUPLICATE SAMPLE
J – ESTIMATED VALUE
NS – NOT SAMPLED
U – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED
BOLD – INDICATES THAT PARAMETER WAS DETECTED ABOVE THE NYSDEC AWQSGVS

NOTES

1. AN OBSERVABLE SHEEN WAS RECORDED DURING PURGE AT MONITORING WELLS MW-7, MW-34 AND MW-45, AND WERE NOT SAMPLED.
2. MONITORING WELLS MW-14 AND MW-15 WENT DRY DURING PURGE AND WERE NOT SAMPLED.

30' 0 30'

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Remedial
REMEDIAL ENGINEERING, P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:

SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

PROJECT FOR:

CSC 4540 PROPERTY CO LLC

TITLE:

VOCs AND LNAPL DETECTED IN GROUNDWATER SEPTEMBER 2017 TO SEPTEMBER 2018

FIGURE

2

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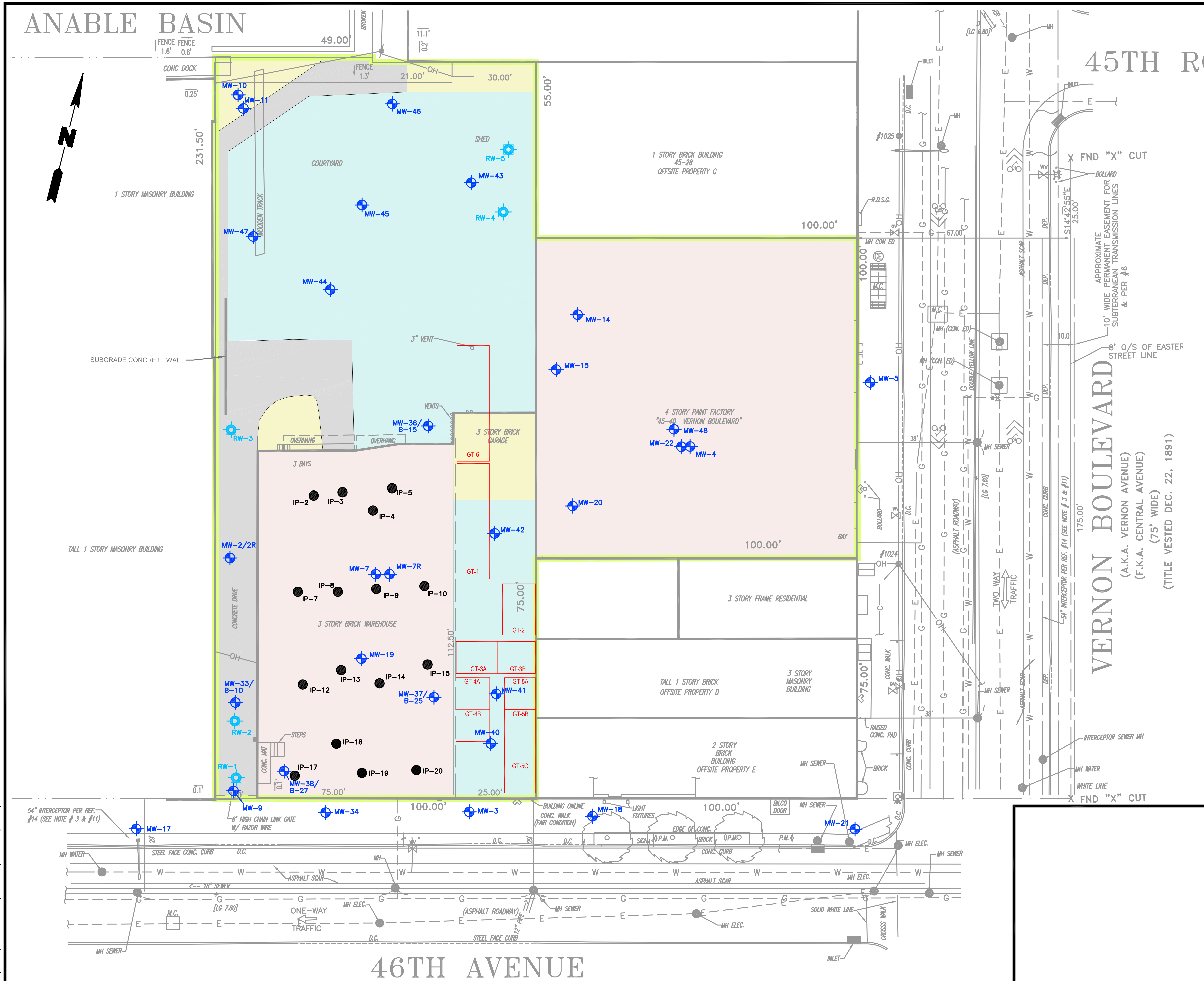

LEGEND

MW-5	LOCATION AND DESIGNATION OF MONITORING WELL
RW-1	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL
IP-2	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
ISCO	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	INSTALLED ASPHALT CAP
	EXISTING CONCRETE PAVEMENT
	INSTALLED RECYCLED CONCRETE AGGREGATE (MIN. 2 FT)
	EXISTING BUILDING SLAB

NOTE

REFER TO AS-BUILT DRAWINGS FOR ELEVATION INFORMATION OF INSTALLED PORTIONS OF COVER SYSTEM.

Title:

ENGINEERING CONTROL LOCATION - COMPOSITE COVER SYSTEM

SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

Prepared For:

CSC 4540 PROPERTY CO LLC

Remedial
REMEDIAL ENGINEERING, P.C.

		FIGURE
Compiled by: C.H.	Date: 03ZPR19	3
Prepared by: G.M.	Scale: AS SHOWN	
Project Mgr: R.M.	Project: 2051.0001Y002	
File: 2051.0001Y260.02.DWG		

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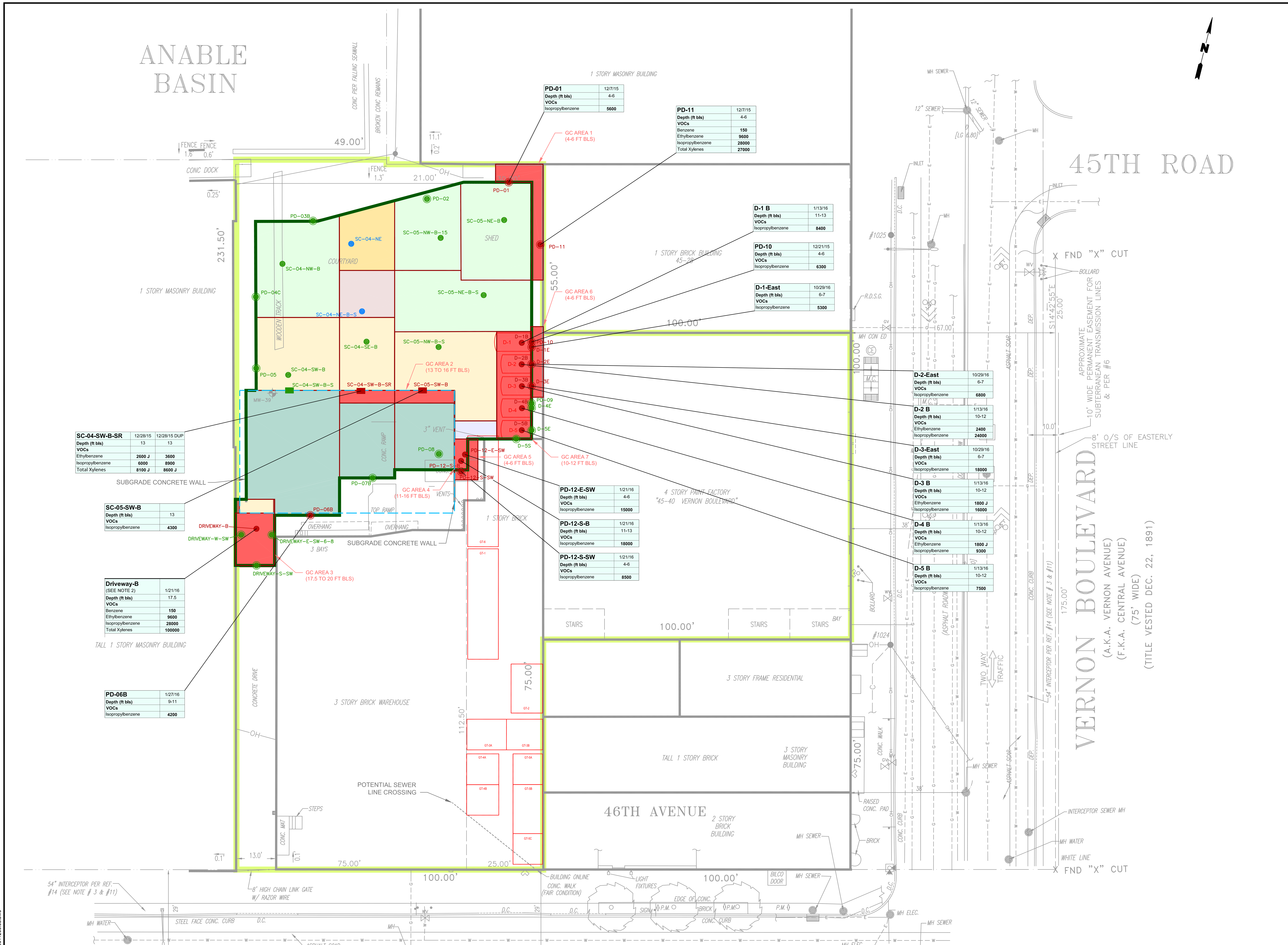

LEGEND

PD-12-S-B	EXCAVATION BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
PD-10	EXCAVATION SIDWEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
SC-04-SW-B-SR	CONCRETE SLAB BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
SC-05-NW-B-S	EXCAVATION BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
D-5S	EXCAVATION SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
SC-04-SW-B-S	CONCRETE SLAB BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS (SEE NOTE 1)
SC-04-NE	POTENTIAL SAMPLE LOCATION AND DESIGNATION ABANDONED DUE TO REFUSAL
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
D-5	APPROXIMATE LOCATION AND DESIGNATION OF DISHED UNDERGROUND STORAGE TANK (REMOVED)
	REMEDIAL ACTION EXCAVATION LIMITS
	CONCRETE SLAB
	9 FT BLS EXCAVATION FOOTPRINT
	11 FT BLS EXCAVATION FOOTPRINT (TOPOGRAPHY OF CONCRETE SLAB)
	13 FT BLS EXCAVATION FOOTPRINT
	15 FT-15.5 FT BLS EXCAVATION FOOTPRINT
	16 FT BLS EXCAVATION FOOTPRINT
	17 FT BLS EXCAVATION FOOTPRINT
	18 FT BLS EXCAVATION FOOTPRINT
GC AREA 1 (4-6 FT BLS)	DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING

Parameter	Standards* (µg/kg)
VOCs	
Benzene	**60**
Ethylbenzene	**1000**
Isopropylbenzene	****2300**
Total Xylenes	**1600**

CONCENTRATIONS IN µg/kg

µg/kg – MICROGRAMS PER KILOGRAM
NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
* – NYSDEC PART 375 PROTECTION OF GROUNDWATER
** – NYSDEC CP-51 PROTECTION OF GROUNDWATER STANDARDS
VOCS – VOLATILE ORGANIC COMPOUNDS
J – ESTIMATED VALUE
FT BLS – FEET BELOW LAND SURFACE

NOTE

1. CONCRETE SLAB LOCATED IN COURTYARD AT APPROXIMATELY 11 TO 13 FT BLS WAS NOT REMOVED DURING REMEDIAL ACTION DUE TO SIZE. POST EXCAVATION SOIL SAMPLES WERE COLLECTED AT ACCESSIBLE EDGE BENEATH CONCRETE SLAB AS SHOWN DURING THE PERFORMANCE OF THE REMEDIAL ACTION.
2. GROSS CONTAMINATION PRESENT FROM 17.5' TO 20' BLS. ADDITIONAL EXCAVATION NOT PERFORMED DUE TO LIMITATIONS OF SHORING METHOD USED.

ABANDONED IN PLACE UNDERGROUND STORAGE TANK INFORMATION			
TANK ID	ESTIMATED DIAMETER (FT)	ESTIMATED LENGTH (FT)	ESTIMATED CAPACITY (GAL)
GT-1	10	36	21,000
GT-2	10	13	7,500
GT-3A	10	11.5	6,700
GT-3B	10	11.5	6,700
GT-4A	10	9	5,000
GT-4B	10	9	5,000
GT-5A	10	12	7,000
GT-5B	10	12	7,000
GT-5C	10	12	7,000
GT-6	10	36	21,000
REMOVED UNDERGROUND STORAGE TANK INFORMATION			
D-1	6	12	2,500
D-2	6	10	2,000
D-3	6	10	2,000
D-4	6	10	2,000
D-5	6	10	2,000

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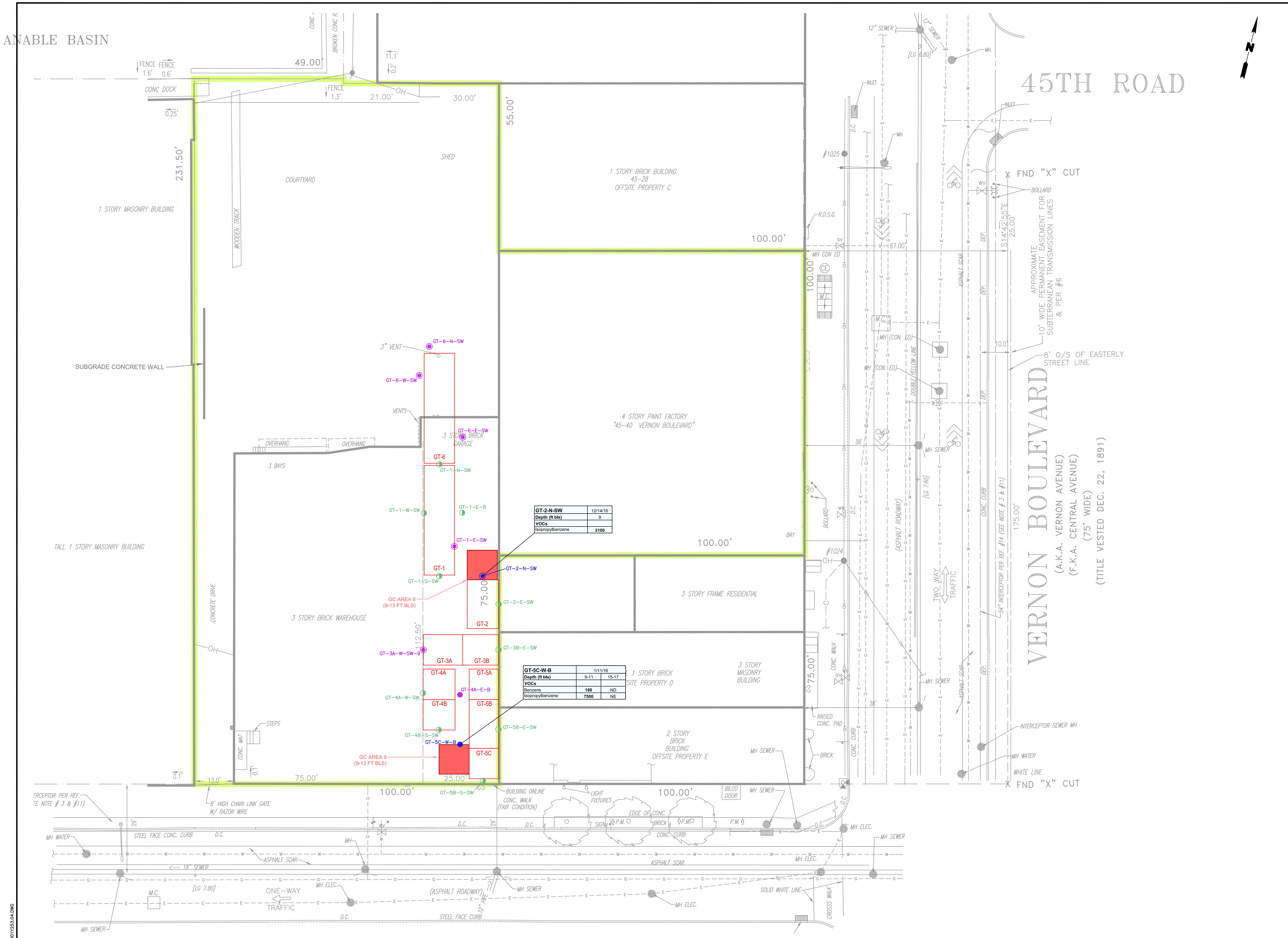
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
CSC 4540 PROPERTY CO LLC

TITLE:
CONTAMINATION REMAINING IN SOIL AFTER THE REMEDIAL ACTION WITHIN COURTYARD

FIGURE
4



GT-2-N-SW	12/14/16
Depth (ft bls)	9
VOCs	
Isopropylbenzene	**3100**

GT-5C-W-B	1/11/16	
Depth (ft bls)	9-11	15-17
VOCs		
Benzene	**180**	ND
Isopropylbenzene	**7500**	NE

LEGEND

- GT-1-E-B — POTENTIAL CONFIRMATORY SOIL SAMPLE LOCATION AND DESIGNATION WHERE CONCRETE REFUSAL ENCOUNTERED
- GT-6-N-SW — UNDERGROUND STORAGE TANK BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION BENEATH CONCRETE SLAB WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- GT-4A-E-B — UNDERGROUND STORAGE TANK SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- GT-5C-W-B — UNDERGROUND STORAGE TANK BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION BENEATH CONCRETE SLAB WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- GT-2-N-SW — UNDERGROUND STORAGE TANK SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- PROPERTY BOUNDARY
- GT-6 — APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- GC AREA 8 (9-13 FT BLS) — DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING

Parameter	Standards* (μg/kg)
VOCs	
Benzene	**60**
Isopropylbenzene	****2300**

CONCENTRATIONS IN μg/kg

μg/kg – MICROGRAMS PER KILOGRAM
NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
* – NYSDEC PART 375 PROTECTION OF GROUNDWATER
** – NYSDEC CP-51 PROTECTION OF GROUNDWATER STANDARDS
VOCS – VOLATILE ORGANIC COMPOUNDS
ND – NO DETECTION
NE – NO EXCEEDANCE
FT BLS – FEET BELOW LAND SURFACE

15' 0 15'

NO.	DATE	REVISION DESCRIPTION	INT.

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209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
CSC 4540 PROPERTY CO LLC

TITLE:
CONTAMINATION REMAINING IN SOIL AFTER THE REMEDIAL ACTION WITHIN THE GARAGE

FIGURE
5

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APPENDICES

A. IC/EC Certification Form
B. Site Inspection Checklists and Photo Log
C. Groundwater Monitoring Results
D. LNAPL Recovery System Monitoring Logs
E. NYSDEC Site Management Plan Approval
F. SMP ISCO Injections Documentation
G. NYSDEC Response Letter to SMP Modifications
H. Formal Groundwater Monitoring Reports
I. Revised Quality Assurance Project Plan
J. Turbidity Curtain Removal Waste Manifest

APPENDIX A

IC/EC Certification Form

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

Site Details **Box 1**

Site No. **C241108**

Site Name Paragon Paint and Varnish Corp

Site Address: 5-49 46th Avenue Zip Code: 11101-5214
City/Town: Long Island City
County: Queens
Site Acreage: 0.759

Reporting Period: April 15, 2018 to April 15, 2019

	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? Restricted-Residential, 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 _______________

Box 2A

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

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

	YES	NO
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

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

SITE NO. C241108 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
4-26-4	CSC 4540 Property Co, LLC, c/o Simon Dev	Ground Water Use Restriction Soil Management Plan Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

Site Management Plan (SMP)
Conduct groundwater monitoring
Compliance with a soil management plan
Prepare periodic review reports
Perform OM&M as per the SMP
Evaluate vapor intrusion before occupying buildings
No vegetable gardens

Box 4

Description of Engineering Controls

Parcel	Engineering Control
4-26-4	Cover System

Cover System for entire site 0.759 acres
LNAPL Recovery System
ISCO Injections as required

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. C241108

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 Omar Ramotar at Roux Environmental Engineering and Geology, D.P.C 209 Shafter Street, Islandia, NY 11749,

print name — print business address

am certifying as Remedial Party (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

5/15/2019
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 Omar Ramotar at Roux Environmental Engineering and Geology, D.P.C. 209 Shafter Street, Islandia, NY 11749,

print name | print business address

am certifying as a Professional Engineer for the Remedial Party

(Owner or Remedial Party)

STATE OF NEW YORK ★ OMAR RAMOTAR ★ No. 077995 LICENSED PROFESSIONAL ENGINEER

5/15/2019

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

APPENDIX B

Site Inspection Checklists and Photo Log

Appendix B. Site Checklist and Photo Log

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Tuesday, April 9, 2019**

Site Observations: Performed by (MS) on (4/9/2019)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as nece

Inspection of RCA Cap: Performed by (MS) on (4/9/2019)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (4/9/2019)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as nece

Inspection of Building Covers: Performed by (MS) on (4/9/2019)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (4/9/2019)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **4/9/2019**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

The concrete pad surrounding monitoring well MW-43 was observed to be damaged and removed on March 20, 2018. New pad was constructed on June 8, 2018.

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Photos of inspection attached.

Photograph 1: Condition of driveway looking north

Photograph 2: Conditions of paint factory, garage, and warehouse looking southeast

Photograph 3: Condition of paint factory looking east

Photograph 4: Aerial view of courtyard looking south

Photograph 5: Aerial view looking southwest of courtyard and warehouse

Photograph 6: Aerial view looking west of courtyard leading into warehouse

Photograph 7: Aerial view of courtyard looking east

Photograph 8: Condition of courtyard and entrance to paint factory

Photograph 9: View of Anable Basin looking west

Photograph 10: View of Anable Basin and condition of bulkhead looking southwest

Photograph 11: Designated drum storage area with secondary containment pad

Photograph 12: Geotech AC Sipper control panel

Photograph 13: Condition of warehouse basement

Photograph 14: One of five Geotech AC Sipper pumps installed in recovery wells

APPENDIX C

Groundwater Monitoring Results

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-4	MW-10	MW-11	MW-19	MW-21	MW-33	MW-33
		Sample Date:	08/10/2018	08/09/2018	08/09/2018	08/09/2018	08/10/2018	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	5 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**6.4**	2.5 U	1.4 J	3.3 J	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	620 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Acetone	50	UG/L	3.4 J	5 U	5 U	12 U	2.4 J	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-4	MW-10	MW-11	MW-19	MW-21	MW-33	MW-33
		Sample Date:	08/10/2018	08/09/2018	08/09/2018	08/09/2018	08/10/2018	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**5.8**	2.5 U	2.5 U	**10**	2.5 U	1 J	1 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	18	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**5.5**	2.5 U	2.5 U	**16**	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**8.4**	2.5 U	2.5 U	**11**	2.5 U	2.9	2.8
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**6.4**	2.5 U	3.7	**7.6**	2.5 U	1.8 J	1.8 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-37	MW-38	MW-40	MW-41	MW-42	MW-43
		Sample Date:	08/10/2018	08/09/2018	08/09/2018	08/10/2018	08/10/2018	08/10/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	15 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	20 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	**17**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	2500 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	6.5	4.8 J	50 U	4.3 J	2.6 J	2.1 J	5.2
Benzene	**1**	UG/L	0.5 U	0.5 U	5 U	**5.1**	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	20 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	8.7	5 U	50 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	50 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-37	MW-38	MW-40	MW-41	MW-42	MW-43
		Sample Date:	08/10/2018	08/09/2018	08/09/2018	08/10/2018	08/10/2018	08/10/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**29**	**13**	**52**	**44**	2.5 U	2.5 U	1.6 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	0.91 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	4.1 J	50 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**40**	**23**	**69**	4.3	2.5 U	2.5 U	2.1 J
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	0.75 J
Sec-Butylbenzene	**5**	UG/L	**18**	**8.9**	**28**	**19**	1 J	2.5 U	1 J
Styrene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**8.4**	3	**12 J**	**5.7**	0.97 J	0.7 J	0.91 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	10 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	1.7 J

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-44	MW-45	MW-46	MW-47	MW-48
		Sample Date:	08/09/2018	08/09/2018	08/09/2018	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units					
1,1,1-Trichloroethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	3 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	4 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**23**	**96**	0.91 J	**25**	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	10 U	5 U	5 U	5 U
Acetone	50	UG/L	4.7 J	32	5 U	5.8	5 U
Benzene	**1**	UG/L	0.5 U	0.42 J	0.5 U	0.17 J	0.5 U
Bromochloromethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	4 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	10 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	10 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-44	MW-45	MW-46	MW-47	MW-48
		Sample Date:	08/09/2018	08/09/2018	08/09/2018	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units					
Dichloroethylenes	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	1.4 J	**9.1**	2.5 U	2.5	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.7	**27**	2.5 U	4.6	2.5 U
m,p-Xylene	**5**	UG/L	4.2	**9.6**	2.5 U	**6.1**	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	4 J	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	10 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	4.1	**44**	2.5 U	**7.2**	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	3.7	4.5 J	2.5 U	3.6	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.3 J	**10**	2.5 U	2.1 J	1 J
Styrene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.1 J	3.7 J	2.5 U	0.95 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	5 U	2.5 U	0.73 J	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	2 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	**7.9**	**14 J**	2.5 U	**9.7**	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

APPENDIX D

LNAPL Recovery System Monitoring Logs

Appendix D. LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - June 7, 2018
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.29	--	
Recovery Well RW-2	N	--	6.56	--	
Recovery Well RW-3	N	--	6.81	--	
Recovery Well RW-4	N	--	7.10	--	
Recovery Well RW-5	N	--	6.90	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. The system was shut off effective January 12, 2018, however the system will remain in-place in the event that future monitoring events detect LNAPL.

Form Completed By:

Michael Sarni

Appendix D. LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - August 9, 2018
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.23	--	
Recovery Well RW-2	N	--	6.55	--	
Recovery Well RW-3	N	--	6.99	--	
Recovery Well RW-4	N	--	7.28	--	
Recovery Well RW-5	N	--	7.08	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. The system was shut off effective January 12, 2018, however the system will remain in-place in the event that future monitoring events detect LNAPL.

Form Completed By:

Michael Sarni

Appendix D. LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - November 8, 2018
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.15	--	
Recovery Well RW-2	N	--	6.40	--	
Recovery Well RW-3	N	--	6.93	--	
Recovery Well RW-4	N	--	7.21	--	
Recovery Well RW-5	N	--	7.03	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. The system was shut off effective January 12, 2018, however the system will remain in-place in the event that future monitoring events detect LNAPL.

Form Completed By:

Michael Sarni

Appendix D. LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - February 14, 2019
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.11	--	
Recovery Well RW-2	N	--	6.39	--	
Recovery Well RW-3	N	--	6.83	--	
Recovery Well RW-4	N	--	7.12	--	
Recovery Well RW-5	N	--	6.99	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. The system was shut off effective January 12, 2018, however the system will remain in-place in the event that future monitoring events detect LNAPL.

Form Completed By:

Michael Sarni

APPENDIX E

NYSDEC Site Management Plan Approval

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

December 7, 2016

Mr. Brent Carrier
4540 Vernon Realty LLC
45 Carleon Ave
Larchmont NY 10538

RE Paragon Paint and Varnish Corp.
5-49 46th Avenue, Long Island City, NY
Brownfield Cleanup Program, Site ID C241108, Queens County
Site Management Plan

Dear Ms. Carrier:

The New York State Department of Environmental Conservation has reviewed the Site Management Plan (SMP) dated November 2016, for the referenced site, NYSDEC BCP Site No. C241108, NYSDEC BCA Index No. W2-1119-08-03, prepared by Remedial Engineering P.C. on behalf of 4540 Vernon Realty LLC.

This SMP was prepared as a requirement of the New York State Brownfield Cleanup Program. The SMP contains a comprehensive plan that provides detailed maintenance and monitoring discussions of the Institutional and Engineering Controls developed for the site, as well as provisions for the annual certification of these controls. The SMP is hereby approved.

The approved SMP must be placed in all publicly accessible repositories for the Site within five business days. A certification that this document has been placed, and that the repositories are complete with all project documents, must be submitted to the NYSDEC project manager.

If you have any questions or comments, please feel free to contact me at (718) 482-4891.

Sincerely,

Sondra Martinkat
Environmental Engineer

ec: Jane O'Connell, Karen Mintzer – NYSDEC
Justin Deming, Anthony Perretta – NYSDOH
Michael Bogin – Sive Paget Riesel
Omar Ramotar – Remedial Engineering, P.C.

cc: Angela Krevey – Anable Beach Inc
Donald Rattner – 549 46th Ave LLC

APPENDIX F

NYSDEC Response Letter to SMP Modifications

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

January 12, 2018

Robert Hendrickson
Quadrum Global
757 3rd Avenue
New York NY 10017

Re: Paragon Paint and Varnish Company
Queens County, BCP # C241108
Modifications to the Site Management Plan (SMP)

Dear Mr. Hendrickson:

On December 1, 2017, the New York State Department of Environmental Conservation (the Department) met with Quadrum Global and Roux Associates to review the project. As a follow-up to that discussion, Roux Associates provided an email on January 9, 2018 which included a summary of proposed changes regarding monitoring, sampling, operation, maintenance and reporting activities. These proposed changes constitute modifications to the Site Management Plan (SMP).

The following SMP modifications are approved:

1. All Site monitoring wells will be gauged for the presence of light non-aqueous phase liquid (LNAPL) on a quarterly basis in lieu of gauging select wells on a monthly basis. The first quarterly gauging event will occur in March 2018.

2. Monthly progress reports are no longer required. A quarterly report will be submitted that details the performance of gauging or sampling events performed at the Site.

3. The groundwater sampling frequency may be reduced to annual, with the next sampling event in June 2018.

4. A formal groundwater monitoring report will be replaced with a tabular summary of groundwater data and a short evaluation of conditions when data is generated. This may be applied to the recent groundwater sampling event performed at the Site in December 2017. The results should be discussed in greater detail in the subsequent Periodic Review Report (PRR). The first PRR for the Site is due April 15, 2018.

5. Since no LNAPL has been recovered by the on-site system in the past year, the LNAPL recovery system may be shut down. The system should remain in-place in the event that future monitoring events identify recoverable LNAPL. The system may be decommissioned when the Site is redeveloped. LNAPL recovery will continue manually with bailers and/or oil absorbing socks/pads on a quarterly basis, as needed.

Within 30 days of the date of this letter, please submit revised sections of the SMP for the approvals listed above. Upon approval of these sections, a revised SMP must be submitted to the Department.

If you have any questions or would like to schedule a meeting to discuss this letter, please contact me at (718) 482-4891 or sondra.martinkat@dec.ny.gov.

Sincerely,

Sondra Martinkat
Project Manager

ec: Jane O'Connell, Gerard Burke, Karen Mintzer – NYSDEC
Anthony Perretta – NYSDOH
Matthew Baron – CSC Realty LLC
Omar Ramotar – Roux Associates/Remedial Engineering PC
Larry Schnapf – Schnapf Law
Brent Carrier – Vernon 4540 Realty LLC

cc: Angela Krevey – Anabel Beach, Inc.
Donald Rattner – 549 46th Ave LLC

APPENDIX G

Formal Groundwater Monitoring Reports

From: Jordanna Kendrot
Sent: Monday, January 11, 2016 5:15 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin
Subject: Progress Report December 2015 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period the following major Site activities occurred:

The excavation footprint located beneath the odor-suppression tent was completed as per the RAWP. The final depth of the excavation was dependent on sample results or encountering bedrock. Upon a clean analysis or reaching bedrock, the area was backfilled with approved for re-use site soils (original 0-5 ft bls pre-characterized soil from the courtyard excavation) or imported RCA.

- Approximately 2880 CY (144 loads) of clean 1”-5” RCA was imported to the Site from Liberty Aggregates LLC to be used as backfill.
- Approximately 2618 CY (119 loads) of pre-characterized nonhazardous material was excavated from inside the tent was transported off-site for disposal to one of the following facilities: Clean Earth- Carteret, Berks County Landfill, Cumberland County Landfill, or Greentree County Landfill.
- Dished UST D-4 was removed from the excavation after being cleaned in-place and will be disposed off-Site.
- A concrete slab was uncovered from 11 ft bls to 13 ft bls within the southern portion of the courtyard excavation. Soil samples were collected from beneath the slab during excavation activities. As per email correspondence, NYSDEC has approved leaving the concrete slab in place and to treat any residual soil exceeding Site-specific cleanup criteria with in-situ chemical oxidation (ISCO) injections as described in the RAWP.

The Excavation of garage soil was completed to approximately 3 feet below the surface of the USTs. Backfill was completed using re-usable soil previously excavated and imported RCA. The contents of the UST were removed by-hand and containerized in either 55-gallon drums or 275 gallon totes. The contents were disposed off-Site either in these containers by a certified hauler or in the case of liquid-state material, was disposed off-Site by use of a Vac truck.

- 110 55-gallon drums were removed off-Site;
- 5 275-gallon totes were removed off-Site; and
- 14,316 gallons were removed off-Site.

The status of backfilling USTs located inside the garage area is noted below:

- GT-3A, GT-3B, GT-4A, and half of GT-5A were backfilled with material from stockpile SP-Garage;
- GT-1, GT-2, half of GT-5A, GT-5B, and GT-C were backfilled with clean 1.5” RCA; and
- GT-6 was not backfilled during this reporting period, but will be backfilled with flowable fill.

Confirmatory UST samples were collected from the garage USTs post-cleaning as per the NYSDEC approved Tank Closure Design Plan dated November 18, 2015. The inside wall of each UST was cut using power tools and, if concrete was not encountered, a sidewall sample was collected. The status of collecting sidewall samples from these USTs are noted below:

- UST sidewall samples GT-3A-W-SW-9, GT-2-N-SW-9 and GT-1-E-SW-9 were the only locations that did not present concrete refusal for sample locations in GT-1, GT-2, GT-3A, GT-3B, GT-4A, GT-4B, and GT-5A.
- USTs GT-1, GT-2, GT-3A, GT-3B, GT-4A, GT-4B, GT-5A, GT-5B and GT-5C are all certified to be clean and all sidewall samples from the listed tanks were collected or concrete refusal was identified at the proposed sample location.

Dust was mitigated by applying water as necessary during soil movement activities. Foam suppressant was used to control odors from the excavation during soil movement and loadout and has been applied to the bed of dump trucks as necessary. No dust or VOC exceedances were recorded during the month of December 2015.

<u>Sampling/Sample Results:</u>

The sample results discussed herein were received during this reporting period and will be validated and provided to the NYSDEC as part of the Final Engineering Report.

<u>Post-Excavation Samples (Courtyard):</u>

- 3 sidewall samples were collected from the excavation through the excavation support system (PD-04C/8-10, PD-11/4-6 and PD-01/4-6):
  - Analytical results from PD-04C/8-10 did not exceed Site-specific cleanup criteria and no further action is required.
  - Analytical results from PD-11/4-6 and PD-01/4-6 exceeded Site-specific cleanup criteria. The residual contamination will be treated with ISCO injections in the post-remediation phase.
- 5 bottom soil samples were collected from the NW SC-04 excavation footprint from 14ft to 17 ft bls (SC-04-NE-B-14R, SC-05-NW-B-15, SC-05-NE-B-15.5, SC-05-NW-B-15.5S and SC-05-NW-B-17S):
  - Analytical results show the following samples did not exceed Site-specific cleanup criteria and no further action is required:
    - SC-04-NE-B-14R;
    - SC-05-NE-B-15.5;
    - SC-05-NW-B-15.5S; and
    - SC-05-NW-B-17S.
  - Analytical results from SC-05-NW-B-15 exceeded Site-specific cleanup criteria and was addressed with further excavation. This location was resampled as "SC-05-NW-B-15.5S" and did not exceed Site-specific criteria.
- 4 sub-slab samples were collected from the slab encountered at 11-13 ft bls on the south perimeter of the tent excavation (SC-04-SW-B-13S, SC-04-SE-B-13S, SC-04-SE-B-13SR, and SC-05-SW-B-13):
  - Analytical results show the following samples came back with no exceedances;
    - SC-04-SW-B-13S.
  - Analytical results show the following samples exceeded Site-specific cleanup criteria and, as per NYSDEC response, the residual contamination will be treated with ISCO injections in the post-remediation phase:
    - SC-04-SE-B-13S;
    - SC-04-SE-B-13SR; and
    - SC-05-SW-B-13S.

<u>Waste Characterization Samples (Soil and UST Liquid/Solid Contents):</u>

- Roux collected soil characterization sample SC-06/9-16 for disposal purposes.
- SCE collected waste samples for profiling purposes from material contained in UST GT-3B (hard gel) on 12/1/15.

- SCE collected waste samples for profiling purposes from oily water generated from dewatering the excavation on 12/1/15.

Post-Injection Groundwater Monitoring Samples:

- Roux collected groundwater samples from monitoring wells MW-19, and MW-38; both monitoring wells are located in the area recently injected with RegenOx®. Results of all groundwater sampling on-Site will be completed under a separate cover to document the effectiveness of the implemented ISCO injection phase of work.

Planned Actions:

The following activities are scheduled for the next reporting period (January 1, 2015 through January 31, 2016):

- Completion of the Remedial Action;
- Continued preparation of Final Engineering Report; and
- Submittal of the completed RCRA Closure Completion Report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

As per the RCRA Closure Plan, a Closure Completion Report will be submitted to NYSDEC under separate cover during the next reporting period.

Please do not hesitate to contact me, Richard Maxwell or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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We solve our clients' most challenging environmental problems.

From: Jordanna Kendrot
Sent: Wednesday, February 10, 2016 1:23 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; Rachel Henke
Subject: Progress Report January 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period the following major Site activities occurred:

The excavation footprint located beneath the odor-suppression tent was completed during the last reporting period as per the RAWP. The area was backfilled with imported RCA to restore to original grade elevation.

- 965.86 tons (40 loads) of clean 1"-5" RCA were imported to the Site from Liberty Aggregates LLC;
- Dished underground storage tanks (UST) D-5 was removed from the excavation after being cleaned in-place and was disposed off-Site with previously removed UST D-4. Wastes generated from the cleaning are currently staged on-Site to be disposed of at a later date:
    - 2 55-gallons drums
    - 3 275-gallon totes
- The tent surrounding the footprint was disassembled and shipped off-Site; and
- 5,160 gallons of oily water dewatered from the excavation were shipped off-Site for treatment and disposal.

The excavation of the area to the south of the tent footprint was completed as per the RAWP. The final depth of the excavation was 11 feet below level surface (ft bls), where the previously documented concrete slab is located. The excavation was split into three sections based on previous pre-delineation samples PD-06, PD-07 and PD-08 and the final horizontal extent of the excavation areas was dependent on sample results, encountering grossly contaminated material, or not exceeding the required excavation sloping (1:1) that was implemented to prevent structure collapse (see attached figure). The area was backfilled with imported RCA to restore to original grade elevation; this RCA was taken from the tent footprint backfilled area.

- 849.60 tons (29 loads) of pre-characterized non-hazardous material was excavated and transported off-site for disposal to Cumberland County Landfill.
- The excavation area associated with sample PD-06 was extended both west and south due to the presence of grossly contaminated material. Western excavation was completed to 1.5 feet off the border of the site due to the presence of a subgrade retaining wall that surrounded the former 20,000-gallon courtyard USTs. The excavation was extended south until 1:1 sloping off of the warehouse building limited the excavation. When excavation activities were completed in the driveway, described below, the excavation was further extended south due to the presence of grossly contaminated material.
- The excavation associated with sample PD-07 was bordered by PD-06 and PD-08 excavation areas, so it did not expand to the west or east. The area extended to the south until a clean sample was collected.

- The excavation associated with sample PD-08 was extended both south and east. Additionally sampling was completed (PD-12) to further document the sub-surface delineation marked by the eastern sidewall of the subgrade retaining wall that surrounded the former 20,000-gallon courtyard USTs. The area extended to the east until it was limited by UST GT-6 or by the concrete and brick encasement around part of UST GT-6. The excavation was extended south until 1:1 slopping off the warehouse and boiler room limited the excavation.

The excavation of the driveway near preexisting monitoring wells MW-12 and MW-13 was completed using a 10' by 20' slide-rail excavation system. The area was backfilled with imported RCA to restore to original grade elevation; this RCA was taken from the tent footprint backfilled area.

- 225.38 tons (8 loads) of pre-characterized nonhazardous material was excavated and transported off-site for disposal to Cumberland County Landfill.
- The excavation was extended to 17.5 ft bls due to the presence of grossly contaminated material. Due to machinery and shoring limitations, further excavation could not be completed to remove grossly impacted material beyond the noted depth.

The status of backfilling USTs located inside the garage area is noted below:

- GT-1, GT-2, GT-3A, GT-3B, GT-4A GT-5A, GT-5B, and GT-5C were backfilled during the previous reporting period;
- GT-6 was not backfilled during this reporting period, but will be backfilled with RCA.

Confirmatory UST samples were collected from beneath the concrete slab where the dished USTs were located prior to removal and off-Site disposal. Samples were completed using a drill rig to sample through the concrete slab. Five (5) bottom soil samples were completed for the dished USTs at a depth of 11-13 ft bls and three (3) sidewall samples were collected for the dished USTs at 6-7 ft bls.

Confirmatory UST samples were collected from the garage USTs post-cleaning using a drill rig as per the NYSDEC approved Tank Closure Design Plan dated November 18, 2015. Bottom samples were collected through the concrete slab that was encountered beneath the garage USTs. Three (3) bottom soil samples were collected either below the sub-slab concrete located in the garage, with a final depth not exceeding 17 ft bls, where non-impacted material was observed. Monitoring wells were installed at the bottom sampling locations after samples were collected. Three (3) sidewall samples were completed at UST GT-6 from 6.5- 9 ft bls.

The spent activated carbon from the TIGG air filtration unit was removed from the unit and stockpiled on-Site prior to off-Site disposal. Approximately 22 cubic yards of material was removed and transported off-site for disposal to Cumberland County Landfill

Dust was mitigated by applying water as necessary during soil movement activities, RCA stockpiling and load out of spent carbon. Foam suppressant was used to control odors from the excavation during soil movement and loadout and has been applied to the bed of dump trucks as necessary. No dust or VOC exceedances were recorded during the month of January 2016.

<u>**Sampling/Sample Results:**</u>

The sample results discussed herein were received during this reporting period and will be validated and provided to the NYSDEC as part of the Final Engineering Report.

<u>Post-Excavation Samples (Courtyard):</u>

- 5 sidewall samples were collected from the excavation completed to the south of the tent excavation footprint (PD-06B/9-11, PD-07B/9-11, PD-09/4-6, PD-12-S-SW-4-6, and PD-12-W-SW-4-6):
    - Analytical results from PD-07B/9-11 and PD-09/4-6 did not exceed Site-specific cleanup criteria and no further action is required.
    - Analytical results show the following samples came back with exceedances of Site-specific cleanup criteria. The residual contamination will be treated with ISCO injections in the post-remediation phase:

        - PD-06B/9-11;
        - PD-12-S-SW-4-6; and
        - PD-12-W-SW-4-6.

- 1 bottom soil sample was collected from the excavation completed to the south of the tent excavation footprint (PD-12-S-B-11-13):
    - Analytical results from PD-12-S-B-11-13 exceeded Site-specific cleanup but the excavation could not be extended due to the location of the garage foundation (the sample was collected under the foundation) and the presence of large boulders that could not be removed. The residual contamination will be treated with ISCO injections in the post-remediation phase

<u>Post-Excavation Samples (Driveway):</u>

- 4 sidewall samples were collected from the driveway excavation before dropping the excavation support system (Driveway-S-SW-6-8, Driveway-E-SW-6-8, Driveway-W-SW-6-8, and Driveway-N-SW-6-8):
    - Analytical results show the following samples came back with no exceedances;
        - Driveway-S-SW-6-8;
        - Driveway-E-SW-6-8; and
        - Driveway-W-SW-6-8
    - Analytical results from Driveway-N-SW exceeded Site-specific cleanup criteria. The excavation was extended north into excavation being completed outside the tent footprint to remove all accessible grossly contaminated material..

- 2 bottom soil samples were collected from the driveway excavation (Driveway-B-14, and Driveway-B-17.5):
    - Analytical results from Driveway-B-14 exceeded Site-specific cleanup criteria and was addressed with further excavation. This location was resampled as "Driveway-B-17.5", which still exceeded Site-specific criteria. Due to machinery and shoring limitations, further excavation could not be completed to remove grossly impacted material beyond the noted depth. The residual contamination will be treated with ISCO injections in the post-remediation phase and by the recovery well system to be installed as per the Site Management Plan (SMP).

<u>Confirmatory UST Samples (Courtyard):</u>

- 5 sub-slab bottom samples were collected from the slab encountered below the dished USTs located in the tent excavation footprint (D-1 B/10-12, D-2 B/10-12, D-3 B/10-12, D-4 B/10-12, and D-5 B/10-12).
    - Analytical results show that the five (5) sub-slab bottom samples exceeded Site-specific cleanup criteria and, as per NYSDEC response, the residual contamination will be treated with ISCO injections in the post-remediation phase and by the recovery well system to be installed as per the SMP.

- 3 post-excavation sidewall samples were collected from the previous location of dished USTs D-4 and D-5 (D-4 East/6-7, D-5 East/6-7, and D-5 South/6-7)
    - Analytical results show the three (3) sidewall samples did not exceeded Site-specific cleanup criteria.

<u>Confirmatory UST Samples (Garage):</u>

- 3 sub-slab bottom samples were collected from the slab encountered below the garage USTs (GT-4A-E-B/16-17, GT-5C-W-B/9-11, and GT-5C-W-B/15-17).
    - Analytical results from GT-4A-E-B/16-17 did not exceed Site-specific cleanup criteria and no further action is required.
    - Analytical results from GT-5C-W-B/9-11 exceeded Site-specific cleanup criteria and the area was resampled to determine the extent of contamination. This location was resampled at a deeper depth as "GT-5C-W-B/15-17", which no longer exceeded Site-specific criteria. The residual contamination located above 17 ft bls will be treated with ISCO injections in the post-remediation phase and by the recovery well system to be installed as per the SMP.

- 3 sidewall samples were collected from the garage USTs (GT-6-W-SW-9, GT-6-E-SW/7-9, and GT-6-N-SW/6.5-8.5)

  - Analytical results show that the three (3) sidewall samples did not exceeded Site-specific cleanup criteria and no further action is required.

Waste Characterization Samples (Soil and UST Liquid/Solid Contents):

- No waste characterization samples were collected during this reporting period.

Six-week Post-Injection Groundwater Monitoring Samples:

- Roux collected groundwater samples from six (6) monitoring wells; MW-2R, MW-7R, MW-19, MW-33, MW-34, MW-37, and MW-38. These monitoring wells are located in or adjacent to the area recently injected with RegenOx®. Results of all groundwater sampling on-Site will be completed under a separate cover to document the effectiveness of the implemented ISCO injection phase of work.

Planned Actions:

The following activities are scheduled for the next reporting period (February 1, 2016 through February 29, 2016):

- Completion of the Remedial Action;
- Continued preparation of Final Engineering Report; and
- Submittal of the completed RCRA Closure Completion Report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

As per the RCRA Closure Plan, a Closure Completion Report will be submitted to NYSDEC under separate cover during the next reporting period.

Please do not hesitate to contact me, Richard Maxwell or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
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jkendrot@rouxinc.com
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We solve our clients' most challenging environmental problems.

From: Jordanna Kendrot
Sent: Thursday, March 10, 2016 7:23 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; Rachel Henke
Subject: Progress Report February 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period the following major Site activities occurred:

The excavation footprint located beneath the odor-suppression tent, the area to the south of the tent footprint, and 10’ by 20’ slide-rail excavation of the driveway was completed during the last reporting period as per the RAWP. These areas were backfilled with imported RCA to restore to original grade elevation or to provide an additional 2’ RCA cap in areas where reusable soil was used or native impacted material was undisturbed.

- 709.10 tons (32 loads) of clean 1”-5” RCA were imported to the Site from Liberty Aggregates LLC;
- 943 gallons of oily water dewatered from the excavation were shipped off-Site for treatment and disposal. Frac tanks (x2) were demobilized offsite and the area where frac tanks were staged was decontaminated;
- Whalers, rakers, and toe pins were removed to approximately 3 to 5 ft bls or cut and shipped off-Site for disposal;
- Approximately 115 CY (7 loads) of clean, non-impacted concrete were shipped off-Site for disposal; and
- All sheets installed for the remedial excavation were removed; x23 sheets pulled from excavation footprint perimeter were decontaminated for off-Site removal

Dust was mitigated by applying water as necessary during RCA mobilization, RCA stockpile management, and load out of concrete. Foam suppressant was not used during this reporting period. No dust or VOC exceedances were recorded during the month of February 2016.

A hole was cut in the top surface of garage UST GT-6 and approximately 120 CY of flowable fill was used to backfill and abandon the UST in place. All USTs located inside the garage have been abandoned in place and backfilled using either RCA, reusable soil from the garage, or flowable fill.

Installation of the LNAPL recovery system, which will be used to reduce mobile LNAPL on-Site and prevent off-Site migration during the SMP phase, has begun during this reporting period. The LNAPL recovery system will be installed as per the RAWP.

- 5 recovery wells (RW-1 through RW-5) and associated trenches were installed;
- x1 truck load of clean sand delivered to site (26.63 tons) was used as piping protection from backfilling activities. Sand came from a NYSDEC-permitted virgin mining pit, NY Sand and Stone, LLC;
- Piping was installed on 4" of clean, virgin-source sand and backfilled with 6" of virgin-source sand prior to backfilling with reusable site soils or RCA. Caution tape was placed at 6" bls to mark recovery system layout;
- PVC piping was used for the recovery system to protect recovery components as follows:

    - 2” PVC for RW-1 recovery components to RW-3 vault box;
    - 2” PVC for RW-2 recovery components to RW-3 vault box;
    - 4” PVC for RW-1, RW-2, and RW-3 recovery components to the pull box;
    - 2” PVC for RW-4 recovery components to the pull box; and
    - 2” PVC for RW-5 recovery components to the pull box.
- Recovery components for RW-4 and RW-5 (air lines and product recovery tubing) were pulled to the pull box; and
- Damage to RW-3 vault will be repaired during the March 2016 reporting session to allow complete installation and startup of the LNAPL recovery system.

<u>Sampling/Sample Results:</u>

No samples were collected during this reporting period.

<u>Planned Actions:</u>

The following activities are scheduled for the next reporting period (March 1, 2016 through March 31, 2016):

- Startup of the LNAPL Recovery System;
- Completion of the Remedial Action; and
- Continued preparation of Final Engineering Report.

<u>Work Plan Modifications:</u>

No modifications made to the Work Plan during this reporting period.

<u>Site Management Plan</u>

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date.

<u>Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan</u>

As per the RCRA Closure Plan, the Closure Completion Report was submitted to NYSDEC on February 12, 2016.

Please do not hesitate to contact me, Richard Maxwell or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
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jkendrot@rouxinc.com
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We solve our clients’ most challenging environmental problems.

From: Jordanna Kendrot
Sent: Monday, April 11, 2016 4:51 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; Rachel Henke
Subject: Progress Report March 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period the following major Site activities occurred:

The excavation footprint located beneath the odor-suppression tent, the area to the south of the tent footprint, and 10' by 20' slide-rail excavation of the driveway was completed during the last reporting period as per the RAWP. These areas were backfilled with imported RCA to restore to original grade elevation or to provide an additional 2' RCA cap in areas where reusable soil was used or native impacted material was undisturbed.

- 5 loads of clean 3/4" RCA (approximately 140 tons) were imported to the Site from Liberty Aggregates LLC;
- Final grading of site was completed using RCA;
- x49 sheets pulled from excavation footprint perimeter were wet decontaminated prior to off-Site removal;
- All sheets installed for the remedial excavation were removed off-Site;
- A 2' RCA cap above final grade was installed along the north-east corner and perimeter of tent excavation footprint as engineering control; and
- Asphalt cover installed in driveway, west and north perimeter of the Site, and south of tent excavation footprint.

Dust and odor mitigation was not utilized during this reporting period due to no impacted material being present on-Site to generate odors or excessive fugitive dust.

Completed installation of the LNAPL recovery system, which will be used to reduce mobile LNAPL on-Site and prevent off-Site migration during the SMP phase. The LNAPL recovery system was installed as per the RAWP, with the recovery wells and trenches installed during the previous reporting period.

- Damage to RW-3 vault was repaired during this reporting period.
- Recovery well vaults RW-1 and RW-2 and monitoring wells MW-2 and MW-33 were raised and had concrete re-poured prior to asphalt installation.
- Recovery components for recovery wells RW-1 through RW-5 (air lines and product recovery tubing) were pulled into the Paint Factory Building and connected to the 55-gallon product recovery drum and control panel; and
- Initial system start up for product recovery from recovery wells RW-2, RW-3 and RW-5. Recovery wells RW-1 and RW-4 not programmed into system due to lack of monitored product, but will be implemented in program once product is determined to be present.

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (April 1 through April 30, 2016):

- Monitoring of the LNAPL Recovery System;
- Completion of the Remedial Action (final waste disposal); and
- Continued preparation of Final Engineering Report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 3016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me, Richard Maxwell or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
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From: Jordanna Kendrot
Sent: Tuesday, May 10, 2016 6:31 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin
Subject: Progress Report April 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

Backfilling of the excavation areas and installation of the LNAPL recovery system were completed the previous reporting period. During this reporting period the following material generated from remedial activities was removed offsite for disposal:

- 9 55-gallon drums of solid and liquid paint residue from cleaning underground storage tank (UST) D-4;
- 2 55-gallon drums of solid and liquid paint residue from cleaning UST D-5;
- 1 55-gallons drum containerizing the chalk removed and separated during excavation activities in the main courtyard;
- 7 55-gallons drums of solid sediment generated from decontaminating the frac tanks;
- 4 55-gallon drums of paint residue from the piping removed throughout excavation activities;
- 4 55-gallon drums of purged groundwater generated during recovery well installation and development;
- 3 275-gallon totes containerizing nonhazardous wastewater from the frac tanks and USTs GT-1, GT-4B and D-5; and
- 1 20 CY container of cleaned piping from the garage and excavation areas.

The LNAPL recovery system is operational and recovering free-product.

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (May 1 through May 31, 2016):

- Monitoring of the LNAPL Recovery System;
- Resubmission of the Site Management Plan; and

- Potential submission of Final Engineering Report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date. An updated Draft Site Management Plan will be submitted to further document current site conditions and remedial systems installed onsite.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 3016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me, Richard Maxwell or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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From: Jordanna Kendrot
Sent: Friday, June 10, 2016 2:33 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; Robert Hendrickson
Subject: Progress Report May 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period, the following Remedial Activities were performed:

- The LNAPL recovery system is operational and recovering free-product. During this reporting period a 55-gallon drum of LNAPL recovered by the LNAPL recovery system was removed offsite for disposal.
- Continued preparation of the Final Engineering Report (FER); and
- Continued preparation of resubmittal of Site Management Plan (SMP).

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (June 1 through June 30, 2016):

- Monitoring of the LNAPL Recovery System;
- Potential resubmission of the Site Management Plan; and
- Potential submission of Final Engineering Report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft Site Management Plan was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date. An updated Draft Site Management Plan will be submitted to further document current site conditions and remedial systems installed onsite.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 3016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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From: Jordanna Kendrot
Sent: Monday, July 11, 2016 10:30 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); mbogin@sprlaw.com; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; atill@simonbaron.com; Robert Hendrickson
Subject: Progress Report June 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

During this reporting period, the following Remedial Activities were performed:

- Electronic submittal of the Draft Final Engineering Report (FER) on June 23, 2016; and
- Continued preparation of resubmittal of the Draft Site Management Plan (SMP).

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (July 1 through July 31, 2016):

- Resubmission of the Draft SMP.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Draft SMP was submitted to NYSDEC on October 23, 2015. Comments from the NYSDEC have not been received to date. An updated Draft SMP will be submitted during the July 2016 reporting period to further document current site conditions and remedial systems installed onsite.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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209 Shafter Street
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We solve our clients' most challenging environmental problems.

From: Omar Ramotar
Sent: Monday, December 19, 2016 3:30 PM
To: Jordanna Kendrot
Subject: FW: Progress Report July 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

From: Jordanna Kendrot
Sent: Wednesday, August 10, 2016 11:28 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); mbogin@sprlaw.com; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; atill@simonbaron.com; Robert Hendrickson
Subject: Progress Report July 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

Following removal of the 55-gallon drum containing recovered LNAPL, completed during the previous reporting period, the LNAPL recovery system has experienced difficulties due to the compressor malfunctioning. During this reporting period, the LNAPL recovery was non-operational and did not recover free-product.

The electronic and physical submittal of the Draft Site Management Plan (SMP) was completed on July 11, 2016.

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (August 1 through August 31, 2016):

- Repair the LNAPL recovery system and resume LNAPL recovery.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The updated Draft SMP was submitted to NYSDEC on July 11, 2016. Comments from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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We solve our clients' most challenging environmental problems.

From: Omar Ramotar
Sent: Friday, September 9, 2016 12:07 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); mbogin@sprlaw.com; Jordanna Kendrot; Joe Duminuco; atill@simonbaron.com; Robert Hendrickson
Subject: Progress Report August 2016 - Former Paragon Paint (NYSDEC Site No. C241108)

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Remedial Activities:

As reported the previous period, the LNAPL recovery system was non-operational and did not recover free-product. During maintenance and troubleshooting completed this reporting period, it was determined that the compressor had sustained moisture damage. The compressor was repaired and will be re-installed during the next scheduled site visit. Upon reinstallation and testing the LNAPL recovery system will be fully operational. This is anticipated to occur on September 9, 2016.

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (September 1 through September 30, 2016):

- Preparation and completion of quarterly gauging and collection of groundwater samples from monitoring wells within proposed SMP monitoring network; and
- Installation of repaired compressor in the LNAPL recovery system and resume LNAPL recovery.

These activities are anticipated to be completed by September 9, 2016.

Work Plan Modifications:

No modifications were made to the Work Plan during this reporting period.

Site Management Plan

The updated Draft SMP was submitted to NYSDEC on July 11, 2016. Comments from the NYSDEC were received on August 31, 2016. Comments will be addressed and the revised Draft SMP will be re-submitted to the NYSDEC and NYSDOH within the required 30 day time frame.

Final Engineering Report (FER)

The FER was submitted to NYSDEC on June 23, 2016. Comments from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact our office with any questions or concerns.

Kind Regards,
Omar

Omar Ramotar
Principal Engineer
P.E. - NY, AZ

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From: Jordanna Kendrot
Sent: Wednesday, October 12, 2016 2:35 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report September 2016 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (September 2016).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On September 8, 2016, Roux Associates completed the first post-remediation quarterly groundwater gauging and sampling of monitoring wells to be included in the SMP monitoring network, consisting of 17 monitoring wells. If the presence of free-product was observed, the monitoring well was not sampled. The remainder of monitoring wells were sampled and analyzed for VOCs. During the gauging event, the five recovery wells (RW-1 through RW-5) onsite were gauged to determine the presence of free-product.

During the groundwater sampling on September 8, 2016, the presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-22, MW-33 and MW-40 and recovery wells RW-3 and RW-4. Free-product that was present in the monitoring wells were manually bailed and removed from the monitoring well. Approximately 1.35 gallons of free-product were removed in total from these monitoring wells, to be stored in the onsite 55-gallon recovery drum.

Free-product had not previously been noted in monitoring wells MW-4 and MW-22. As a result, subsequent Site visits were completed on September 16 and 30, 2016 to confirm observations noted on September 8, 2016. During these visits, the two monitoring wells were gauged again and manually bailed with the following results:

- MW-22: Thickness was 1.38’ on September 8, 2016. 0.25 gallons of free-product removed during gauging event. To confirm presence of free-product observed on September 8, 2016, well gauged again on September 16, 2016. Thickness was 0.29’ on September 16, 2016 (about one foot less). **Trace amounts** of free-product removed during this subsequent Site visit because thickness of free-product in the well was only 0.29’.

- MW-4: Thickness was 0.20’ on September 8, 2016. 0.1 gallons of free-product removed during gauging event. To confirm presence of free-product observed on September 8, 2016, well gauged again on September 16, 2016. Thickness was 0.15’ on September 16, 2016 (about 0.05’ less). **Trace amounts** of free-product removed during this subsequent Site visit because thickness of free-product in the well was only 0.15’.

A summary of the gauging data collected during the reporting period is provided in the attached table. Moving forward, free-product levels at these monitoring wells, as well as other monitoring wells across the entire Site that have product present, will continue to be monitored and respective free-product bailed on a monthly basis. Additional efforts to optimize free-product recovery efforts will be employed, as necessary, in accordance with the Site Management Plan.

As reported during the previous reporting period, the LNAPL recovery system was non-operational and did not recover free-product. On September 29, 2016, the LNAPL recovery system was brought online upon system repair.

Sampling/ Sample Results:

During this reporting period, 11 groundwater samples were collected from the following monitoring wells:

- MW-5
- MW-7R
- MW-10
- MW-11
- MW-19
- MW-21
- MW-34
- MW-37
- MW-38
- MW-41
- MW-42

Monitoring well MW-7R, though not included in the original SMP monitoring network, was sampled in lieu of MW-7 because no product was encountered. The results of this quarterly sampling round will be presented and discussed in a groundwater monitoring report, which will be submitted under separate cover in the upcoming reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (October 1 through October 31, 2016):

- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within modified SMP monitoring network; and
- Installation of six (6) monitoring wells within the courtyard and former paint factory building.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The updated Draft SMP was submitted to the NYSDEC on July 11, 2016. Comments from the NYSDEC were received on August 31, 2016. Comments were addressed and the revised Draft SMP was re-submitted to the NYSDEC and NYSDOH on October 3, 2016. Additional comments on the Draft SMP raised during Roux Associates meeting with the NYSDEC on October 7, 2016 will require the immediate resubmission of the Draft SMP. The updated draft is anticipated to be submitted during the week of October 17, 2016.

Final Engineering Report

The Draft Final Engineering Report (FER) was submitted to the NYSDEC on June 23, 2016. Comments from the NYSDEC were received on October 6, 2016. Comments will be addressed during the next comment period and the FER is anticipated to be resubmitted to the NYSDEC after the new monitoring wells have been installed and monitored for the presence of free-product. It is anticipated that the FER will be submitted during the week of October 24, 2016.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

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Table 1. Updated Summary of September 2016 Water Level Elevations and LNAPL Thickness, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Well ID[3]	MPE (ft)	September 8, 2016				September 16, 2016				September 30, 2016				Comments
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	
Monitoring Wells														
MW-2R	9.46	7.52	7.59	1.92	0.07	--	--	--	--	--	--	--	--	Trace free-product observed. Free-product has historically been observed at this location. No free-product removed during gauging event. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-3	8.44	6.8	8.91	1.11	2.11	--	--	--	--	--	--	--	--	Free-product observed. Free-product has historically been observed at this location. 1 gallon of free-product removed during September 8, 2016 gauging event. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-4	11.57	9.98	10.18	1.54	0.2	10.04	10.19	1.49	0.15	10.18	10.22	1.38	0.04	Free-product observed. However, free-product has historically not been observed at this location during prior gauging events (See Note 3). 0.1 gallons of free-product removed during September 8, 2016 gauging event. To confirm presence of free-product observed on September 8, 2016, well regauged on September 16, 2016. Trace amounts of free-product removed during subsequent Site visits. Free-product levels at this monitoring well will continue to be monitored and bailed on a monthly basis, to the extent practical.
MW-5	8.35	--	6.76	1.59	--	--	--	--	--	--	6.79	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-7	4.48	2.39	3.65	1.78	1.26	--	--	--	--	--	--	--	--	Free-product observed. Free-product has historically been observed at this location. Free-product not removed from this location during the September 8, 2016 gauging event since this monitoring well has a one-inch diameter and the field workers did not have the right size bailer to remove the free-product that was present. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-10	7.82	--	7.65	0.17	--	--	--	--	--	--	--	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-11	7.82	--	6.77	1.05	--	--	--	--	--	--	--	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-14*	11.63	--	--	--	--	--	--	--	--	--	10.11	1.52	--	No free-product observed. See Note 5.
MW-15	11.51	--	9.27	2.24	--	--	--	--	--	--	9.98	1.53	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-17*	8.78	--	--	--	--	--	--	--	--	--	7.05	1.73	--	No free-product observed. See Note 5.
MW-18*	8.40	--	--	--	--	--	--	--	--	--	7.07	1.33	--	No free-product observed. See Note 5.
MW-19	4.41	--	2.36	2.05	--	--	--	--	--	--	--	--	--	No free-product observed. Trace free-product observed prior to system start-up. Monitoring well will continue to be monitored on a monthly basis.
MW-20*	11.69	--	--	--	--	--	--	--	--	--	10.27	1.42	--	No free-product observed. See Note 5.
MW-21	8.17	--	6.65	1.52	--	--	--	--	--	--	--	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-22	11.63	9.81	11.19	1.48	1.38	10.06	10.35	1.50	0.29	10.19	10.34	1.40	0.15	Free-product observed. However, free-product has historically not been observed at this location during prior gauging events (See Notes 3 and 4). 0.25 gallons of free-product removed during September 8, 2016 gauging event. To confirm presence of free-product observed on September 8, 2016, well regauged on September 16, 2016. Trace amounts of free-product removed during this subsequent Site visit. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-33	9.49	7.46	7.48	2.03	0.02	--	--	--	--	--	--	--	--	Trace free-product levels observed. Free-product has historically been observed at this location. No free-product removed during gauging event. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-34	8.30	--	7.31	0.99	--	--	--	--	--	--	--	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-36*	9.11	--	--	--	--	--	--	--	--		7.44	1.67	--	No free-product observed. See Note 5.
MW-38	4.44	--	2.62	1.82	--	--	--	--	--	--	--	--	--	No free-product observed. Monitoring well will continue to be monitored on a monthly basis.
MW-40	8.49	6.98	7	1.51	0.02	--	--	--	--	--	--	--	--	Trace amount of free-product observed. No free-product removed during September 8, 2016 gauging event. New monitoring well installed during remedial action. Free-product levels at this monitoring well will continue to be monitored and respective free-product bailed on a monthly basis, to the extent practical.
MW-41	8.51	--	6.61	1.90	--	--	--	--	--	--	--	--	--	No free-product observed. New monitoring well installed during remedial action and will continue to be monitored on a monthly basis.
MW-42	9.37	--	7.86	1.51	--	--	--	--	--	--	--	--	--	No free-product observed. New monitoring well installed during remedial action and will continue to be monitored on a monthly basis.
Recovery Wells														
RW-1[4]	8.26	--	6.71	1.55	--	--	--	--	--	--	--	--	--	Since system was started, free-product has not been observed at this location.
RW-2[4]	9.81	--	7.34	2.47	--	--	--	--	--	--	--	--	--	Since system was started, free-product has decreased from 1.2 inches to non-detect levels at this location.
RW-3[4]	9.83	8.36	8.38	1.47	0.02	--	--	--	--	--	--	--	--	Since system was started, free-product has decreased from 2.76 inches to trace levels at this location.
RW-4[4]	10.2	8.65	8.66	1.55	0.01	--	--	--	--	--	--	--	--	Since system was started, only trace free-product has been observed at this location.
RW-5[4]	10.27	--	8.45	1.82	--	--	--	--	--	--	--	--	--	Since system was started, free-product has decreased from 2.28 inches to non-detect levels at this location.

Notes:

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. Presence of free-product at monitoring well attributed to disturbance and resulting movement of free-product within the courtyard area during the performance of the remedial action.
4. Monitoring well was gauged to corroborate presence of free-product at MW-4.
5. Monitoring wells gauged are not part of the SMP monitoring network. Wells gauged at request of the NYSDEC on September 29, 2016.

Legend:

LNAPL - light non-aqueous phase liquid
MPE - measuring point elevation (top of well casing)
DTW - depth to water
DTP - depth to product
GWE - groundwater elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - free product thickness

From: Jordanna Kendrot
Sent: Thursday, November 10, 2016 7:11 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report October 2016 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (October 2016).pdf; F2.pdf; F2.Paragon Site Plan.pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On October 7, 2016, a meeting was held between Roux Associates and NYSDEC to discuss actions needed to have the Site obtain its COC; this included review of NYSDEC-comments to the draft Site Management Plan (SMP) and confirmation of the installation of monitoring wells within the Site courtyard. During the meeting NYSDEC expressed concern due to free-product observed last reporting period at monitoring wells MW-4 and MW-22, and requested an additional monitoring well be installed within 10 feet of the aforementioned monitoring wells.

On October 11, 2016, NYSDEC was provided with a figure detailing the locations of the six (6) monitoring wells to be installed: five (5) within the Site courtyard and one (1) within the Paint Factory Building. Verbal approval was granted on October 11, 2016 to install these wells at these locations, with an email approval following for documentation purposes on October 18, 2016.

On October 13, 14, and 17, 2016, Roux Associates completed the installation and development of six (6) new monitoring wells (MW-43 to MW-48). The monitoring well construction logs will be provided as part of the SMP. Prior to installation of the new monitoring wells on October 13, 2016, and a week following the development of those monitoring wells on October 26, 2016, monitoring wells within the SMP monitoring network were gauged.

The presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-18, MW-19, MW-22, MW-33 and MW-40, newly installed monitoring well MW-45, and recovery wells RW-3 and RW-4. If the presence of free-product in the monitoring wells was observed to be greater than trace amount (e.g., >0.01”), the monitoring well was manually bailed. Approximately .60 gallons of free-product were removed in total from monitoring wells MW-2R and MW-3 during this reporting period. Any recovered product is temporarily stored on-site in a 55-gallon drum until it is required to be disposed.

A summary of the gauging and recovery data collected during the reporting period is provided in the attached table. In addition, Figure 2 from the Site Management Plan is provided for reference purposes.

Sampling/ Sample Results:

During this reporting period, no sampling was completed.

Planned Actions:

The following activities are scheduled for the next reporting period (November 1 through November 30, 2016):

- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Preparation and submittal of quarterly groundwater monitoring report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The updated Draft SMP was submitted to the NYSDEC on July 11, 2016. Comments from the NYSDEC were received on August 31, 2016. Comments were addressed and the revised Draft SMP was re-submitted to the NYSDEC and NYSDOH on October 3, 2016. Additional comments on the Draft SMP were raised during the meeting held on October 7, 2016. Comments most critical to expediting the review of the SMP were addressed by Roux and the revised SMP text and Figure 2 ("Site Layout Map") were submitted via email to NYSDEC on October 19, 2016. The remaining comments will be addressed and implemented in the final version of the SMP, which is anticipated to be submitted during the next reporting period.

Final Engineering Report

The Draft Final Engineering Report (FER) was submitted to the NYSDEC on June 23, 2016. Comments from the NYSDEC were received on October 6, 2016. Comments will be addressed and the updated and final versions of the FER are anticipated to be submitted during the next reporting period.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

COC Status

It is Roux's understanding that the NYSDEC will issue the COC before the end of the year as final SMP and FER documents for the project are anticipated to be submitted during the next reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

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October 2016 - Summary of Water Level Elevations and LNAPL Thickness
Former Paragon Paint Manufacturing Facility, Long Island City, New York

		March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*				October 26, 2016			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																					
MW-1/1R	7.55	--	6.37	1.18	--	--	6.76	0.79	--	--	6.62	0.93	--	N/A				N/A			
MW-2R	9.23	7.11	7.12	2.12	0.01	--	7.84	1.39	--	--	7.14	2.09	--	7.65	8.3	1.42	0.65	7.69	8.24	1.40	0.55
MW-3	8.40	6.31	6.62	2.01	0.31	7	7.12	1.37	0.12	6.67	6.74	1.71	0.07	7.08	7.81	1.14	0.73	7.18	7.9	1.04	0.72
MW-4	11.57	--	9.68	1.89	--	--	9.73	1.84	--	--	9.62	1.95	--	10.13	10.21	1.42	0.08	10.05	10.12	1.50	0.07
MW-5	8.35	--	5.75	2.6	--	--	6.1	2.25	--	--	6.1	2.25	--	--	6.57	1.78	--	--	6.68	1.67	--
MW-6	NR	10.00	13.60	NC	3.6	--	--	NC	--	10.04	13.72	NC	3.68	N/A				N/A			
MW-6R	11.73	--	--	--	--	10.27	13.04	2.21	2.77	9.87	11.93	1.35	2.06	N/A				N/A			
MW-7	4.48	1.07	1.63	3.27	0.56	2.39	2.66	2.02	0.27	1.78	2.14	2.61	0.36	2.80	3.20	1.58	0.4	3.11	3.19	1.35	0.08
MW-7R	4.48	--	--	--	--	--	1.36	3.12	--	--	1.06	3.42	--	--	2.95	1.53	--	--	3.02	1.46	--
MW-8	8.00	5.95	10.63	0.88	4.68	6.84	9.46	0.51	2.62	6.08	10.45	0.83	4.37	N/A				N/A			
MW-9	8.81	6.91	8.76	1.44	1.85	7.39	9.88	0.80	2.49	6.94	7.93	1.62	0.99	N/A				N/A			
MW-10	7.82	--	7.53	0.29	--	--	6.38	1.44	--	--	7.55	0.27	--	--	5.03	2.79	--	--	2.37	5.45	--
MW-11	7.82	--	6.36	1.46	--	--	6.7	1.12	--	--	6.52	1.30	--	--	6.05	1.77	--	--	6.78	1.04	--
MW-12	9.12	7.81	9.16	0.97	1.35	8.31	9.69	0.46	1.38	9.13	10.81	0.43	1.68	N/A				N/A			
MW-13	9.13	7.30	10.87	0.94	3.57	7.98	11.02	0.39	3.04	7.90	9.49	0.83	1.59	N/A				N/A			
MW-14	11.63	N/A				--	9.55	2.08	--	--	9.35	2.28	--	--	10.09	1.54	--	--	9.95	1.68	--
MW-15	11.51	N/A				--	9.46	2.05	--	--	9.26	2.25	--	--	9.99	1.52	--	--	NM	NM	--
MW-16	8.55	N/A				--	7.4	1.15	--	--	6.12	2.43	--	N/A				N/A			
MW-17	8.78	N/A				7.03	11.02	0.75	3.99	6.86	6.89	1.91	0.03	--	7.00	1.78	--	--	6.98	1.8	--
MW-18	8.40	N/A				--	6.81	1.59	--	--	6.68	1.72	--	--	6.69	1.71	--	--	7.03	1.37	--
MW-19	4.41	N/A				1.96	2.01	2.44	0.05	--	1.02	3.39	--	2.9	2.93	1.50	0.03	3.29	3.44	1.08	0.15
MW-20	11.69	N/A				--	9.85	1.84	--	--	9.74	1.95	--	--	10.26	1.43	--	--	10.19	1.5	--
MW-21	8.17	N/A				--	6.44	1.73	--	--	6.11	2.06	--	--	6.28	1.89		--	6.19	1.98	
MW-22	11.63	N/A				--	9.79	1.84	--	--	9.66	1.97	--	10.18	10.32	1.42	0.14	10.08	10.22	1.52	0.14
MW-23	8.27	N/A				7.02	10.13	0.47	3.11	6.46	8.41	1.32	1.95	N/A				N/A			
MW-24	8.86	N/A				N/A				--	6.36	2.50	--	N/A				N/A			
MW-25	9.29	N/A				N/A				--	6.88	2.41	--	N/A				N/A			
MW-27	9.55	N/A				N/A				--	7.29	2.26	--	N/A				N/A			
MW-28	9.10	N/A				N/A				--	6.75	2.35	--	N/A				N/A			
MW-30	8.70	N/A				N/A				--	7.06	1.64	--	N/A				N/A			
MW-31	9.27	N/A				N/A				8.00	8.21	1.22	0.21	N/A				N/A			
MW-32	7.76	N/A				N/A					6.18	1.58	--	N/A				N/A			
MW-33	9.49	N/A				N/A				7.39	8.20	1.90	0.81	7.55	7.60	1.93	0.05		7.55	7.60	7.55
MW-34	8.30	N/A				N/A				--	6.76	1.54	--	--	7.43	0.87	--	--	7.55	0.75	--
MW-35	NR	N/A				N/A				7.68	7.79	NC	0.11	N/A				N/A			
MW-36	9.11	N/A				N/A				--	7.07	2.04	--	--	7.42	1.69	--	--	1.07	8.04	--
MW-37	4.45	N/A				N/A				--	1.02	3.43	--	N/A				--	2.98	1.47	--
MW-38	4.44	N/A				N/A				--	NM	NM	--	--	3.00	1.44	--	--	3.17	1.27	--
MW-40	8.49	N/A				N/A				N/A				7.23	7.26	1.25	0.03	7.30	7.32	1.19	0.02
MW-41	8.51	N/A				N/A				N/A				--	7.04	1.47	--	--	6.98	1.53	--
MW-42	9.37	N/A				N/A				N/A				--	7.92	1.45	--	--	7.88	1.49	--
MW-43	7.81	N/A				N/A				N/A				--	6.22	1.59	--	--	6.22	1.59	--
MW-44	9.15	N/A				N/A				N/A				--	7.51	1.64	--	--	7.51	1.64	--
MW-45	8.69	N/A				N/A				N/A				7.07	7.13	1.61	0.06	7.07	7.13	1.61	0.06
MW-46	7.69	N/A				N/A				N/A				--	6.70	0.99	--	--	6.70	0.99	--
MW-47	8.03	N/A				N/A				N/A				--	6.45	1.58	--	--	6.45	1.58	--
MW-48	11.43	N/A				N/A				N/A				--	9.87	1.56	--	--	9.87	1.56	--

October 2016 - Summary of Water Level Elevations and LNAPL Thickness
Former Paragon Paint Manufacturing Facility, Long Island City, New York

Well ID	MPE (ft)	March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*				October 26, 2016			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Recovery Wells																					
RW-1	8.26	N/A				N/A				N/A				--	6.71	1.55	--	--	6.84	1.42	--
RW-2	9.81	N/A				N/A				N/A				--	7.34	2.47	--	--	7.4	2.41	--
RW-3	9.83	N/A				N/A				N/A				8.36	8.38	1.47	0.02	--	8.04	1.79	--
RW-4	10.2	N/A				N/A				N/A				8.65	8.66	1.55	0.01	--	8.3	1.9	--
RW-5	10.27	N/A				N/A				N/A				--	8.45	1.82	--	8.1	8.12	2.15	--

Notes:

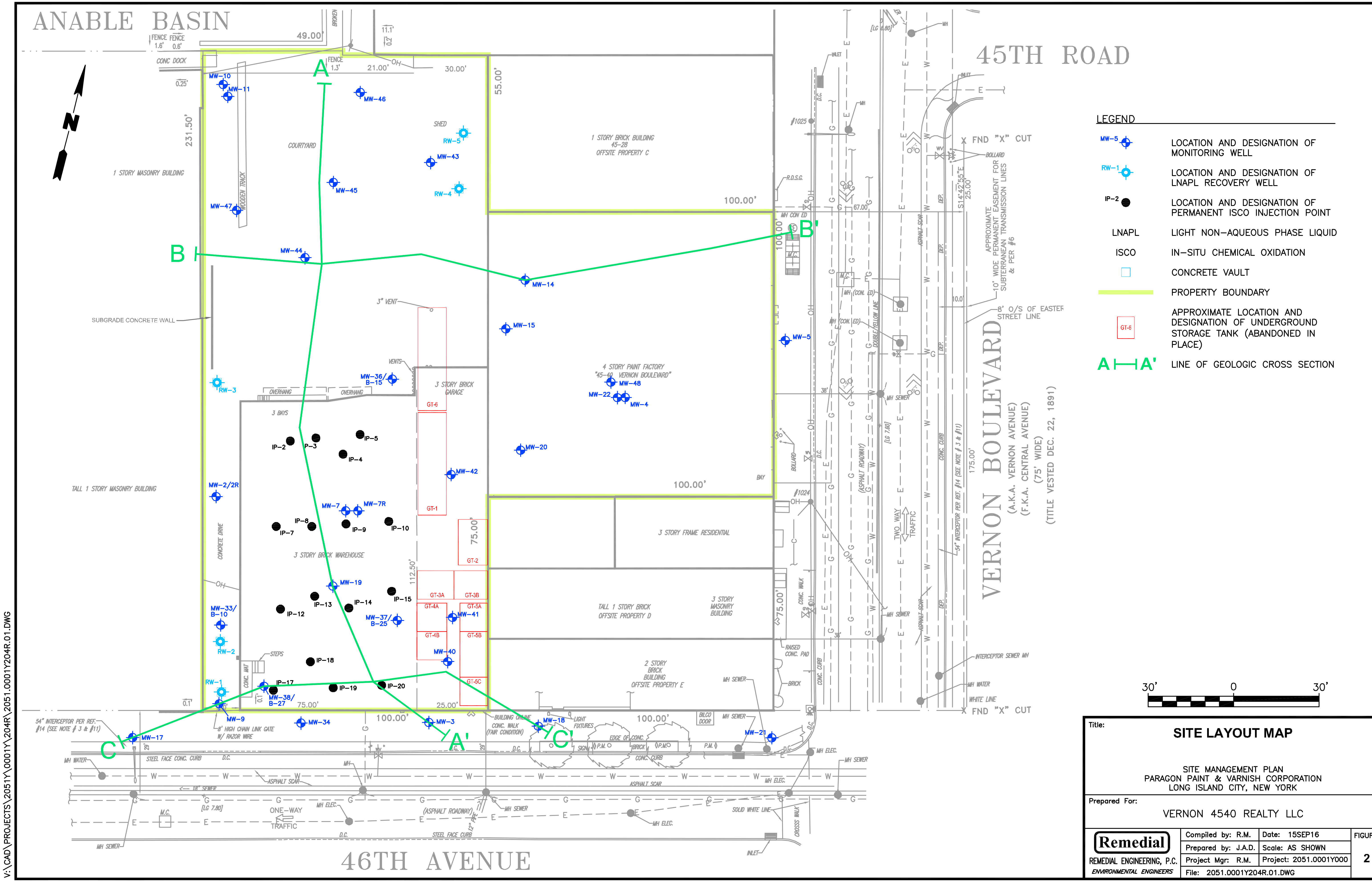
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period) or destroyed (October 2016 monitoring event) when monitoring event was performed.
* - Measurement data collected for monitoring wells MW-43 to MW-48 were collected on 10/17/2016; following installation

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:

   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)

   Assumes a specific gravity of 0.75



ANABLE BASIN
45TH ROAD
46TH AVENUE
VERNON BOULEVARD
(A.K.A. VERNON AVENUE)
(F.K.A. CENTRAL AVENUE)
(75' WIDE)
(TITLE VESTED DEC. 22, 1891)
N
COURTYARD
SHED
1 STORY MASONRY BUILDING
TALL 1 STORY MASONRY BUILDING
SUBGRADE CONCRETE WALL
1 STORY BRICK BUILDING
45-28
OFFSITE PROPERTY C
4 STORY PAINT FACTORY
"45-40 VERNON BOULEVARD"
3 STORY BRICK GARAGE
3 STORY BRICK WAREHOUSE
3 BAYS
3 STORY FRAME RESIDENTIAL
TALL 1 STORY BRICK
OFFSITE PROPERTY D
3 STORY MASONRY BUILDING
2 STORY BRICK BUILDING
OFFSITE PROPERTY E
CONCRETE DRIVE
WOODEN TRACK
3" VENT
A
A'
B
B'
C
C'
MW-10
MW-11
MW-46
RW-5
MW-43
MW-45
RW-4
MW-47
MW-44
MW-14
MW-15
MW-5
MW-36/
B-15
RW-3
MW-48
MW-22
MW-4
MW-20
MW-42
MW-2/2R
MW-7
MW-7R
MW-19
MW-33/
B-10
MW-37/
B-25
MW-41
MW-40
RW-2
RW-1
MW-38/
B-27
MW-9
MW-17
MW-34
MW-3
MW-18
MW-21
IP-2
IP-3
IP-4
IP-5
IP-7
IP-8
IP-9
IP-10
IP-12
IP-13
IP-14
IP-15
IP-17
IP-18
IP-19
IP-20
GT-1
GT-2
GT-3A
GT-3B
GT-4A
GT-4B
GT-5A
GT-5B
GT-5C
GT-6
231.50'
49.00'
21.00'
30.00'
55.00'
100.00'
100.00'
100.00'
112.50'
75.00'
75.00'
25.00'
100.00'
100.00'
175.00'
FND "X" CUT
FND "X" CUT
8' O/S OF EASTERLY STREET LINE
APPROXIMATE 10' WIDE PERMANENT EASEMENT FOR SUBTERRANEAN TRANSMISSION LINES & PER #6
TWO WAY TRAFFIC
ONE-WAY TRAFFIC
8' HIGH CHAIN LINK GATE W/ RAZOR WIRE
54" INTERCEPTOR PER REF. #14 (SEE NOTE # 3 & #11)
INTERCEPTOR SEWER MH
LEGEND
MW-5 LOCATION AND DESIGNATION OF MONITORING WELL
RW-1 LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL
IP-2 LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
LNAPL LIGHT NON-AQUEOUS PHASE LIQUID
ISCO IN-SITU CHEMICAL OXIDATION
CONCRETE VAULT
PROPERTY BOUNDARY
GT-8 APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
A A' LINE OF GEOLOGIC CROSS SECTION
30' 0 30'
Title:
SITE LAYOUT MAP
SITE MANAGEMENT PLAN
PARAGON PAINT & VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK
Prepared For:
VERNON 4540 REALTY LLC
Remedial
REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS
Compiled by: R.M.
Prepared by: J.A.D.
Project Mgr: R.M.
File: 2051.0001Y204R.01.DWG
Date: 15SEP16
Scale: AS SHOWN
Project: 2051.0001Y000
FIGURE
2
V:\CAD\PROJECTS\2051Y\0001Y\204R\2051.0001Y204R.01.DWG

From: Jordanna Kendrot
Sent: Tuesday, December 13, 2016 10:51 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report November 2016 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (November 15, 2016).pdf

Ms. Martinkat,

I apologize for the delay. In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On November 15, 2016 during the performance of the quarterly groundwater monitoring event, the wells within the SMP sampling network were gauged. Moving forward, all Site monitoring wells will be gauged, when and where applicable, in accordance with the schedule presented in Table 5 of the approved SMP.

The presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-19, MW-22, MW-40 and MW-45. If the presence of free-product in the monitoring wells was observed to be greater than trace amount (e.g., >0.01"), the monitoring well was manually bailed. Approximately 1.50 gallons of free-product were removed in total from the aforementioned monitoring wells, excluding monitoring wells MW-19 and MW-40, during this reporting period. Any recovered product is temporarily stored on-site in a 55-gallon drum until it is required to be disposed.

A summary of the gauging data collected during the reporting period is provided in the attached table.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (December 1 through December 31, 2016):

- Preparation and completion of quarterly gauging and collection of groundwater samples from monitoring wells within proposed SMP monitoring network;
- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Preparation and submittal of quarterly groundwater monitoring report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Final SMP was signed and certified by Roux Associates on November 8, 2016, and submitted to NYSDEC for approval on November 15, 2016. Minor comments were received from NYSDEC on December 2, 2016. The edits were addressed by Roux and the revised SMP was resubmitted to NYSDEC for approval on December 6, 2016. The NYSDEC approved the SMP on December 7, 2016. The SMP will be placed in the required public repositories within five business days of this approval.

Final Engineering Report

The Final FER was signed and certified by Roux Associates on November 22, 2016, and submitted to NYSDEC for approval on December 1, 2016. Minor edits to the FER (i.e., changing template blue text to black) were completed by Roux Associates and the revised FER was resubmitted to NYSDEC for approval on December 6, 2016. Comments or approval from the NYSDEC have not been received to date.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date.

COC Status

It is Roux's understanding that the NYSDEC will issue the COC before the end of the year as final, certified SMP and FER documents have been submitted to the NYSDEC and all outstanding comments have been addressed.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
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We solve our clients' most challenging environmental problems.

Summary of Water Level Elevations and LNAPL Thickness; November 2016
Former Paragon Paint and Varnish Corp., Long Isladn City, New York

		March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*				October 26, 2016				November 15, 2016			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-1/1R	7.55	--	6.37	1.18	--	--	6.76	0.79	--	--	6.62	0.93	--	N/A				N/A				N/A			
MW-2R	9.23	7.11	7.12	2.12	0.01	--	7.84	1.39	--	--	7.14	2.09	--	7.65	8.3	1.42	0.65	7.69	8.24	1.40	0.55	7.85	8.31	1.27	0.46
MW-3	8.40	6.31	6.62	2.01	0.31	7	7.12	1.37	0.12	6.67	6.74	1.71	0.07	7.08	7.81	1.14	0.73	7.18	7.9	1.04	0.72	7.21	8.15	0.96	0.94
MW-4	11.57	--	9.68	1.89	--	--	9.73	1.84	--	--	9.62	1.95	--	10.13	10.21	1.42	0.08	10.05	10.12	1.50	0.07	10.29	10.34	1.27	0.05
MW-5	8.35	--	5.75	2.6	--	--	6.1	2.25	--	--	6.1	2.25	--	--	6.57	1.78	--	--	6.68	1.67	--	--	NM	NM	--
MW-6	NR	10.00	13.60	NC	3.6	--	--	NC	--	10.04	13.72	NC	3.68	N/A				N/A				N/A			
MW-6R	11.73	--	--	--	--	10.27	13.04	2.21	2.77	9.87	11.93	1.35	2.06	N/A				N/A				N/A			
MW-7	4.48	1.07	1.63	3.27	0.56	2.39	2.66	2.02	0.27	1.78	2.14	2.61	0.36	2.80	3.20	1.58	0.4	3.11	3.19	1.35	0.08	2.98	3.06	1.48	0.08
MW-7R	4.48	--	--	--	--	--	1.36	3.12	--	--	1.06	3.42	--	--	2.95	1.53	--	--	3.02	1.46	--	--	NM	NM	--
MW-8	8.00	5.95	10.63	0.88	4.68	6.84	9.46	0.51	2.62	6.08	10.45	0.83	4.37	N/A				N/A				N/A			
MW-9	8.81	6.91	8.76	1.44	1.85	7.39	9.88	0.80	2.49	6.94	7.93	1.62	0.99	N/A				N/A				N/A			
MW-10	7.82	--	7.53	0.29	--	--	6.38	1.44	--	--	7.55	0.27	--	--	5.03	2.79	--	--	2.37	5.45	--	--	4.65	3.17	--
MW-11	7.82	--	6.36	1.46	--	--	6.7	1.12	--	--	6.52	1.30	--	--	6.05	1.77	--	--	6.78	1.04	--	--	5.97	1.85	--
MW-12	9.12	7.81	9.16	0.97	1.35	8.31	9.69	0.46	1.38	9.13	10.81	0.43	1.68	N/A				N/A				N/A			
MW-13	9.13	7.30	10.87	0.94	3.57	7.98	11.02	0.39	3.04	7.90	9.49	0.83	1.59	N/A				N/A				N/A			
MW-14	11.63	N/A				--	9.55	2.08	--	--	9.35	2.28	--	--	10.09	1.54	--	--	9.95	1.68	--	--	NM	NM	--
MW-15	11.51	N/A				--	9.46	2.05	--	--	9.26	2.25	--	--	9.99	1.52	--	--	NM	NM	--	--	10.12	1.39	--
MW-16	8.55	N/A				--	7.4	1.15	--	--	6.12	2.43	--	N/A				N/A				N/A			
MW-17	8.78	N/A				7.03	11.02	0.75	3.99	6.86	6.89	1.91	0.03	--	7.00	1.78	--	--	6.98	1.8	--	--	NM	NM	--
MW-18	8.40	N/A				--	6.81	1.59	--	--	6.68	1.72	--	--	6.69	1.71	--	--	7.03	1.37	--	--	NM	NM	--
MW-19	4.41	N/A				1.96	2.01	2.44	0.05	--	1.02	3.39	--	2.9	2.93	1.50	0.03	3.29	3.44	1.08	0.15	3.08	3.1	1.33	0.02
MW-20	11.69	N/A				--	9.85	1.84	--	--	9.74	1.95	--	--	10.26	1.43	--	--	10.19	1.5	--	--	NM	NM	--
MW-21	8.17	N/A				--	6.44	1.73	--	--	6.11	2.06	--	--	6.28	1.89		--	6.19	1.98		--	NM	NM	
MW-22	11.63	N/A				--	9.79	1.84	--	--	9.66	1.97	--	10.18	10.32	1.42	0.14	10.08	10.22	1.52	0.14	10.31	10.42	1.29	0.11
MW-23	8.27	N/A				7.02	10.13	0.47	3.11	6.46	8.41	1.32	1.95	N/A				N/A				N/A			
MW-24	8.86	N/A				N/A				--	6.36	2.50	--	N/A				N/A				N/A			
MW-25	9.29	N/A				N/A				--	6.88	2.41	--	N/A				N/A				N/A			
MW-27	9.55	N/A				N/A				--	7.29	2.26	--	N/A				N/A				N/A			
MW-28	9.10	N/A				N/A				--	6.75	2.35	--	N/A				N/A				N/A			
MW-30	8.70	N/A				N/A				--	7.06	1.64	--	N/A				N/A				N/A			
MW-31	9.27	N/A				N/A				8.00	8.21	1.22	0.21	N/A				N/A				N/A			
MW-32	7.76	N/A				N/A					6.18	1.58	--	N/A				N/A				N/A			
MW-33	9.49	N/A				N/A				7.39	8.20	1.90	0.81	7.55	7.60	1.93	0.05	--	7.55	1.94	--	--	5.87	3.62	--
MW-34	8.30	N/A				N/A				--	6.76	1.54	--	--	7.43	0.87	--	--	7.55	0.75	--	--	7.18	1.12	--
MW-35	NR	N/A				N/A				7.68	7.79	NC	0.11	N/A				N/A				N/A			
MW-36	9.11	N/A				N/A				--	7.07	2.04	--	--	7.42	1.69	--	--	1.07	8.04	--	--	NM	NM	--
MW-37	4.45	N/A				N/A				--	1.02	3.43	--	N/A				--	2.98	1.47	--	--	NM	NM	--
MW-38	4.44	N/A				N/A				--	NM	NM	--	--	3.00	1.44	--	--	3.17	1.27	--	--	3.04	1.4	--
MW-40	8.49	N/A				N/A				N/A				7.23	7.26	1.25	0.03	7.30	7.32	1.19	0.02	7.39	7.40	1.10	0.01
MW-41	8.51	N/A				N/A				N/A				--	7.04	1.47	--	--	6.98	1.53	--	--	7.10	1.41	--
MW-42	9.37	N/A				N/A				N/A				--	7.92	1.45	--	--	7.88	1.49	--	--	8.08	1.29	--
MW-43	7.81	N/A				N/A				N/A				--	6.22	1.59	--	--	6.22	1.59	--	--	6.57	1.24	--
MW-44	9.15	N/A				N/A				N/A				--	7.51	1.64	--	--	7.51	1.64	--	--	7.90	1.25	--
MW-45	8.69	N/A				N/A				N/A				7.07	7.13	1.61	0.06	7.07	7.13	1.61	0.06	7.41	7.50	1.26	0.09
MW-46	7.69	N/A				N/A				N/A				--	6.70	0.99	--	--	6.70	0.99	--	--	6.91	0.78	--
MW-47	8.03	N/A				N/A				N/A				--	6.45	1.58	--	--	6.45	1.58	--	--	6.77	1.26	--
MW-48	11.43	N/A				N/A				N/A				--	9.87	1.56	--	--	9.87	1.56	--	--	10.10	1.33	--

Summary of Water Level Elevations and LNAPL Thickness; November 2016
Former Paragon Paint and Varnish Corp., Long Isladn City, New York

		March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*				October 26, 2016				November 15, 2016			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Recovery Wells																									
RW-1	8.26	N/A				N/A				N/A				--	6.71	1.55	--	--	6.84	1.42	--	--	7.2	1.06	--
RW-2	9.81	N/A				N/A				N/A				--	7.34	2.47	--	--	7.4	2.41	--	--	7.6	2.21	--
RW-3	9.83	N/A				N/A				N/A				8.36	8.38	1.47	0.02	--	8.04	1.79	--	--	7.29	2.54	--
RW-4	10.2	N/A				N/A				N/A				8.65	8.66	1.55	0.01	--	8.3	1.9	--	--	8.68	1.52	--
RW-5	10.27	N/A				N/A				N/A				--	8.45	1.82	--	8.1	8.12	2.17	0.02	--	8.46	1.81	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid

MPE - Measuring Point Elevation (top of well casing)

DTW - Depth to Water

DTP - Depth to Product

GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])

FPT - Free Product Thickness

NR - Not Recorded

NC - Not Calculated[2]

NM - Not Measured

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period) or destroyed (October 2016 monitoring event) when monitoring event was performed.

* - Measurement data collected for monitoring wells MW-43 to MW-48 were collected on 10/17/2016; following installation

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:

   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)

   Assumes a specific gravity of 0.75

From: Jordanna Kendrot
Sent: Wednesday, January 11, 2017 7:21 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report December 2016 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (December 1, 2016).pdf

Ms. Martinkat,

I apologize for the delay. In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On December 1, 2016, Roux Associates completed the quarterly groundwater gauging and sampling of the 21 monitoring wells included in the SMP monitoring network. If the presence of free-product was observed, the monitoring well was not sampled. The remaining monitoring wells within the network were sampled and analyzed for VOCs. The five (5) recovery wells (RW-1 through RW-5) onsite and an additional nine (9) monitoring wells both onsite and offsite were gauged in addition to the monitoring wells above to determine the presence of LNAPL.

During the groundwater sampling, the presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-19, MW-22, MW-42, MW-45, and recovery well RW-5. If the presence of free-product in the monitoring wells was observed to be greater than trace amount (e.g., >0.01"), the monitoring well was manually bailed. Approximately 1.00 gallons of free-product were removed in total from the aforementioned monitoring wells, excluding monitoring wells MW-22 and MW-42, during this reporting period. Any recovered product is temporarily stored on-site in a 55-gallon drum until it is required to be disposed.

A summary of the gauging data collected during the reporting period is provided in the attached table.

On December 15, 2016, NYSDEC issued the Certificate of Completion (COC) for the project. The COC will be recorded by the Site owner as requested by the NYSDEC.

Sampling/ Sample Results:

During this reporting period, 13 groundwater samples were collected from the following monitoring wells:

- MW-10
- MW-11
- MW-21
- MW-33
- MW-37
- MW-38
- MW-40
- MW-41
- MW-43
- MW-44
- MW-46
- MW-47
- MW-48

The results of this quarterly sampling round, as well as the previously completed sampling event in September 2016, will be presented and discussed in a Quarterly Status Report. This report will be submitted under separate cover in the upcoming reporting period (January 2017).

Planned Actions:

The following activities are scheduled for the next reporting period (January 1 through January 31, 2017):

- Preparation and completion of quarterly gauging and collection of groundwater samples from monitoring wells within proposed SMP monitoring network;
- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Preparation and submittal of quarterly status report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Site Management Plan

The Final SMP was signed and certified by Roux Associates on November 8, 2016, and submitted to NYSDEC for approval on November 15, 2016. Minor comments were received from NYSDEC on December 2, 2016. The edits were addressed by Roux and the revised SMP was resubmitted to NYSDEC for approval on December 6, 2016. The NYSDEC approved the SMP on December 7, 2016. The SMP was placed in the required public repositories as requested by the NYSDEC.

Final Engineering Report

The Final FER was signed and certified by Roux Associates on November 22, 2016, and submitted to NYSDEC for approval on December 1, 2016. Minor edits to the FER (i.e., changing template blue text to black) were completed by Roux Associates and the revised FER was resubmitted to NYSDEC for approval on December 6, 2016. The NYSDEC approved the FER upon issuance of the COC, dated December 15, 2016. The FER was placed in the required public repositories as requested by the NYSDEC.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date. Based on prior discussions with the NYSDEC, no comments on the report will be provided on the RCRA Closure Completion Report.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
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We solve our clients' most challenging environmental problems.

Summary of Water Level Elevations and LNAPL Thickness; December 2016
Former Paragon Paint and Varnish Corp., Long Isladn City, New York

		March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*				October 26, 2016				November 15, 2016				December 1, 2016			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																													
MW-1/1R	7.55	--	6.37	1.18	--	--	6.76	0.79	--	--	6.62	0.93	--	N/A				N/A				N/A				N/A			
MW-2R	9.23	7.11	7.12	2.12	0.01	--	7.84	1.39	--	--	7.14	2.09	--	7.65	8.3	1.42	0.65	7.69	8.24	1.40	0.55	7.85	8.31	1.27	0.46	6.66	6.82	2.53	0.16
MW-3	8.40	6.31	6.62	2.01	0.31	7	7.12	1.37	0.12	6.67	6.74	1.71	0.07	7.08	7.81	1.14	0.73	7.18	7.9	1.04	0.72	7.21	8.15	0.96	0.94	6.60	6.97	1.71	0.37
MW-4	11.57	--	9.68	1.89	--	--	9.73	1.84	--	--	9.62	1.95	--	10.13	10.21	1.42	0.08	10.05	10.12	1.50	0.07	10.29	10.34	1.27	0.05	6.50	6.58	5.05	0.08
MW-5	8.35	--	5.75	2.6	--	--	6.1	2.25	--	--	6.1	2.25	--	--	6.57	1.78	--	--	6.68	1.67	--	--	NM	NM	--	N/A			
MW-6	NR	10.00	13.60	NC	3.6	--	--	NC	--	10.04	13.72	NC	3.68	N/A				N/A				N/A				N/A			
MW-6R	11.73	--	--	--	--	10.27	13.04	2.21	2.77	9.87	11.93	1.35	2.06	N/A				N/A				N/A				N/A			
MW-7	4.48	1.07	1.63	3.27	0.56	2.39	2.66	2.02	0.27	1.78	2.14	2.61	0.36	2.80	3.20	1.58	0.4	3.11	3.19	1.35	0.08	2.98	3.06	1.48	0.08	2.36	2.43	2.10	0.07
MW-7R	4.48	--	--	--	--	--	1.36	3.12	--	--	1.06	3.42	--	--	2.95	1.53	--	--	3.02	1.46	--	--	NM	NM	--	--	3.32	1.16	--
MW-8	8.00	5.95	10.63	0.88	4.68	6.84	9.46	0.51	2.62	6.08	10.45	0.83	4.37	N/A				N/A				N/A				N/A			
MW-9	8.81	6.91	8.76	1.44	1.85	7.39	9.88	0.80	2.49	6.94	7.93	1.62	0.99	N/A				N/A				N/A				N/A			
MW-10	7.82	--	7.53	0.29	--	--	6.38	1.44	--	--	7.55	0.27	--	--	5.03	2.79	--	--	2.37	5.45	--	--	4.65	3.17	--	--	6.15	1.67	--
MW-11	7.82	--	6.36	1.46	--	--	6.7	1.12	--	--	6.52	1.30	--	--	6.05	1.77	--	--	6.78	1.04	--	--	5.97	1.85	--	--	5.61	2.21	--
MW-12	9.12	7.81	9.16	0.97	1.35	8.31	9.69	0.46	1.38	9.13	10.81	0.43	1.68	N/A				N/A				N/A				N/A			
MW-13	9.13	7.30	10.87	0.94	3.57	7.98	11.02	0.39	3.04	7.90	9.49	0.83	1.59	N/A				N/A				N/A				N/A			
MW-14	11.63	N/A				--	9.55	2.08	--	--	9.35	2.28	--	--	10.09	1.54	--	--	9.95	1.68	--	--	NM	NM	--	--	8.44	3.19	--
MW-15	11.51	N/A				--	9.46	2.05	--	--	9.26	2.25	--	--	9.99	1.52	--	--	NM	NM	--	--	10.12	1.39	--	--	NM	NM	--
MW-16	8.55	N/A				--	7.4	1.15	--	--	6.12	2.43	--	N/A				N/A				N/A				N/A			
MW-17	8.78	N/A				7.03	11.02	0.75	3.99	6.86	6.89	1.91	0.03	--	7.00	1.78	--	--	6.98	1.8	--	--	NM	NM	--	--	9.23	-0.45	--
MW-18	8.40	N/A				--	6.81	1.59	--	--	6.68	1.72	--	--	6.69	1.71	--	--	7.03	1.37	--	--	NM	NM	--	--	6.58	1.82	--
MW-19	4.41	N/A				1.96	2.01	2.44	0.05	--	1.02	3.39	--	2.9	2.93	1.50	0.03	3.29	3.44	1.08	0.15	3.08	3.1	1.33	0.02	2.80	2.92	1.58	0.12
MW-20	11.69	N/A				--	9.85	1.84	--	--	9.74	1.95	--	--	10.26	1.43	--	--	10.19	1.5	--	--	NM	NM	--	--	NM	NM	--
MW-21	8.17	N/A				--	6.44	1.73	--	--	6.11	2.06	--	--	6.28	1.89		--	6.19	1.98		--	NM	NM		--	6.55	1.62	
MW-22	11.63	N/A				--	9.79	1.84	--	--	9.66	1.97	--	10.18	10.32	1.42	0.14	10.08	10.22	1.52	0.14	10.31	10.42	1.29	0.11	9.52	9.61	2.09	0.09
MW-23	8.27	N/A				7.02	10.13	0.47	3.11	6.46	8.41	1.32	1.95	N/A				N/A				N/A				N/A			
MW-24	8.86	N/A				N/A				--	6.36	2.50	--	N/A				N/A				N/A				N/A			
MW-25	9.29	N/A				N/A				--	6.88	2.41	--	N/A				N/A				N/A				N/A			
MW-27	9.55	N/A				N/A				--	7.29	2.26	--	N/A				N/A				N/A				N/A			
MW-28	9.10	N/A				N/A				--	6.75	2.35	--	N/A				N/A				N/A				N/A			
MW-30	8.70	N/A				N/A				--	7.06	1.64	--	N/A				N/A				N/A				N/A			
MW-31	9.27	N/A				N/A				8.00	8.21	1.22	0.21	N/A				N/A				N/A				N/A			
MW-32	7.76	N/A				N/A					6.18	1.58	--	N/A				N/A				N/A				N/A			
MW-33	9.49	N/A				N/A				7.39	8.20	1.90	0.81	7.55	7.60	1.93	0.05	--	7.55	1.94	--	--	5.87	3.62	--	--	6.10	3.39	--
MW-34	8.30	N/A				N/A				--	6.76	1.54	--	--	7.43	0.87	--	--	7.55	0.75	--	--	7.18	1.12	--	--	6.82	1.48	--
MW-35	NR	N/A				N/A				7.68	7.79	NC	0.11	N/A				N/A				N/A				N/A			
MW-36	9.11	N/A				N/A				--	7.07	2.04	--	--	7.42	1.69	--	--	1.07	8.04	--	--	NM	NM	--	--	3.8	5.31	--
MW-37	4.45	N/A				N/A				--	1.02	3.43	--	N/A				--	2.98	1.47	--	--	NM	NM	--	--	2.78	1.67	--
MW-38	4.44	N/A				N/A				--	NM	NM	--	--	3.00	1.44	--	--	3.17	1.27	--	--	3.04	1.4	--	--	2.82	1.62	--
MW-40	8.49	N/A				N/A				N/A				7.23	7.26	1.25	0.03	7.30	7.32	1.19	0.02	7.39	7.40	1.10	0.01	--	6.80	1.69	--
MW-41	8.51	N/A				N/A				N/A				--	7.04	1.47	--	--	6.98	1.53	--	--	7.10	1.41	--	--	6.18	2.33	--
MW-42	9.37	N/A				N/A				N/A				--	7.92	1.45	--	--	7.88	1.49	--	--	8.08	1.29	--	7.44	7.45	1.93	0.01
MW-43	7.81	N/A				N/A				N/A				--	6.22	1.59	--	--	6.22	1.59	--	--	6.57	1.24	--	--	4.86	2.95	--
MW-44	9.15	N/A				N/A				N/A				--	7.51	1.64	--	--	7.51	1.64	--	--	7.90	1.25	--	--	6.18	2.97	--
MW-45	8.69	N/A				N/A				N/A				7.07	7.13	1.61	0.06	7.07	7.13	1.61	0.06	7.41	7.50	1.26	0.09	5.75	5.80	2.93	0.05
MW-46	7.69	N/A				N/A				N/A				--	6.70	0.99	--	--	6.70	0.99	--	--	6.91	0.78	--	--	5.75	1.94	--
MW-47	8.03	N/A				N/A				N/A				--	6.45	1.58	--	--	6.45	1.58	--	--	6.77	1.26	--	--	5.10	2.93	--
MW-48	11.43	N/A				N/A				N/A				--	9.87	1.56	--	--	9.87	1.56	--	--	10.10	1.33	--	--	6.28	5.15	--
Recovery Wells																													
RW-1	8.26	N/A				N/A				N/A				--	6.71	1.55	--	--	6.84	1.42	--	--	7.2	1.06	--	--	6.51	1.75	--
RW-2	9.81	N/A				N/A				N/A				--	7.34	2.47	--	--	7.4	2.41	--	--	7.6	2.21	--	--	6.54	3.27	--
RW-3	9.83	N/A				N/A				N/A				8.36	8.38	1.47	0.02	--	8.04	1.79	--	--	7.29	2.54	--	--	6.67	3.16	--
RW-4	10.2	N/A				N/A				N/A				8.65	8.66	1.55	0.01	--	8.3	1.9	--	--	8.68	1.52	--	--	6.98	3.22	--
RW-5	10.27	N/A				N/A				N/A				--	8.45	1.82	--	8.1	8.12	2.17	0.02	--	8.46	1.81	--	6.74	6.75	3.53	0.01

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period),destroyed (October 2016 monitoring event) when monitoring event was performed, or is not included in the monitoring network
* - Measurement data collected for monitoring wells MW-43 to MW-48 were collected on 10/17/2016; following installation

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75

REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

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TEL: 631-232-2600
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February 10, 2017

Ms. Sondra Martinkat
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
Region Two
47-40 21st Street
Long Island City, New York 11101

Re: Quarterly Inspection and Monitoring Report
September 2016 to December 2016
Paragon Paint and Varnish Corp., Long Island, New York, Site No. C241108

Dear Ms. Martinkat:

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering), on behalf of Vernon 4540 Realty, LLC, have generated this quarterly inspection and monitoring report to summarize operation, maintenance and monitoring activities being performed at the Paragon Paint and Varnish Corp. located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, Queens, New York (Site). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241108, which is administered by New York State Department of Environmental Conservation (NYSDEC), and the controls described are in accordance with the NYSDEC-approved Site Management Plan (SMP) dated November 2016. During this reporting period (September 2016 to December 2016), the composite cover system and institutional controls (ICs) were not modified. In addition, the following activities, as described herein, were specifically performed:

- Monthly operation and maintenance (O&M) of the Light Non-Aqueous Phase Liquid (LNAPL) recovery system;
- Monthly gauging of Site monitoring and recovery wells to assess presence of LNAPL;
- Monthly LNAPL recovery using manual bailing techniques, where applicable, at Site monitoring wells; and
- Quarterly monitoring (gauging and sampling) of Site monitoring wells.

O&M of the LNAPL Recovery System

As per the SMP, O&M of the LNAPL recovery system and its respective recovery wells (RW-1 through RW-5) was completed monthly. The completed site-wide monitoring, inspection, and maintenance forms are included in Attachment 1. During this reporting period, the LNAPL recovery system was operational and recovering LNAPL. Although maintenance of the system was not required, adjustments were made to optimize LNAPL recovery at selected recovery wells (i.e., RW-4 and RW-5) that contained recoverable amounts of LNAPL. Approximately 3.1 gallons of LNAPL has been recovered from the operation of the LNAPL recovery system during this reporting period. Gauging data generated during the reporting period for each recovery well is presented in tabular form in Attachment 2. The following summarizes LNAPL present at each recovery well as of December 1, 2016:

Recovery Well	LNAPL Thickness
RW-1	Not present
RW-2	Not present
RW-3	Not present
RW-4	Not present
RW-5	0.01 feet

Based on the lack of recoverable amounts of product at each recovery well, the continued operation of the LNAPL recovery system may not be warranted. Accordingly, the presence of LNAPL at these specific recovery wells will continue to be evaluated in the next quarter to determine if continued operation of the on-site LNAPL recovery system is necessary.

Gauging and Manual LNAPL Recovery

As required by the SMP, the approved monitoring well network must be gauged on a monthly basis to support ongoing assessment of measurable LNAPL in on-site and off-site monitoring and recovery wells. In addition, gauging of accessible Site monitoring wells outside the approved SMP monitoring network will also be performed periodically to determine if LNAPL is present and needs to also be addressed at those particular locations. Specifically, the gauging of these additional monitoring wells will be performed monthly for a six (6) month period through June 2017 following the recent issuance of the Site-specific Certificate of Completion (COC) on December 15, 2016. After June 2017, these activities will then be performed on a quarterly basis at all Site monitoring wells, although LNAPL assessment and manual recovery efforts, where applicable, will continue to be performed on a monthly basis at monitoring wells where LNAPL continues to be present. If the presence of LNAPL in the monitoring wells was observed to be greater than trace amount (i.e., >0.01’), the monitoring well was manually bailed. A total of approximately 4.45 gallons of LNAPL was manually recovered from the aforementioned monitoring wells. This total is in addition to the 3.1 gallons of LNAPL recovered from the operation of the LNAPL system at recovery wells RW-1 through RW-5 as highlighted earlier.

All gauging and manual LNAPL recovery data generated during the reporting period is provided in tabular form in Attachment 3 with a more focused and condensed summary of monitoring wells with the presence of LNAPL provided below:

Monitoring Well	LNAPL Thickness Measurements				LNAPL Recovered
	September 2016 (4 events)*	October 2016 (2 events)	November 2016 (1 event)	December 2016 (1 event)	
MW-2R	0.07 feet	0.55 feet; 0.65 feet	0.46 feet	0.16 feet	0.85 gallons
MW-3 (Off-Site)	2.11 feet	0.72 feet; 0.73 feet	0.94 feet	0.37 feet	2.35 gallons
MW-4	0.2 feet; 0.15 feet; 0.04 feet	0.07 feet; 0.08 feet	0.05 feet	0.08 feet	0.3 gallons
MW-7	1.26 feet	0.4 feet; 0.08 feet	0.08 feet	0.07 feet	0.2 gallons
MW-19	Not present	0.03 feet; 0.15 feet	0.02 feet	0.12 feet	0.1 gallons
MW-22	1.38 feet; 0.29 feet; 0.15 feet	0.14 feet (both events)	0.11 feet	0.09 feet	0.35 gallons
MW-33	0.02 feet	Not Present; 0.05 feet	Not Present	Not Present	trace amounts
MW-40	0.02 feet	0.02 feet; 0.03 feet	0.01 feet	Not Present	trace amounts
MW-42	Not present	Not Present (both events)	Not Present	0.01 feet	0 gallons
MW-45	Monitoring well not installed during reporting period	0.06 feet (both events)	0.09 feet	0.05 feet	0.3 gallons

* The gauging and monitoring of the NYSDEC-approved SMP monitoring network was completed on September 8, 2016. Supplemental gauging and bailing of monitoring wells MW-4 and MW-22 was completed upon NYSDEC request on September 16, 29 and 30, 2016 due to the presence of non-historic LNAPL.

Based on a review of the gauging and manual LNAPL recovery data generated during the reporting period, the following key observations and trends are provided below:

- The presence of LNAPL was noted in ten (10) monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-19, MW-22, MW-33, MW-40, MW-42 and MW-45 at one point during the monitoring period.
- Based on the most recent, December 2016, gauging event of the ten monitoring wells that had LNAPL at one point during the monitoring period:
  - LNAPL is currently not present at two (2) on-site locations (MW-33 and MW-40);
  - LNAPL thickness at remaining seven (7) on-site locations is currently less than 0.2 feet; and
  - LNAPL thickness at one (1) off-site location is currently 0.37 feet and has decreased by approximately 50% over the monitoring period.

- Manual bailing is effectively removing residual LNAPL at some Site monitoring wells.

Based on the summary provided herein, manual bailing of LNAPL at various monitoring wells highlighted herein appears to be effective and will continue to be performed on a monthly basis during the next quarter. However, alternative methods (i.e., oil absorbing socks), if practical, may be employed during the next monitoring period to supplement recovery of LNAPL if manual bailing efforts become less effective.

Groundwater Monitoring

Groundwater is monitored by a combination of gauging and sampling of groundwater monitoring wells within the SMP monitoring network. As discussed earlier, groundwater monitoring wells are gauged monthly to check for the presence of LNAPL and confirm thickness of LNAPL, if present. Site monitoring wells are then sampled on a quarterly basis to determine the presence of volatile organic compounds (VOCs), in particular the four Site-specific chemicals of concern (benzene, ethylbenzene, isopropylbenzene and total xylenes). The monitoring wells were sampled for Target Compound List (TCL) of VOCs using United States Environmental Protection Agency (USEPA) SW846 Method 8260.

The water/ LNAPL level data (Attachment 3) collected during the December 2016 gauging event was used to prepare a Site groundwater elevation contour and flow pattern map (Figure 1). If the presence of LNAPL was noted in groundwater monitoring wells outside the radius of influence of Site recovery wells, the product thickness was noted and the monitoring well was manually bailed to the extent practical. The respective LNAPL measurements collected from the September and December 2016 gauging rounds are highlighted on Figures 2 and 3.

On September 8, 2016 and December 1, 2016, two separate quarterly groundwater gauging and sampling rounds were performed. Since the monitoring well network was not finalized when the September 8, 2016 event was performed, the number and location of monitoring wells that were sampled were not the same for each event. The current monitoring well network consists of the following:

- three off-site monitoring wells along the southern perimeter of the site (MW-3, MW-4, and MW-34); and
- 18 on-site monitoring wells (MW-2R, MW-4, MW-7, MW-10, MW-11, MW-15, MW-19, MW-33, MW-38, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, and MW-48).

For each event, if the presence of product was noted at a monitoring well to be sampled within the respective monitoring network, the monitoring well was not sampled. Instead of being sampled, LNAPL was manually recovered to the extent practical. A total of 4.45 gallons of LNAPL were recovered by bailing during this reporting period.

Groundwater samples were collected using low-flow groundwater sampling procedures. The pump intake was set within the saturated portion of the well screen during purging and sampling activities. Prior to collecting groundwater samples, each monitoring well was purged at a flow rate of approximately .12 liters per minute (L/min). Flow rates were adjusted to maintain minimal drawdown in the well during purging activities. A portable water-quality meter, equipped with an in-line flow-through cell, was used to monitor water quality indicator parameters (pH, conductivity, dissolved oxygen [DO], oxidation-reduction potential [ORP], temperature, and turbidity). Groundwater quality measurements were collected every three to five minutes until the field parameters stabilized (Attachments 4 and 5).

Purging was considered complete when the field parameters had stabilized, after which groundwater samples were collected and submitted for TCL VOC analysis. The results of these samples are summarized in Table 1 and presented in Figures 2 and 3.

The following monitoring wells were sampled during the two (2) quarterly events:

September 2016 (11 Monitoring Wells Sampled)		**December 2016 (14 Monitoring Wells Sampled)**	
MW-5	MW-34	MW-10	MW-40
MW-7R	MW-37	MW-11	MW-41
MW-10	MW-38	MW-21	MW-43
MW-11	MW-41	MW-33	MW-44
MW-19	MW-42	MW-34	MW-46
MW-21		MW-37	MW-47
		MW-38	MW-48

A review of the groundwater data generated indicated the following:

- Seven (7) of the twenty-one (21) monitoring wells within the NYSDEC-approved monitoring network were not sampled during the December 2016 sampling event due to the presence of LNAPL at those locations as discussed previously.
- VOCs were detected, but at concentrations below AWQSGVs in seven (7) monitoring wells (MW-11, MW-21, MW-33, MW-41, MW-42, MW-46 and MW-48).
- COC exceedances of AWQSGVs were generally less than an order of magnitude greater than their respective AWQSGV:
  - Benzene results were below their respective AWQSGV of 5 µg/L at all monitoring locations except at MW-40 which had a detection of 8.6 µg/L.
  - Ethylbenzene results exceeded their respective AWQSGV of 5 µg/L at two monitoring well locations (9.9 µg/L at MW-44 and 11 µg/L at MW-47).
  - Isopropylbenzene results exceeded their respective AWQSGV of 5 µg/L at seven monitoring well locations. Exceedances ranged from 6.8 to 44 µg/L.
  - Xylene results exceed their respective AWQSGV of 5 µg/L at two monitoring well locations (44 µg/L at MW-44 and 38 µg/L at MW-47).

Based on the presence of VOCs above the NYSDEC AWQSGVs in groundwater, treatment of VOCs utilizing In-situ Chemical Oxidation (ISCO) will be required. As contemplated in the SMP, ISCO will also be required to address residual gross contamination in areas depicted on Figure 9 of the SMP. It is anticipated that an ISCO injection design plan will be prepared and implemented at a later date after on-site LNAPL recovery efforts have been completed to the extent practical. Development and implementation of a NYSDEC-approved injection plan could potentially occur as early as the second quarter of 2017.

Modifications or Amendments to the SMP
No modifications or amendments to the SMP were implemented this reporting period.

Actions Planned for the Next Quarterly Reporting Period
The following actions are planned for the next reporting period:

- Continued monthly operation and maintenance of LNAPL recovery system;
- Continued monthly gauging and manual LNAPL recovery, where applicable, at Site monitoring and recovery wells;
- Continued quarterly monitoring (gauging and sampling) of Site monitoring wells within SMP network;
- Evaluation of LNAPL recovery efforts at RW-1 through RW-5 to determine if continued operation of the on-site LNAPL recovery system is warranted; and
- Evaluation and potential use of alternative (i.e., oil absorbing socks), practical methods to supplement recovery of LNAPL at Site monitoring wells where manual recovery efforts become ineffective.

If there are any follow-up questions or concerns with regards to the information provided in this quarterly report, please don't hesitate to contact our office.

Sincerely,

REMEDIAL ENGINEER, P.C.

Omar Ramotar, P.E.
Principal Engineer

Attachments

cc: Jane O'Connell, NYSDEC
Andrew Till, Simon Baron Development
Robert Hendrickson, Quadrum Global
Joseph Duminuco, Roux Associates, Inc.
Glenn Netuschil, P.E., Remedial Engineering, P.C.
Jordanna Kendrot, Roux Associates, Inc.

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-11	MW-11	MW-19	MW-21	MW-21
		Sample Date:	09/08/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**7**	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	5 U	5 U	5.6	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.64	0.68	0.46 J	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-11	MW-11	MW-19	MW-21	MW-21
		Sample Date:	09/08/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**25**	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**33**	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**23**	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	4.7	4.1	**13**	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
 - - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-33	MW-34	MW-34	MW-37	MW-37	MW-38
		Sample Date:	12/01/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	0.74 J	12 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	10 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	3	1.3 J	0.98 J	2.5 U	3.6 J	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	1200 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	25 U	5 U
Acetone	**50**	UG/L	5 U	23	5 U	5 U	3.4 J	39	3.5 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.42 J	0.26 J	0.19 J	2.5 U	0.27 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	10 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	25 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-21	MW-33	MW-34	MW-34	MW-37	MW-37	MW-38
Sample Date:			12/01/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	25 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	0.76 J	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	1.3 J	**30**	**22**	**14**	**28**	**15**
m,p-Xylene	**5**	UG/L	2.5 U	1.1 J	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	3.2 J	5 U	5 U	7.4	25 U	6.8
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	25 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.2 J	**39**	**33**	**20**	**50**	**16**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	1.5 J	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.6	**16**	**15**	**5.1**	**21**	5
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	1.8 J	**7**	**6.9**	2.8	**7.1 J**	2.5
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.46 J	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.2 J	12 U	1 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	5 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.6 J	2.5 U	2.5 U	2.5 U	12 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-38	MW-40	MW-41	MW-41	MW-42	MW-43	MW-44
		Sample Date:	12/01/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	12/01/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**12**	**41**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	1.6 J	2 J	5 U	5 U	5 U	7.4	**98**
Benzene	**1**	UG/L	0.28 J	**8.6**	0.26 J	0.5 U	0.5 U	0.5 U	1
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-38	MW-40	MW-41	MW-41	MW-42	MW-43	MW-44
		Sample Date:	12/01/2016	12/01/2016	09/08/2016	12/01/2016	09/08/2016	12/01/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**9.9**
Isopropylbenzene (Cumene)	**5**	UG/L	**26**	**44**	1.3 J	0.73 J	4.7	1.4 J	**6.8**
m,p-Xylene	**5**	UG/L	2.5 U	1 J	2.5 U	2.5 U	2.5 U	1.3 J	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	12
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**34**	**69**	1.7 J	0.8 J	3.5	1.9 J	**8.5**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	0.78 J	2.5 U	2.5 U	2.5 U	0.8 J	**17**
Sec-Butylbenzene	**5**	UG/L	**11**	**16**	2.3 J	1.1 J	2.9	2.5 U	1.8 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	4.3	3.5	1.2 J	0.78 J	1.2 J	2.5 U	1.2 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	0.97 J	1.7 J	2.5 U	2.5 U	2.5 U	2.5 U	3.8
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	1.8 J	2.5 U	2.5 U	2.5 U	2.1 J	**41**

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values
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- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-47	MW-47	MW-48	MW-5	MW-7R
		Sample Date:	12/01/2016	12/01/2016	12/01/2016	12/01/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units						
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	**41**	**40**	2.2 J	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	1.1 J	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	4.2 J	**110**	**110**	5 U	5 U	14
Benzene	**1**	UG/L	0.5 U	**1.1**	0.98	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	1.2 J	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-47	MW-47	MW-48	MW-5	MW-7R
		Sample Date:	12/01/2016	12/01/2016	12/01/2016	12/01/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units						
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	**11**	**11**	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	**9.9**	**9.2**	4	2.5 U	**11**
m,p-Xylene	**5**	UG/L	2.5 U	**25**	**24**	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	16	14	5 U	5 U	5.5
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	1.1 J	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	**14**	**13**	3.1	2.5 U	**19**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	**15**	**14**	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.2 J	2.1 J	4.7	2.5 U	**12**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	0.99 J	0.95 J	4.1	2.5 U	**6**
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	4	3.8	2.5 U	2.5 U	0.99 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	**40**	**38**	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
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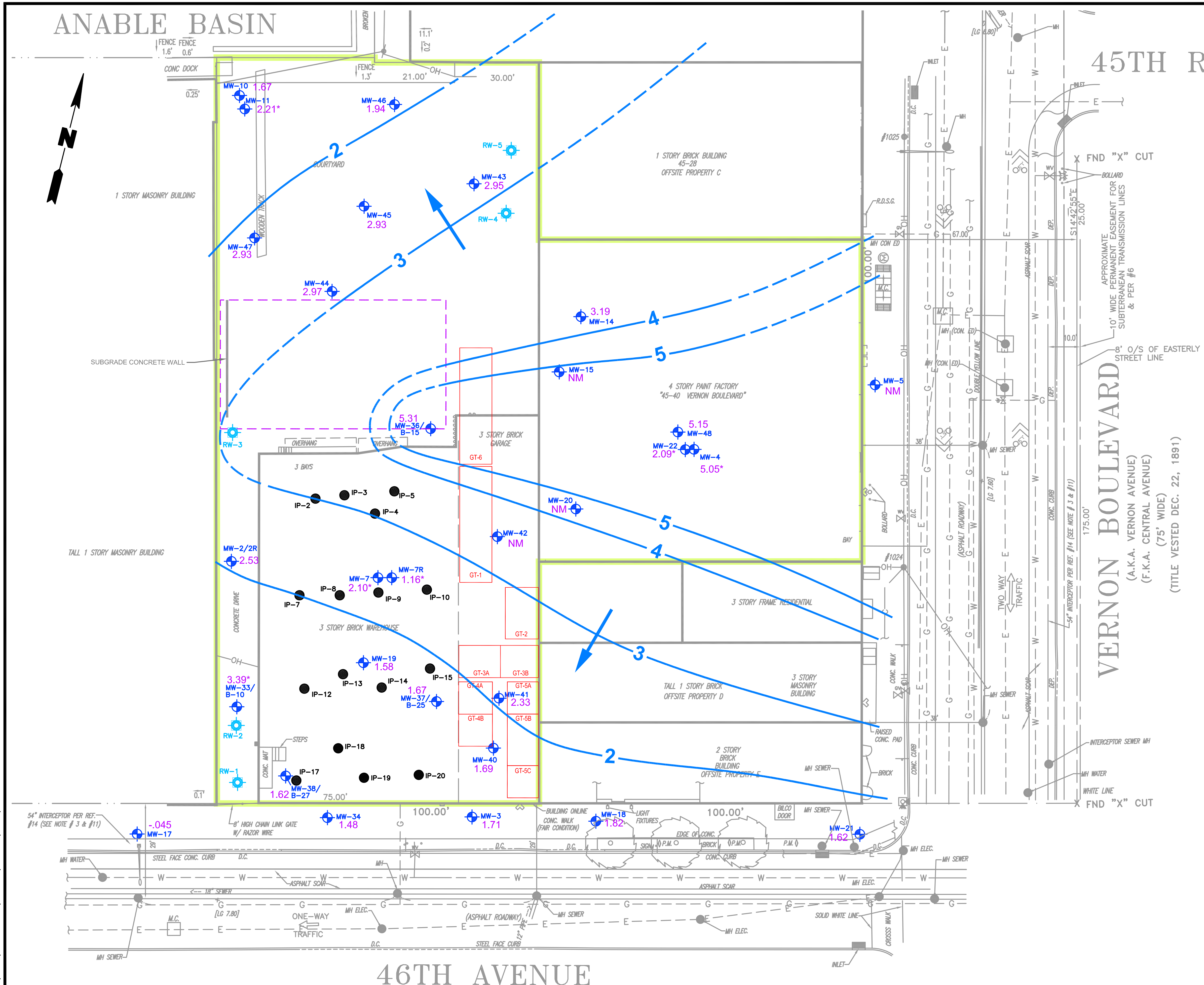


LEGEND

MW-5	LOCATION AND DESIGNATION OF MONITORING WELL
RW-1	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL
IP-2	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
ISCO	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	CONCRETE SLAB
1.67	GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
2.09*	MEASUREMENT NOT USED IN CONTOURING
2	LINE OF EQUAL GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL) (DASHED WHERE INFERRED)
	DIRECTION OF GROUNDWATER FLOW

NOTE

1. GROUNDWATER ELEVATIONS WERE GROUNDWATER CORRECTED FOR THE PRESENCE OF LNAPL WHERE APPLICABLE

Title:

GROUNDWATER ELEVATION AND CONTOUR MAP
DECEMBER 1, 2016

PARAGON PAINT & VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

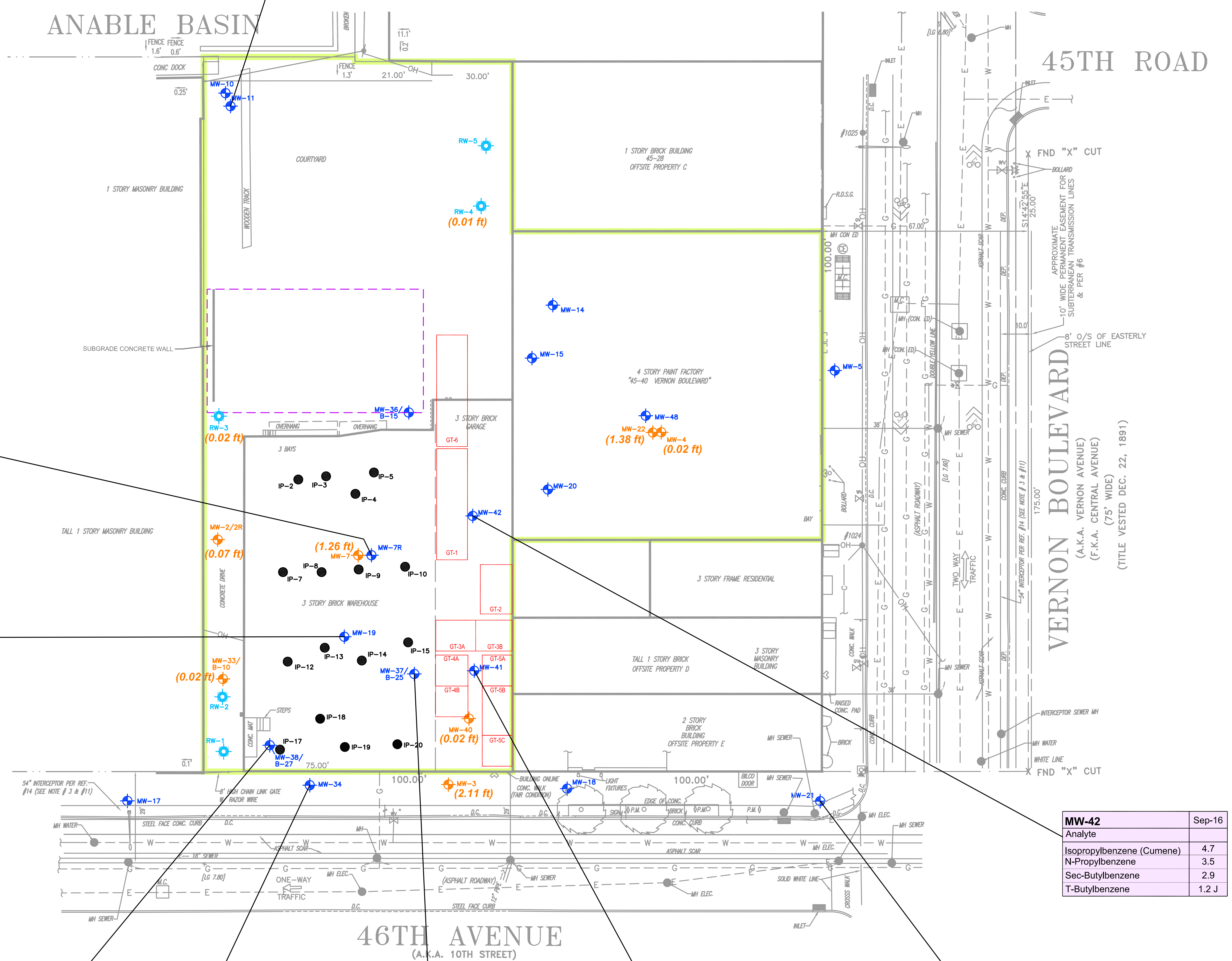
Prepared For:

VERNON 4540 REALTY LLC

Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: J.K. Prepared by: B.H.C. Project Mgr: O.R.	Date: 09FEB17 Scale: AS SHOWN Project: 2051.0001Y000	FIGURE 1
	File: 2051.0001Y236.01.DWG		

V:\CAD\PROJECTS\2051\0001Y\236\2051.0001Y236.01.DWG

MW-11	Sep-16
Analyte	
Benzene	0.64
T-Butylbenzene	4.7



MW-7R	Sep-16
Analyte	
Acetone	14
Isopropylbenzene (Cumene)	**11**
Methyl Ethyl Ketone (2-Butanone)	5.5
N-Propylbenzene	**19**
Sec-Butylbenzene	**12**
T-Butylbenzene	**6**
Toluene	0.99 J

MW-19	Sep-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**7**
Acetone	5.6
Benzene	0.46 J
Isopropylbenzene (Cumene)	**25**
Methyl Ethyl Ketone (2-Butanone)	5
N-Propylbenzene	**33**
Sec-Butylbenzene	**23**
T-Butylbenzene	**13**

MW-42	Sep-16
Analyte	
Isopropylbenzene (Cumene)	4.7
N-Propylbenzene	3.5
Sec-Butylbenzene	2.9
T-Butylbenzene	1.2 J

MW-38	Sep-16
Analyte	
Acetone	3.5 J
Benzene	0.27 J
Isopropylbenzene (Cumene)	**15**
Methyl Ethyl Ketone (2-Butanone)	6.8
N-Propylbenzene	**16**
Sec-Butylbenzene	5
T-Butylbenzene	2.5
Toluene	1 J

MW-34	Sep-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	1.3 J
Benzene	0.42 J
Isopropylbenzene (Cumene)	**30**
N-Propylbenzene	**39**
Sec-Butylbenzene	**16**
T-Butylbenzene	**7**

MW-37	Sep-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	2.5 U
Acetone	3.4 J
Benzene	0.19 J
Isopropylbenzene (Cumene)	**14**
Methyl Ethyl Ketone (2-Butanone)	7.4
N-Propylbenzene	**20**
Sec-Butylbenzene	**5.1**
T-Butylbenzene	2.8
Toluene	1.2 J

MW-41	Sep-16
Analyte	
Benzene	0.26 J
Isopropylbenzene (Cumene)	1.3 J
N-Propylbenzene	1.7 J
Sec-Butylbenzene	2.3 J
T-Butylbenzene	1.2 J

MW-21	Sep-16
Analyte	
Tetrachloroethylene (PCE)	0.5 U

LEGEND

- MW-5 — LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
- MW-3 — LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
- RW-1 — LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
- IP-2 — LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
- (1.38 ft) — LNAPL THICKNESS
- ft — FEET
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID
- ISCO — IN-SITU CHEMICAL OXIDATION
- CONCRETE VAULT
- PROPERTY BOUNDARY
- GT-6 — APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. → | MW-11 | Sep-16 | ← SAMPLE DATE

ANALYTES — Benzene 0.64; T-Butylbenzene 4.7 — CONCENTRATIONS (IN μg/L)

MW-11	Sep-16
Analyte	
Benzene	0.64
T-Butylbenzene	4.7

Parameter (Concentrations in μg/L)	Standards* (μg/L)
1,2-Dichloropropane	1
1,3,5-Trimethylbenzene (Mesitylene)	5
1,3-Dichlorobenzene	3
2-Hexanone	50
Acetone	50
Benzene	1
Chloromethane	--
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
Methyl Ethyl Ketone (2-Butanone)	50
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--
N-Propylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
T-Butylbenzene	5
Tetrachloroethylene (PCE)	5
Toluene	5

Concentrations in μg/L

μg/L - Micrograms per liter
* - NYSDEC AWQSGVs
NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
μg/L - Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
NS - Not Sampled
FD - Duplicate
-- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

N

30' 0 30'

NO.	DATE	REVISION DESCRIPTION	INT.

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Remedial
REMEDIAL ENGINEERING, P.C.
209 Shafter Street
Islandia, New York 11749 (631) 232-2600

PROJECT NAME:
QUARTERLY MONITORING REPORT - 4TH QUARTER
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
VERNON 4540 REALTY LLC

TITLE:
VOCs AND LNAPL DETECTED IN GROUNDWATER
SEPTEMBER 2016

FIGURE
2

V:\CAD\PROJECTS\2051Y\0001Y\236\2051.0001Y236.01.DWG

MW-47	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**40**
2-Hexanone	5 U
Acetone	**110**
Benzene	0.98
Chloromethane	2.5 U
Ethylbenzene	**11**
Isopropylbenzene (Cumene)	**9.2**
m,p-Xylene	**24**
Methyl Ethyl Ketone (2-Butanone)	14
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.1 J
N-Propylbenzene	**13**
O-Xylene (1,2-Dimethylbenzene)	**14**
Sec-Butylbenzene	2.1 J
T-Butylbenzene	0.95 J
Toluene	3.8
Xylenes	**38**

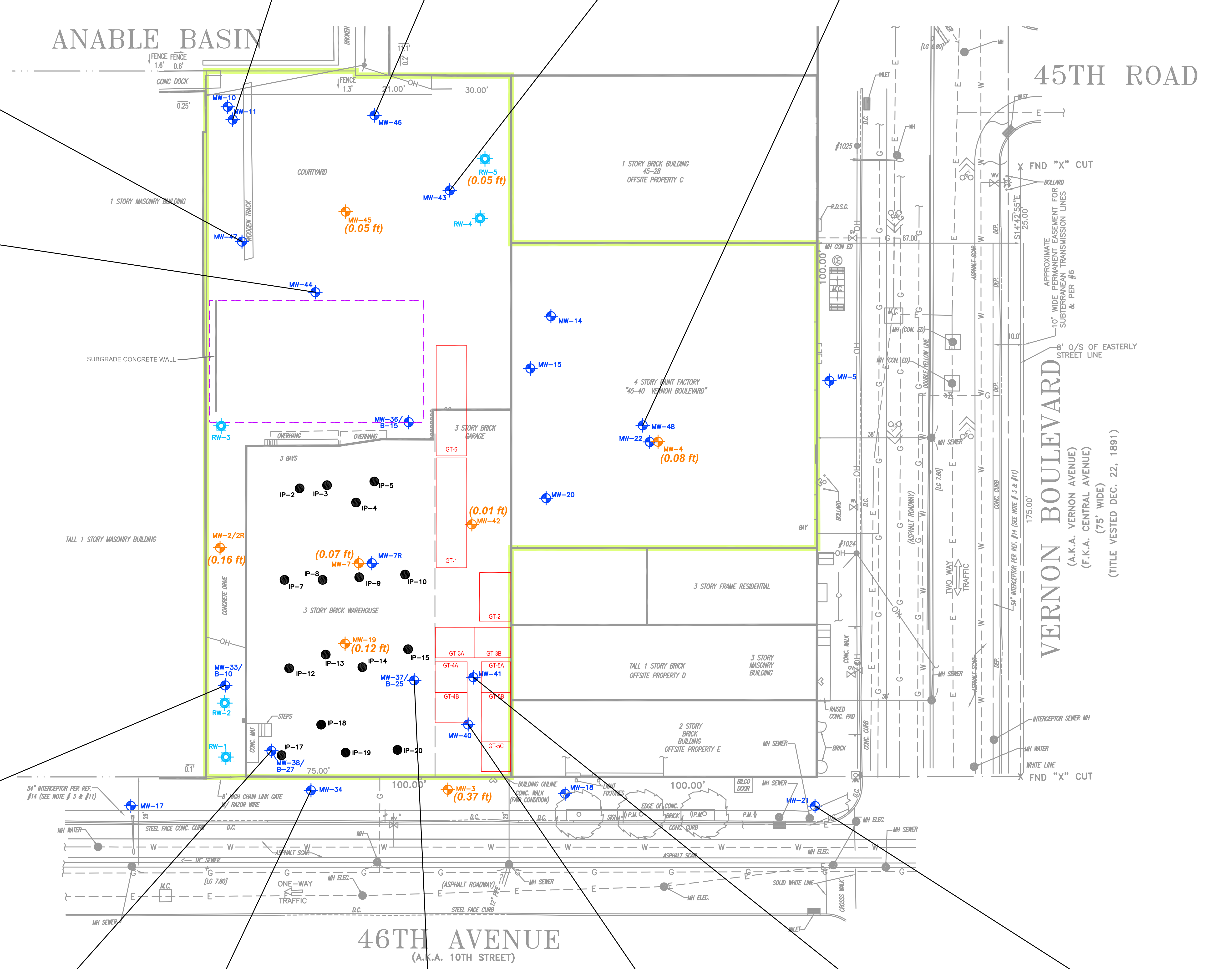
MW-44	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**41**
Acetone	**98**
Benzene	1
Ethylbenzene	**9.9**
Isopropylbenzene (Cumene)	**6.8**
m,p-Xylene	**24**
Methyl Ethyl Ketone (2-Butanone)	12
N-Propylbenzene	**8.5**
O-Xylene (1,2-Dimethylbenzene)	**17**
Sec-Butylbenzene	1.8 J
T-Butylbenzene	1.2 J
Toluene	3.8
Xylenes	**41**

MW-11	Dec-16
Analyte	
Benzene	0.68
T-Butylbenzene	4.1

MW-46	Dec-16
Analyte	
Acetone	4.2 J

MW-43	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**12**
Acetone	7.4
Isopropylbenzene (Cumene)	1.4 J
m,p-Xylene	1.3 J
N-Propylbenzene	1.9 J
O-Xylene (1,2-Dimethylbenzene)	0.8 J
Xylenes	2.1 J

MW-48	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	2.2 J
Isopropylbenzene (Cumene)	4
N-Propylbenzene	3.1
Sec-Butylbenzene	4.7
T-Butylbenzene	4.1



MW-33	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	3
Acetone	23
Ethylbenzene	0.76 J
Isopropylbenzene (Cumene)	1.3 J
m,p-Xylene	1.1 J
Methyl Ethyl Ketone (2-Butanone)	3.2 J
N-Propylbenzene	2.2 J
O-Xylene (1,2-Dimethylbenzene)	1.5 J
Sec-Butylbenzene	2.6
T-Butylbenzene	1.8 J
Xylenes	2.6 J

MW-38	Dec-16
Analyte	
Acetone	1.6 J
Benzene	0.28 J
Isopropylbenzene (Cumene)	**26**
Methyl Ethyl Ketone (2-Butanone)	5 U
N-Propylbenzene	**34**
Sec-Butylbenzene	**11**
T-Butylbenzene	4.3
Toluene	0.97 J

MW-34	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	0.98 J
Benzene	0.26 J
Isopropylbenzene (Cumene)	**22**
N-Propylbenzene	**33**
Sec-Butylbenzene	**15**
T-Butylbenzene	**6.9**

MW-37	Dec-16
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	3.6 J
Acetone	39
Benzene	2.5 U
Isopropylbenzene (Cumene)	**28**
Methyl Ethyl Ketone (2-Butanone)	25 U
N-Propylbenzene	**50**
Sec-Butylbenzene	**21**
T-Butylbenzene	**7.1 J**
Toluene	12 U

MW-40	Dec-16
Analyte	
Acetone	2 J
Benzene	**8.6**
Isopropylbenzene (Cumene)	**44**
m,p-Xylene	1 J
N-Propylbenzene	**69**
O-Xylene (1,2-Dimethylbenzene)	0.78 J
Sec-Butylbenzene	**16**
T-Butylbenzene	3.5
Toluene	1.7 J
Xylenes	1.8 J

MW-41	Dec-16
Analyte	
Benzene	0.5 U
Isopropylbenzene (Cumene)	0.73 J
N-Propylbenzene	0.8 J
Sec-Butylbenzene	1.1 J
T-Butylbenzene	0.78 J

MW-21	Dec-16
Analyte	
Tetrachloroethylene (PCE)	0.46 J

LEGEND

- MW-5 — LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
- MW-3 — LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
- RW-1 — LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
- IP-2 — LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
- (0.05 ft) — LNAPL THICKNESS
- ft — FEET
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID
- ISCO — IN-SITU CHEMICAL OXIDATION
- CONCRETE VAULT
- PROPERTY BOUNDARY
- GT-6 — APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. → | SAMPLE DATE ←

ANALYTES | CONCENTRATIONS (IN µg/L)

MW-11	Dec-16
Analyte	
Benzene	0.68
T-Butylbenzene	4.1

Parameter (Concentrations in µg/L)	Standards* (µg/L)
1,2-Dichloropropane	1
1,3,5-Trimethylbenzene (Mesitylene)	5
1,3-Dichlorobenzene	3
2-Hexanone	50
Acetone	50
Benzene	1
Chloromethane	--
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
Methyl Ethyl Ketone (2-Butanone)	50
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--
N-Propylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
T-Butylbenzene	5
Tetrachloroethylene (PCE)	5
Toluene	5

Concentrations in µg/L

- µg/L - Micrograms per liter
- * - NYSDEC AWQSGVs
- NYSDEC - New York State Department of Environmental Conservation
- AWQSGVs - Ambient Water-Quality Standards and Guidance Values
- µg/L - Micrograms per liter
- J - Estimated Value
- U - Compound was analyzed for but not detected
- NS - Not Sampled
- FD - Duplicate
- -- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

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30' 0 30'

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Islandia, New York 11749 (631) 232-2600

PROJECT NAME:
QUARTERLY MONITORING REPORT - 4TH QUARTER
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
VERNON 4540 REALTY LLC

TITLE:
VOCs AND LNAPL DETECTED IN GROUNDWATER
DECEMBER 2016

FIGURE
3

V:\CAD\PROJECTS\2051Y\0001Y\236\2051.0001Y236.01.DWG

ATTACHMENT 1

Monitoring, Inspection, and
Maintenance Forms

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **Thursday, September 08, 2016**

Site Observations: Performed by (MS) on (9/8/16)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (9/8/16)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (9/8/16)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (9/8/16)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (9/8/16)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **9/8/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in SMP monitoring network

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Jordanna Kendrot**
Date: **Thursday, October 13, 2016**

Site Observations: Performed by (JK) on (10/13/16)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (JK) on (10/13/16)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (JK) on (10/13/16)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (JK) on (10/13/16)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (JK) on (10/13/16)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Jordanna Kendrot**

Date: **10/13/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Tuesday, November 15, 2016**

Site Observations: Performed by (MS) on (11/15/16)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (11/15/16)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (11/15/16)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (11/15/16)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (11/15/16)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	[X]	Were all five (5) AC Sipper reels operating properly? See pg. 2
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **11/15/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery System was turned off (breaker when hooked into system was shut off entirely). Brekaer turned back on and system restarted

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Thursday, December 01, 2016**

Site Observations: **Performed by (MS) on (12/1/16)**

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: **Performed by (MS) on (12/1/16)**

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: **Performed by (MS) on (12/1/16)**

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: **Performed by (MS) on (12/1/16)**

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : **Performed by (MS) on (12/1/16)**

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **12/1/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in SMP monitoring network

ATTACHMENT 2

LNAPL Recovery System
Monitoring Logs

LNAPL Recovery System Monitoring Log, Former Paragon Paint & Varnish Factory, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.71	--	
Recovery Well RW-2	N	--	7.34	--	
Recovery Well RW-3	Y	8.36	8.38	0.02	
Recovery Well RW-4	Y	8.65	8.66	0.01	Trace amount; cannot be recovered by system
Recovery Well RW-5	N	--	8.45	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				0 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? System startup; program LNAPL recovery system to pull from RW-3 and RW-4 only

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log, Former Paragon Paint & Varnish Factory, Long Island City, New York

Source of Reading	Value	Recovery Well Gauging Data			Comments
Recovery Well Network -Presence of Product	Product Present?	DTW	DTP	FTP	
Recovery Well RW-1	N	--	6.71	--	
Recovery Well RW-2	N	--	7.34	--	
Recovery Well RW-3	Y	8.36	8.38	0.02	
Recovery Well RW-4	Y	8.65	8.66	0.01	Trace amount; cannot be recovered by system
Recovery Well RW-5	N	--	8.45	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				2.4 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? N/A

Form Completed By:

Jordanna Kendrot

LNAPL Recovery System Monitoring Log, Former Paragon Paint & Varnish Factory, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.84	--	
Recovery Well RW-2	N	--	7.4	--	
Recovery Well RW-3	N	--	8.04	--	No product present
Recovery Well RW-4	N	--	8.3	--	No product present
Recovery Well RW-5	Y	8.1	8.12	0.02	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				2.6 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? Modify system so no longer removing product from RW-3/RW-4; program system to begin removal from RW-5

Form Completed By:

Michael Sarnie

LNAPL Recovery System Monitoring Log, Former Paragon Paint & Varnish Factory, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	7.2	--	
Recovery Well RW-2	N	--	7.6	--	
Recovery Well RW-3	N	--	7.29	--	
Recovery Well RW-4	N	--	8.68	--	
Recovery Well RW-5	N	--	8.46	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.1 Gallons	

Is the system operating within the acceptable conditions? No; system breaker had been turned off

If no, was the condition corrected and how? Turn on breaker to building and turn system back on; resume settings from 10/26/16

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log, Former Paragon Paint & Varnish Factory, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.51	--	
Recovery Well RW-2	N	--	6.54	--	
Recovery Well RW-3	N	--	6.67	--	
Recovery Well RW-4	N	--	6.98	--	
Recovery Well RW-5	Y	6.74	6.75	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.1 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? N/A

Form Completed By:

Michael Sarni

ATTACHMENT 3

Gauging and Manual LNAPL Recovery Data

Groundwater Gauging Former Paragon Paint Varnish Corp - September 8, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
9/8/2016	MW-2R	7.52	7.59	4	0.07	--	0.0
9/8/2016	MW-3	6.8	8.91	2	2.11	1.0	1.0
9/8/2016	MW-4	9.98	10.18	2	0.2	0.1	0.1
9/8/2016	MW-7	2.39	3.65	1	1.26	--	0.0
9/8/2016	MW-7R	NM	NM	2	--	--	
9/8/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
9/8/2016	MW-10	--	7.65	2	--	--	
9/8/2016	MW-11	--	6.77	2	--	--	
9/8/2016	MW-14	--	NM	2	--	--	
9/8/2016	MW-15	--	9.27	2	--	--	
9/8/2016	MW-17	NM	NM	4	--	--	
9/8/2016	MW-18	NM	NM	4	--	--	
9/8/2016	MW-19	--	2.36	2	--	--	
9/8/2016	MW-20	NM	NM	2	--	--	
9/8/2016	MW-21	--	6.65	4	--	--	
9/8/2016	MW-22	9.81	11.19	2	1.38	0.25	0.25
9/8/2016	MW-33	7.46	7.48	2	0.02	--	0.0
9/8/2016	MW-34	--	7.31	4	--	--	
9/8/2016	MW-36	NM	NM	4	--	--	
9/8/2016	MW-37	NM	NM	2	--	--	
9/8/2016	MW-38	--	2.62	2	--	--	
9/8/2016	MW-40	6.98	7	2	0.02	--	0.0
9/8/2016	MW-41	--	6.61	2	--	--	
9/8/2016	MW-42	--	7.86	2	--	--	
9/8/2016	MW-43	Monitoring well not installed at time of gauging					
9/8/2016	MW-44	Monitoring well not installed at time of gauging					
9/8/2016	MW-45	Monitoring well not installed at time of gauging					0.0
9/8/2016	MW-46	Monitoring well not installed at time of gauging					
9/8/2016	MW-47	Monitoring well not installed at time of gauging					
9/8/2016	MW-48	Monitoring well not installed at time of gauging					
						Total	**1.35**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - September 16, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
9/16/2016	MW-2R	NM	NM	4	--	--	0.0
9/16/2016	MW-3	NM	NM	2	--	--	1.0
9/16/2016	MW-4	10.04	10.19	2	0.15	--	0.1
9/16/2016	MW-7	NM	NM	1	--	--	0.0
9/16/2016	MW-7R	NM	NM	2	--	--	
9/16/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
9/16/2016	MW-10	NM	NM	2	--	--	
9/16/2016	MW-11	NM	NM	2	--	--	
9/16/2016	MW-14	NM	NM	2	--	--	
9/16/2016	MW-15	--	9.29	2	--	--	
9/16/2016	MW-17	NM	NM	4	--	--	
9/16/2016	MW-18	NM	NM	4	--	--	
9/16/2016	MW-19	NM	NM	2	--	--	
9/16/2016	MW-20	NM	NM	2	--	--	
9/16/2016	MW-21	NM	NM	4	--	--	
9/16/2016	MW-22	10.06	10.35	2	0.29	--	0.25
9/16/2016	MW-33	NM	NM	2	--	--	0.0
9/16/2016	MW-34	NM	NM	4	--	--	
9/16/2016	MW-36	NM	NM	4	--	--	
9/16/2016	MW-37	NM	NM	2		--	
9/16/2016	MW-38	NM	NM	2	--	--	
9/16/2016	MW-40	NM	NM	2	--	--	0.0
9/16/2016	MW-41	NM	NM	2	--	--	
9/16/2016	MW-42	NM	NM	2	--	--	
9/16/2016	MW-43	Monitoring well not installed at time of gauging					
9/16/2016	MW-44	Monitoring well not installed at time of gauging					
9/16/2016	MW-45	Monitoring well not installed at time of gauging					0.0
9/16/2016	MW-46	Monitoring well not installed at time of gauging					
9/16/2016	MW-47	Monitoring well not installed at time of gauging					
9/16/2016	MW-48	Monitoring well not installed at time of gauging					
						Total	**1.35**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - September 29, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
9/29/2016	MW-2R	NM	NM	4	--	--	0.0
9/29/2016	MW-3	7.06	8.37	2	1.31	--	1.0
9/29/2016	MW-4	10.04	10.19	2	0.15	--	0.1
9/29/2016	MW-7	NM	NM	1	--	--	0.0
9/29/2016	MW-7R	NM	NM	2	--	--	
9/29/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
9/29/2016	MW-10	NM	NM	2	--	--	
9/29/2016	MW-11	NM	NM	2	--	--	
9/29/2016	MW-14	NM	NM	2	--	--	
9/29/2016	MW-15	NM	NM	2	--	--	
9/29/2016	MW-17	NM	NM	4	--	--	
9/29/2016	MW-18	NM	NM	4	--	--	
9/29/2016	MW-19	NM	NM	2	--	--	
9/29/2016	MW-20	NM	NM	2	--	--	
9/29/2016	MW-21	NM	NM	4	--	--	
9/29/2016	MW-22	10.06	10.35	2	0.29	--	0.25
9/29/2016	MW-33	NM	NM	2	--	--	0.0
9/29/2016	MW-34	NM	NM	4	--	--	
9/29/2016	MW-36	NM	NM	4	--	--	
9/29/2016	MW-37	NM	NM	2		--	
9/29/2016	MW-38	NM	NM	2	--	--	
9/29/2016	MW-40	NM	NM	2	--	--	0.0
9/29/2016	MW-41	NM	NM	2	--	--	
9/29/2016	MW-42	NM	NM	2	--	--	
9/29/2016	MW-43	Monitoring well not installed at time of gauging					
9/29/2016	MW-44	Monitoring well not installed at time of gauging					
9/29/2016	MW-45	Monitoring well not installed at time of gauging					0.0
9/29/2016	MW-46	Monitoring well not installed at time of gauging					
9/29/2016	MW-47	Monitoring well not installed at time of gauging					
9/29/2016	MW-48	Monitoring well not installed at time of gauging					
						Total	**1.35**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - September 30, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
9/30/2016	MW-2R	NM	NM	4	--	--	0.0
9/30/2016	MW-3	NM	NM	2	--	--	1.0
9/30/2016	MW-4	10.18	10.22	2	0.04	--	0.1
9/30/2016	MW-7	NM	NM	1	--	--	0.0
9/30/2016	MW-7R	NM	NM	2	--	--	
9/30/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
9/30/2016	MW-10	NM	NM	2	--	--	
9/30/2016	MW-11	NM	NM	2	--	--	
9/30/2016	MW-14	--	10.11	2	--	--	
9/30/2016	MW-15	--	9.98	2	--	--	
9/30/2016	MW-17	--	7.05	4	--	--	
9/30/2016	MW-18	--	7.07	4	--	--	
9/30/2016	MW-19	NM	NM	2	--	--	
9/30/2016	MW-20	--	10.27	2	--	--	
9/30/2016	MW-21	NM	NM	4	--	--	
9/30/2016	MW-22	10.19	10.34	2	0.15	--	0.25
9/30/2016	MW-33	NM	NM	2	--	--	0.0
9/30/2016	MW-34	NM	NM	4	--	--	
9/30/2016	MW-36	--	7.44	4	--	--	
9/30/2016	MW-37	NM	NM	2	--	--	
9/30/2016	MW-38	NM	NM	2	--	--	
9/30/2016	MW-40	NM	NM	2	--	--	0.0
9/30/2016	MW-41	NM	NM	2	--	--	
9/30/2016	MW-42	NM	NM	2	--	--	
9/30/2016	MW-43	Monitoring well not installed at time of gauging					
9/30/2016	MW-44	Monitoring well not installed at time of gauging					
9/30/2016	MW-45	Monitoring well not installed at time of gauging					0.0
9/30/2016	MW-46	Monitoring well not installed at time of gauging					
9/30/2016	MW-47	Monitoring well not installed at time of gauging					
9/30/2016	MW-48	Monitoring well not installed at time of gauging					
						Total	**1.35**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - October 13, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
10/13/2016	MW-2R	7.65	8.3	4	0.65	--	0.15
10/13/2016	MW-3	7.08	7.81	2	0.73	0.3	1.25
10/13/2016	MW-4	10.13	10.21	2	0.08	--	0.1
10/13/2016	MW-7	2.8	3.2	1	0.4	--	0.0
10/13/2016	MW-7R	--	2.95	2	--	--	
10/13/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
10/13/2016	MW-10	--	5.03	2	--	--	
10/13/2016	MW-11	--	6.05	2	--	--	
10/13/2016	MW-14	--	10.09	2	--	--	
10/13/2016	MW-15	--	9.99	2	--	--	
10/13/2016	MW-17	--	7	4	--	--	
10/13/2016	MW-18	--	6.69	4	--	--	
10/13/2016	MW-19	2.9	2.93	2	0.03	--	0.0
10/13/2016	MW-20	--	10.26	2	--	--	
10/13/2016	MW-21	--	6.28	4	--	--	
10/13/2016	MW-22	10.18	10.32	2	0.14	--	0.25
10/13/2016	MW-33	7.55	7.6	2	0.05	--	0.0
10/13/2016	MW-34	--	7.43	4	--	--	
10/13/2016	MW-36	--	7.42	4	--	--	
10/13/2016	MW-37	NM	NM	2		--	
10/13/2016	MW-38	--	3	2	--	--	
10/13/2016	MW-40	7.23	7.26	2	0.03	--	0.0
10/13/2016	MW-41	--	7.04	2	--	--	
10/13/2016	MW-42	--	7.92	2	--	--	
10/13/2016	MW-43	--	6.22	2	--	--	
10/13/2016	MW-44	--	7.51	2	--	--	
10/13/2016	MW-45	7.07	7.13	2	0.06	--	0.0
10/13/2016	MW-46	--	6.7	2	--	--	
10/13/2016	MW-47	--	6.45	2	--	--	
10/13/2016	MW-48	--	9.87	2	--	--	
						Total	**1.75**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - October 26, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
10/26/2016	MW-2R	7.69	8.24	4	0.55	0.15	0.15
10/26/2016	MW-3	7.18	7.9	2	0.72	0.2	1.45
10/26/2016	MW-4	10.05	10.12	2	0.07	--	0.1
10/26/2016	MW-7	3.11	3.19	1	0.08	--	0.0
10/26/2016	MW-7R	--	3.02	2	--	--	
10/26/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
10/26/2016	MW-10	--	2.37	2	--	--	
10/26/2016	MW-11	--	6.78	2	--	--	
10/26/2016	MW-14	--	9.95	2	--	--	
10/26/2016	MW-15	NM	NM	2	--	--	
10/26/2016	MW-17	--	6.98	4	--	--	
10/26/2016	MW-18	--	7.03	4	--	--	
10/26/2016	MW-19	3.29	3.44	2	0.15	--	0.0
10/26/2016	MW-20	--	10.19	2	--	--	
10/26/2016	MW-21	--	6.19	4	--	--	
10/26/2016	MW-22	10.08	10.22	2	0.14	--	0.25
10/26/2016	MW-33	--	7.55	2	--	--	
10/26/2016	MW-34	--	7.55	4	--	--	
10/26/2016	MW-36	--	1.07	4	--	--	
10/26/2016	MW-37	--	2.98	2	--	--	
10/26/2016	MW-38	--	3.17	2	--	--	
10/26/2016	MW-40	7.3	7.32	2	0.02	--	0.0
10/26/2016	MW-41	--	6.98	2	--	--	
10/26/2016	MW-42	--	7.88	2	--	--	
10/26/2016	MW-43	--	6.22	2	--	--	
10/26/2016	MW-44	--	7.51	2	--	--	
10/26/2016	MW-45	7.07	7.13	2	0.06	--	0.0
10/26/2016	MW-46	--	6.7	2	--	--	
10/26/2016	MW-47	--	6.45	2	--	--	
10/26/2016	MW-48	--	9.87	2	--	--	
						Total	**1.95**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - November 11, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
11/15/2016	MW-2R	7.85	8.31	4	0.46	0.2	0.65
11/15/2016	MW-3	7.21	8.15	2	0.94	0.4	1.95
11/15/2016	MW-4	10.29	10.34	2	0.05	0.1	0.2
11/15/2016	MW-7	2.98	3.06	1	0.08	0.1	0.1
11/15/2016	MW-7R	NM	NM	2	--	--	
11/15/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
11/15/2016	MW-10	--	4.65	2	--	--	
11/15/2016	MW-11	--	5.97	2	--	--	
11/15/2016	MW-14	NM	NM	2	--	--	
11/15/2016	MW-15	--	10.12	2	--	--	
11/15/2016	MW-17	NM	NM	4	--	--	
11/15/2016	MW-18	NM	NM	4	--	--	
11/15/2016	MW-19	3.08	3.1	2	0.02	--	0.0
11/15/2016	MW-20	--	NM	2	--	--	
11/15/2016	MW-21	--	NM	4	--	--	
11/15/2016	MW-22	10.31	10.42	2	0.11	--	0.35
11/15/2016	MW-33	--	5.87	2	--	--	
11/15/2016	MW-34	--	7.18	4	--	--	
11/15/2016	MW-36	NM	NM	4	--	--	
11/15/2016	MW-37	NM	NM	2	--	--	
11/15/2016	MW-38	--	3.04	2	--	--	
11/15/2016	MW-40	7.39	7.4	2	0.01	--	0.0
11/15/2016	MW-41	--	7.1	2	--	--	
11/15/2016	MW-42	--	8.08	2	--	--	
11/15/2016	MW-43	--	6.57	2	--	--	
11/15/2016	MW-44	--	7.9	2	--	--	
11/15/2016	MW-45	7.41	7.5	2	0.09	0.1	0.2
11/15/2016	MW-46	--	6.91	2	--	--	
11/15/2016	MW-47	--	6.77	2	--	--	
11/15/2016	MW-48	--	10.1	2	--	--	
						Total	**3.45**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - December 1, 2016
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
12/1/2016	MW-2R	6.66	6.82	4	0.16	0.2	0.85
12/1/2016	MW-3	6.6	6.97	2	0.37	0.4	2.35
12/1/2016	MW-4	6.5	6.58	2	0.08	0.1	0.3
12/1/2016	MW-7	2.36	2.43	1	0.07	0.1	0.2
12/1/2016	MW-7R	--	3.32	2	--	--	
12/1/2016	MW-9	Monitoring well destroyed/paved over by asphalt					
12/1/2016	MW-10	--	6.15	2	--	--	
12/1/2016	MW-11	--	5.61	2	--	--	
12/1/2016	MW-14	--	8.44	2	--	--	
12/1/2016	MW-15	NM	NM	2	--	--	
12/1/2016	MW-17	--	9.23	4	--	--	
12/1/2016	MW-18	--	6.58	4	--	--	
12/1/2016	MW-19	2.8	2.92	2	0.12	0.1	0.1
12/1/2016	MW-20	NM	NM	2	--	--	
12/1/2016	MW-21	--	6.55	4	--	--	
12/1/2016	MW-22	9.52	9.61	2	0.09	--	0.35
12/1/2016	MW-33	--	6.1	2	--	--	
12/1/2016	MW-34	--	6.82	4	--	--	
12/1/2016	MW-36	--	3.8	4	--	--	
12/1/2016	MW-37	--	2.78	2	--	--	
12/1/2016	MW-38	--	2.82	2	--	--	
12/1/2016	MW-40	--	6.8	2	--	--	
12/1/2016	MW-41	--	6.18	2	--	--	
12/1/2016	MW-42	7.44	7.45	2	0.01	--	0.0
12/1/2016	MW-43	--	4.86	2	--	--	
12/1/2016	MW-44	--	6.18	2	--	--	
12/1/2016	MW-45	5.75	5.8	2	0.05	0.1	0.3
12/1/2016	MW-46	--	5.75	2	--	--	
12/1/2016	MW-47	--	5.1	2	--	--	
12/1/2016	MW-48	--	6.28	2	--	--	
						Total	**4.45**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

ATTACHMENT 4

September 2016 Well Sampling
Data Forms

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-5
Intake depth: Approx. 17'
DTW: 6.76
Vol Purged: 1 gal
DTB: 18.06
Sampler: AF
Purge Start: 8:20
Purge End Time: 8:44
Purge Water Description: Clear

MS/MSD samples collected at 8:50 and 8:55, respectively

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:20	8.58	200.00	20.38	5.73	2.51	6.53	-33	367.00
8:23	8.62	200.00	20.01	5.68	1.37	6.73	-61	128.00
8:26	8.64	200.00	19.96	5.66	0.94	6.73	-64	67.90
8:29	8.68	200.00	19.94	5.63	0.88	6.73	-63	46.50
8:32	8.69	200.00	19.95	5.61	0.79	6.73	-64	21.30
8:35	8.70	200.00	19.93	5.60	0.73	6.73	-64	13.50
8:38	8.70	200.00	19.95	5.60	0.75	6.73	-65	10.10
8:41	8.71	200.00	19.96	5.60	0.71	6.72	-65	9.60
8:44	8.71	200.00	19.97	5.60	0.70	6.72	-65	9.20

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-7R
Intake depth: Approx. 18.5
DTW: 2.1
Vol Purged: 2 gal
DTB: 6.85
Sampler: MS
Purge Start: 10:20
Purge End Time: 10:35
Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:20	2.10	100.00	20.75	1.48	2.89	6.75	-111	132.00
10:23		100.00	20.41	1.49	0.62	6.72	-113	143.00
10:26		100.00	20.39	1.49	0.57	6.72	-115	150.00
10:29		100.00	20.36	1.48	0.46	6.73	-117	164.00
10:32		100.00	20.31	1.48	0.38	6.74	-114	161.00
	Well pumped dry during initial purge. Well was sampled following recharge.							

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-10
Intake depth: Approx. 9
DTW: 7.65
Vol Purged: .75 gal
DTB: 10.55
Sampler: AF
Purge Start: 9:15
Purge End Time: 9:45
Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:15	8.41	100.00	25.14	35.14	2.04	6.63	-15	53.00
9:18	8.43	100.00	24.91	36.20	1.24	6.59	-7	42.30
9:21	8.44	100.00	24.88	36.20	1.17	6.59	3	40.70
9:24	8.44	100.00	24.87	36.30	0.88	6.58	7	19.80
9:27	8.45	100.00	24.85	36.30	0.70	6.59	12	12.40
9:30	8.45	100.00	24.85	36.40	0.61	6.60	15	11.30
9:33	8.45	100.00	24.83	36.40	0.53	6.61	17	10.20
9:36	8.45	100.00	24.83	36.40	0.51	6.61	18	8.40
9:39	8.45	100.00	24.82	36.40	0.51	6.61	18	7.90
9:42	8.45	100.00	24.82	36.50	0.49	6.61	19	7.70
9:45	8.45	100.00	24.82	36.50	0.49	6.61	19	7.30

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-11
Intake depth: Approx. 23.5
DTW: 6.77
Vol Purged: 1.25 gal
DTB: 24.50
Sampler: AF
Purge Start: 9:55
Purge End Time: 10:28
Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:55	7.81	150.00	20.33	23.50	1.71	6.88	-49	88.90
9:58	7.92	150.00	19.92	23.30	1.13	6.87	-48	71.30
10:01	7.96	150.00	19.88	23.30	0.74	6.86	-48	62.70
10:04	8.04	150.00	19.81	23.20	0.62	6.85	-48	57.20
10:07	8.07	150.00	19.81	23.20	0.53	6.85	-48	54.70
10:10	8.08	150.00	19.70	23.10	0.39	6.85	-50	51.60
10:13	8.09	150.00	19.54	23.00	0.31	6.85	-51	49.50
10:16	8.12	150.00	19.48	23.00	0.24	6.85	-53	47.30
10:19	8.14	150.00	19.41	22.90	0.17	6.85	-56	46.40
10:22	8.15	150.00	19.36	22.90	0.10	6.85	-56	45.80
10:25	8.17	150.00	19.34	22.80	0.09	6.85	-57	44.70
10:28	8.18	150.00	19.33	22.80	0.07	6.85	-57	44.00

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-19
Intake depth: Approx. 5'
DTW: 2.36
Vol Purged: 0.5 gal
DTB: 6
Sampler: CH
Purge Start: 11:05
Purge End Time: 11:45
Purge Water Description: Yellow, odor

Monitoring well went dry during sampling; only 2 of 3 VOAs collected

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:13	2.45	250.00	21.97	1.61	4.21	6.70	-107	81.20
11:18	2.78	225.00	21.69	1.62	1.33	6.70	-118	32.30
11:23	3.12	225.00	21.47	1.61	0.48	6.74	-126	26.50
11:28	3.21	225.00	21.33	1.62	0.10	6.79	-132	8.40
11:33	3.57	225.00	21.24	1.62	0.00	6.93	-142	28.70
11:38	3.95	225.00	21.42	1.64	0.15	6.97	-140	52.20
11:41	4.00	225.00	21.54	1.64	0.24	6.96	-136	56.10

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-21
Intake depth: Approx. 12
DTW: 6.56
Vol Purged: 1 gal
DTB: 15
Sampler: CH
Purge Start: 8:32
Purge End Time: 9:20
Purge Water Description: Clear

DUP090816 sampled at 0915

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:36	6.71	250.00	26.81	1.48	1.84	6.51	-68	90.00
8:41	6.78	200.00	26.98	1.44	1.20	6.53	-83	83.00
8:46	6.85	200.00	27.18	1.43	0.83	6.54	-86	64.00
8:51	6.92	220.00	27.31	1.42	0.61	6.55	-87	53.50
8:56	7.02	220.00	27.45	1.42	0.41	6.54	-89	45.90
9:00	7.08	220.00	27.49	1.41	0.34	6.52	-91	42.50

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F Date: 9/8/2016

Well ID: MW-34 Intake depth: Approx. 12.5

DTW: 7.27 Vol Purged: 2 gal

DTB: 13.5

Sampler: MS

Purge Start: 8:45 Purge End Time: 9:15

Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:45	7.27	100.00	22.93	3.28	3.44	6.38	-109	36.40
8:48	7.27	100.00	23.24	3.31	1.90	6.47	-117	30.10
8:51	7.27	100.00	23.66	3.28	1.25	6.52	-128	22.60
8:54	7.27	100.00	23.83	3.25	1.02	6.56	-127	23.80
8:59	7.27	100.00	23.97	3.23	0.80	6.58	-130	31.90
9:02	7.27	100.00	24.11	3.22	0.62	6.61	-135	29.70
9:05	7.27	100.00	24.16	3.23	0.46	6.63	-141	34.20
9:08	7.27	100.00	24.17	3.23	0.40	6.64	-144	34.80
9:11	7.27	100.00	24.16	3.23	0.37	6.65	-145	33.00
9:14	7.27	100.00	24.19	3.23	0.35	6.65	-147	30.9

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F Date: 9/8/2016
Well ID: MW-37 Intake depth: Approx. 3.5'
DTW: 2.07 Vol Purged: 1 gal
DTB: 4.57
Sampler: MS
Purge Start: 11:05 Purge End Time: 11:30
Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:05	2.07	100.00	21.13	1.32	0.00	6.77	-128	79.90
11:08	2.21	100.00	21.18	1.31	0.00	6.74	-129	68.00
11:11	2.40	100.00	21.24	1.30	0.00	6.78	-131	45.50
11:14	2.57	100.00	21.32	1.30	0.00	6.73	-136	40.10
11:17	2.70	100.00	21.29	1.30	0.00	6.73	-137	42.50
11:20	2.96	100.00	21.33	1.29	0.00	6.74	-137	45.60
11:23	3.12	100.00	21.32	1.29	0.00	6.74	-138	50.20
11:26	3.27	100.00	21.34	1.30	0.00	6.74	-138	49.60
11:30	3.48	100.00	21.29	1.29	0.00	6.73	-139	49.00

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-38
Intake depth: Approx. 4.5'
DTW: 2.62
Vol Purged: 0.5 gal
DTB: 5
Sampler: AF
Purge Start: 11:00
Purge End Time: 11:33
Purge Water Description: Clear

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:00	2.98	50.00	22.88	2.62	2.23	6.93	-93	183.00
11:03	2.98	50.00	22.80	1.78	1.84	6.90	-102	171.00
11:06	2.98	50.00	22.80	1.70	1.20	6.85	-110	150.00
11:09	2.98	50.00	22.70	1.51	0.86	6.78	-111	120.00
11:12	2.98	50.00	22.68	1.46	0.53	6.76	-111	105.00
11:15	2.98	50.00	22.68	1.40	0.31	6.74	-113	87.80
11:18	2.98	50.00	22.65	1.31	0.24	6.72	-115	46.20
11:21	2.98	50.00	22.64	1.26	0.18	6.71	-118	33.90
11:24	2.98	50.00	22.62	1.25	0.12	6.70	-119	20.10
11:27	2.98	50.00	22.60	1.24	0.1	6.69	-119	19.6
11:30	2.98	50.00	22.60	1.23	0.09	6.69	-119	19.1
11:33	2.98	50.00	22.59	1.23	0.08	6.69	-120	18.7

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-41
Intake depth: Approx. 8'
DTW: 6.61
Vol Purged: 1.5 gal
DTB: 11.4
Sampler: CH
Purge Start: 9:40
Purge End Time: 10:20
Purge Water Description: Clear, no sediment

Sodium Persulfate: 1.4ppm

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:44	6.58	250.00	22.28	1.04	8.30	7.07	118	0.00
9:49	6.58	225.00	21.76	1.05	2.47	7.09	61	0.00
9:54	6.58	225.00	21.14	1.06	1.34	7.11	23	0.00
9:59	6.58	225.00	20.72	1.05	0.54	7.20	-15	0.00
10:04	6.58	225.00	20.62	1.03	0.22	7.39	-44	0.00
10:09	6.58	225.00	20.59	1.02	0.00	7.48	-63	0.00
10:12	6.58	225.00	20.54	1.01	0.00	7.51	-73	0.00
10:15	6.58	225.00	20.55	1.00	0.00	7.54	-83	0.00

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 90F
Date: 9/8/2016
Well ID: MW-42
Intake depth: Approx. 19
DTW: 7.8
Vol Purged: 4 gal
DTB: 11.15
Sampler: MS
Purge Start: 9:35
Purge End Time: 10:05
Purge Water Description: Greenish brown, no sediment, strong odor

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:35	7.80	100.00	20.25	0.68	0.32	7.49	-131	31.70
9:38	7.80	100.00	20.11	0.66	0.14	7.31	-131	27.90
9:41	7.80	100.00	20.01	0.66	0.05	7.23	-134	12.70
9:44	7.80	100.00	19.97	0.66	0.00	7.23	-137	10.00
9:47	7.80	100.00	19.92	0.66	0.00	7.21	-138	4.90
9:50	7.80	100.00	19.88	0.66	0.00	7.20	-139	2.60
9:53	7.80	100.00	19.86	0.66	0.00	7.19	-140	1.90
9:58	7.80	100.00	19.82	0.66	0.00	7.18	-142	1.10
10:01	7.80	100.00	19.81	0.66	0.00	7.19	-143	0.90
10:04	7.80	100.00	19.8	0.66	0.00	7.20	-145	0.60
10:07	7.80	100.00	19.79	0.66	0.00	7.19	-145	0.7

ATTACHMENT 5

December 2016 Well Sampling
Data Forms

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-10
Intake depth: Approx. 11.5
DTW: 6.15
Vol Purged: 1 gal
DTB: 12.50
Sampler: MS
Purge Start: 8:30
Purge End Time: 8:54
Purge Water Description: Clear, no sediment, odor

MS/MSD collected at 8:56 and 8:57 respectively

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:30	6.15	100.00	13.36	37.80	5.16	8.12	150	60.90
8:33	6.15	100.00	13.33	37.80	5.02	8.14	159	24.40
8:36	6.15	100.00	13.13	37.90	5.01	8.29	175	4.60
8:39	6.15	100.00	13.10	37.90	5.00	8.31	183	5.60
8:42	6.15	100.00	13.07	37.90	4.95	8.39	197	3.40
8:45	6.15	100.00	13.06	37.90	4.94	8.40	202	2.40
8:48	6.15	100.00	13.05	37.90	4.87	8.41	204	1.70
8:51	6.15	100.00	13.07	38.00	4.88	8.41	206	2.00
8:54	6.15	100.00	13.07	37.90	4.85	8.41	207	1.50

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-11
Intake depth: Approx. 23.5
DTW: 5.61
Vol Purged: 1 gal
DTB: 24.50
Sampler: RL
Purge Start: 7:55
Purge End Time: 8:20
Purge Water Description: Clear, no sediment, odor

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
7:55	7.55	100.00	15.62	7.65	2.51	7.26	344	1.30
7:58	7.55	100.00	15.42	7.49	2.52	7.93	334	2.10
8:01	7.55	100.00	15.63	7.61	2.41	8.33	325	2.00
8:04	7.55	100.00	15.70	7.82	2.13	8.48	322	2.70
8:07	7.55	100.00	15.69	15.60	1.60	8.50	294	2.60
8:10	7.55	100.00	15.34	15.50	0.91	8.49	297	1.90
8:13	7.55	100.00	15.28	15.30	0.00	8.40	104	0.30
8:16	7.55	100.00	15.30	15.20	0.00	8.30	103	0.40
8:20	7.55	100.00	15.27	15.20	0.00	8.28	101	0.40

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-21
Intake depth: Approx. 14
DTW: 6.55
Vol Purged: 1 gal
DTB: 15
Sampler: RL
Purge Start: 7:30
Purge End Time: 8:03
Purge Water Description: Clear, no sediment

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:22	6.55	100.00	18.06	0.92	0.60	7.62	-66	286.00
12:25	6.55	100.00	18.50	0.90	0.06	7.36	-40	113.00
12:28	6.55	100.00	18.64	0.90	0.00	7.34	-36	94.90
12:31	6.55	100.00	18.59	0.90	0.02	7.27	-28	60.20
12:34	6.55	100.00	18.44	0.88	0.16	7.25	-25	29.70
12:37	6.55	100.00	18.43	0.88	0.27	7.24	-21	10.70
12:40	6.55	100.00	18.53	0.88	0.26	7.23	-18	9.60
12:43	6.55	100.00	18.50	0.88	0.26	7.21	-15	10.90

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-33
Intake depth: Approx. 12.25'
DTW: 6.1
Vol Purged: 1 gal
DTB: 13.25
Sampler: MS
Purge Start: 12:20
Purge End Time: 12:44
Purge Water Description: Clear, no sediment, no odor

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:20	6.10	100.00	16.47	0.54	0.00	8.22	34	29.40
12:23	6.11	100.00	0.51	0.54	1.00	8.11	35	27.70
12:26	6.13	100.00	16.55	0.54	2.00	8.00	36	28.00
12:29	6.14	100.00	16.62	0.53	3.00	7.84	37	26.60
12:32	6.15	100.00	16.64	0.53	4.00	7.76	38	26.70
12:35	6.16	100.00	16.74	0.53	5.00	7.69	39	27.60
12:38	6.17	100.00	16.79	0.54	6.00	7.55	40	28.20
12:41	6.18	100.00	16.81	0.54	7.00	7.53	41	27.50
12:44	6.19	100.00	16.82	0.55	8.00	7.51	42	27.70

SITE NAME:	5-49 46th Ave. Long Island City, NY	**Project Number:**	2051.0001Y002
Weather:	Clear, 49F	Date:	12/1/2016
Well ID:	MW-37	Intake depth:	Approx. 3.5'
DTW:	2.78	Vol Purged:	1 gal
DTB:	4.57		
Sampler:	RM		
Purge Start:	9:05	Purge End Time:	9:37
Purge Water Description:	Clear, no sediment, strong odor		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:20	2.78	100.00	13.98	1.88	0.60	8.82	-98	37.80
10:23	3.42	100.00	14.12	1.89	0.15	7.84	-85	33.60
10:26	3.80	100.00	14.17	1.87	0.00	7.50	-97	30.80
10:29	4.10	100.00	14.28	1.86	0.00	7.36	-81	30.60
10:32	4.46	100.00	14.28	1.86	0.00	7.29	-85	30.00
Thick sediment coming up from well caused clogging/high turbidity; stopped reading then at 14:00 sampled upon monitoring well recharge								

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F Date: 12/1/2016

Well ID: MW-38 Intake depth: Approx. 4.25'

DTW: 2.82 Vol Purged: 1 gal

DTB: 5.25

Sampler: RL

Purge Start: 9:47 Purge End Time: 10:16

Purge Water Description: Clear, no sediment, strong odor

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:47	2.82	100.00	15.20	1.80	0.00	8.37	-16	93.40
9:50	2.88	100.00	15.17	1.72	0.00	8.12	-17	60.00
9:53	2.89	100.00	15.18	1.67	0.00	7.97	-20	41.40
9:56	2.94	100.00	15.18	1.67	0.00	7.86	-23	33.90
9:59	2.97	100.00	15.19	1.53	0.00	7.83	-27	20.30
10:02	3.04	100.00	15.21	1.48	0.00	7.76	-29	15.90
10:05	3.11	100.00	15.22	1.44	0.00	7.77	-31	12.00
10:08	3.18	100.00	15.25	1.41	0.00	7.74	-33	12.30
10:11	3.21	100.00	15.25	1.37	0.00	7.41	-36	11.90
10:14	3.28	100.00	15.26	1.36	0	7.71	-36	11.8

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-40
Intake depth: Approx. 18'
DTW: 6.80
Vol Purged: 1 gal
DTB: 19
Sampler: RL
Purge Start: 10:50
Purge End Time: 11:22
Purge Water Description: Clear, no sediment

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:50	6.80	100.00	15.97	1.39	0.00	8.31	-16	19.46
10:53	6.80	100.00	15.88	1.38	0.00	8.50	-12	7.50
10:56	6.80	100.00	15.89	1.39	0.00	8.54	-20	5.90
10:59	6.80	100.00	15.94	1.37	0.00	8.57	-28	4.90
11:02	6.80	100.00	16.11	1.37	0.00	8.51	-30	4.30
11:05	6.80	100.00	16.10	1.37	0.00	8.52	-39	4.40
11:08	6.80	100.00	16.11	1.37	0.00	8.53	-40	4.30
11:11	6.80	100.00	16.13	1.37	0.00	8.52	-41	4.50
11:14	6.80	100.00	16.14	1.37	0.00	8.54	-42	4.40
11:17	6.80	100.00	16.15	1.37	0	8.53	-44	4.5
11:20	6.80	100.00	16.15	1.37	0	8.53	-45	4.5

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-41
Intake depth: Approx. 10'
DTW: 6.18
Vol Purged: 2 gal
DTB: 11.4
Sampler: RL
Purge Start: 10:45
Purge End Time: 11:20
Purge Water Description: Clear, no sediment

Sodium Persulfate: 1.4ppm

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:50	6.18	100.00	15.21	1.66	4.37	9.18	30	22.70
10:54	6.18	100.00	15.24	1.66	3.62	9.20	32	21.50
10:57	6.18	100.00	15.21	1.66	3.29	9.11	33	24.20
11:01	6.18	100.00	15.23	1.64	2.83	9.08	32	13.30
11:05	6.18	100.00	15.28	1.63	1.82	9.05	26	12.00
11:08	6.18	100.00	15.29	1.63	1.44	9.02	22	11.60
11:12	6.18	100.00	15.29	1.63	1.32	9.08	15	10.50
11:15	6.18	100.00	15.31	1.63	1.23	9.04	14	10.50
11:18	6.18	100.00	15.32	1.63	1.03	9.04	10	10.40

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-43
Intake depth: Approx. 19
DTW: 4.86
Vol Purged: 1 gal
DTB: 20
Sampler: RL
Purge Start: 8:35
Purge End Time: 9:10
Purge Water Description:

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:40	4.85	100.00	14.29	0.83	0.12	13.02	124	15.50
8:44	4.85	100.00	14.41	0.83	0.00	12.77	102	15.40
8:48	4.85	100.00	14.41	0.82	0.00	12.63	99	15.90
8:51	4.85	100.00	14.40	0.82	0.00	12.48	94	15.30
8:54	4.85	100.00	14.32	0.83	0.00	12.35	91	14.90
8:58	4.85	100.00	14.38	0.83	0.00	12.25	89	14.70
9:01	4.85	100.00	14.34	0.82	0.00	12.06	90	14.60
9:04	4.85	100.00	14.36	0.82	0.00	11.98	89	14.30
9:07	4.85	100.00	14.37	0.83	0.00	11.95	87	14.70
9:10	4.85	100.00	14.38	0.83	0	11.93	84	14.4

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-44
Intake depth: Approx. 14
DTW: 6.18
Vol Purged: 2 gal
DTB: 15
Sampler: RL
Purge Start: 7:30
Purge End Time: 8:03
Purge Water Description: Clear, no sediment, strong odor

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
7:34	6.18	150.00	15.52	1.77	0.32	13.67	69	16.80
7:38	7.18	150.00	0.53	0.79	0.25	14.00	0.0	13.30
7:42	8.18	150.00	15.56	1.80	0.22	15.00	43	13.20
7:45	9.18	150.00	15.63	1.81	0.19	16.00	20	13.80
7:48	10.18	150.00	15.68	1.82	0.16	17.00	10	13.70
7:51	11.18	150.00	15.61	1.83	0.12	18.00	-5	13.70
7:55	12.18	150.00	15.57	2.83	0.10	19.00	-10	13.60
7:59	13.18	150.00	15.54	3.83	0.09	20.00	-15	13.20
8:02	14.18	150.00	15.63	1.85	0.07	21.00	-20	13.40

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F Date: 12/1/2016

Well ID: MW-46 Intake depth: Approx. 18.5

DTW: 5.75 Vol Purged: 2 gal

DTB: 19.5

Sampler: RM

Purge Start: 7:50 Purge End Time: 8:15

Purge Water Description: Greenish brown, odor, no sediment

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
7:55	5.75	100.00	16.01	1.43	0.47	7.13	190	40.90
8:00	6.75	100.00	15.98	1.42	0.22	8.14	191	36.00
8:03	7.75	100.00	15.20	1.41	0.11	8.23	183	36.20
8:06	8.75	100.00	15.20	1.41	0.09	8.33	175	34.50
8:09	9.75	100.00	15.15	1.41	0.05	8.35	171	34.30
8:12	10.75	100.00	15.15	1.41	0.03	8.38	167	32.70
8:15	11.75	100.00	15.15	1.41	0.02	8.42	162	32.40

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 49F
Date: 12/1/2016
Well ID: MW-47
Intake depth: Approx. 19
DTW: 5.1
Vol Purged: 4 gal
DTB: 20.00
Sampler: RM
Purge Start: 9:05
Purge End Time: 9:37
Purge Water Description: Greenish brown, no sediment, strong odor

DUP-120116 collected at 9:40

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:07	5.10	100.00	15.43	1.50	0.63	11.80	14	78.40
9:10	5.10	100.00	15.68	1.50	0.47	11.78	-7	58.00
9:13	5.10	100.00	15.71	1.51	0.49	11.81	-23	29.20
9:16	5.10	100.00	15.71	1.53	0.44	11.90	-44	22.80
9:19	5.10	100.00	15.71	1.54	0.42	11.93	-49	30.80
9:22	5.10	100.00	15.78	1.55	0.47	11.96	-56	21.70
9:25	5.10	100.00	15.70	1.57	0.41	11.98	-63	18.20
9:28	5.10	100.00	15.78	1.57	0.45	11.98	-68	16.90
9:31	5.10	100.00	15.74	1.57	0.44	12.00	-73	15.20
9:34	5.10	100.00	15.77	1.58	0.49	12.01	-78	15.6
9:37	5.1	100.00	15.78	1.59	0.47	12.01	-84	15.2

SITE NAME:	5-49 46th Ave. Long Island City, NY	**Project Number:**	2051.0001Y002
Weather:	Clear, 49F	Date:	12/1/2016
Well ID:	MW-48	Intake depth:	Approx. 19
DTW:	6.28	Vol Purged:	1 gal
DTB:	20		
Sampler:	MS		
Purge Start:	12:18	Purge End Time:	12:45
Purge Water Description:	Clear, no sediment		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
13:30	6.28	100.00	15.70	0.52	0.00	8.32	51	65.60
13:33	6.28	100.00	15.56	0.52	0.03	8.12	59	58.10
13:36	6.28	100.00	15.74	0.52	0.09	8.05	62	62.50
13:39	6.28	100.00	15.39	0.52	0.08	7.95	66	62.50
13:42	6.28	100.00	15.37	0.52	0.01	7.87	68	66.90
13:45	6.28	100.00	15.38	0.52	0.00	7.82	70	70.20
13:48	6.28	100.00	15.39	0.52	0.00	7.79	72	71.10
13:51	6.28	100.00	15.38	0.52	0.00	7.70	74	73.10
13:54	6.28	100.00	15.39	0.52	0.00	7.69	76	74.20
13:57	6.28	100.00	15.4	0.52	0	7.7	77	74.9
14:00	6.28	100.00	15.4	0.52	0	7.67	78	75.1

From: Jordanna Kendrot
Sent: Monday, February 13, 2017 10:51 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report January 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (January 19, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On January 19, 2016, the wells within the SMP sampling network were gauged.

The presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-19, MW-22, MW-42 and MW-45. If the presence of free-product in the monitoring wells was observed to be greater than trace amount (e.g., >0.01”), the monitoring well was manually bailed. Approximately 1.00 gallons of free-product were removed in total from the aforementioned monitoring wells, excluding monitoring well MW-42, during this reporting period. Any recovered product is temporarily stored on-site in a 55-gallon drum until it is required to be disposed.

A summary of the gauging data collected during the reporting period is provided in the attached table.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (February 1, 2017 to February 28, 2017):

- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Preparation and submittal of quarterly status report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Resource Conservation and Recovery Act (RCRA) Facility Closure Work Plan

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date. Based on prior discussions with the NYSDEC, no comments on the report will be provided on the RCRA Closure Completion Report.

COC Status

The RCRA Closure Completion Report was submitted to NYSDEC on February 12, 2016. Comments from the NYSDEC have not been received to date. Based on prior discussions with the NYSDEC, no comments on the report will be provided on the RCRA Closure Completion Report.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot
Project Engineer
jkendrot@rouxinc.com
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We solve our clients' most challenging environmental problems.

Summary of Water Level Elevations and LNAPL Thickness; January 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

Well ID	MPE (ft)	March 20, 2013				March 14, 2014				January 9, 2015				October 13, 2016*			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																	
MW-1/1R	7.55	--	6.37	1.18	--	--	6.76	0.79	--	--	6.62	0.93	--	N/A			
MW-2R	9.23	7.11	7.12	2.12	0.01	--	7.84	1.39	--	--	7.14	2.09	--	7.65	8.3	1.42	0.65
MW-3	8.40	6.31	6.62	2.01	0.31	7	7.12	1.37	0.12	6.67	6.74	1.71	0.07	7.08	7.81	1.14	0.73
MW-4	11.57	--	9.68	1.89	--	--	9.73	1.84	--	--	9.62	1.95	--	10.13	10.21	1.42	0.08
MW-5	8.35	--	5.75	2.6	--	--	6.1	2.25	--	--	6.1	2.25	--	--	6.57	1.78	--
MW-6	NR	10.00	13.60	NC	3.6	--	--	NC	--	10.04	13.72	NC	3.68	N/A			
MW-6R	11.73	--	--	--	--	10.27	13.04	2.21	2.77	9.87	11.93	1.35	2.06	N/A			
MW-7	4.48	1.07	1.63	3.27	0.56	2.39	2.66	2.02	0.27	1.78	2.14	2.61	0.36	2.80	3.20	1.58	0.4
MW-7R	4.48	--	--	--	--	--	1.36	3.12	--	--	1.06	3.42	--	--	2.95	1.53	--
MW-8	8.00	5.95	10.63	0.88	4.68	6.84	9.46	0.51	2.62	6.08	10.45	0.83	4.37	N/A			
MW-9	8.81	6.91	8.76	1.44	1.85	7.39	9.88	0.80	2.49	6.94	7.93	1.62	0.99	N/A			
MW-10	7.82	--	7.53	0.29	--	--	6.38	1.44	--	--	7.55	0.27	--	--	5.03	2.79	--
MW-11	7.82	--	6.36	1.46	--	--	6.7	1.12	--	--	6.52	1.30	--	--	6.05	1.77	--
MW-12	9.12	7.81	9.16	0.97	1.35	8.31	9.69	0.46	1.38	9.13	10.81	0.43	1.68	N/A			
MW-13	9.13	7.30	10.87	0.94	3.57	7.98	11.02	0.39	3.04	7.90	9.49	0.83	1.59	N/A			
MW-14	11.63	N/A				--	9.55	2.08	--	--	9.35	2.28	--	--	10.09	1.54	--
MW-15	11.51	N/A				--	9.46	2.05	--	--	9.26	2.25	--	--	9.99	1.52	--
MW-16	8.55	N/A				--	7.4	1.15	--	--	6.12	2.43	--	N/A			
MW-17	8.78	N/A				7.03	11.02	0.75	3.99	6.86	6.89	1.91	0.03	--	7.00	1.78	--
MW-18	8.40	N/A				--	6.81	1.59	--	--	6.68	1.72	--	--	6.69	1.71	--
MW-19	4.41	N/A				1.96	2.01	2.44	0.05	--	1.02	3.39	--	2.9	2.93	1.50	0.03
MW-20	11.69	N/A				--	9.85	1.84	--	--	9.74	1.95	--	--	10.26	1.43	--
MW-21	8.17	N/A				--	6.44	1.73	--	--	6.11	2.06	--	--	6.28	1.89	
MW-22	11.63	N/A				--	9.79	1.84	--	--	9.66	1.97	--	10.18	10.32	1.42	0.14
MW-23	8.27	N/A				7.02	10.13	0.47	3.11	6.46	8.41	1.32	1.95	N/A			
MW-24	8.86	N/A				N/A				--	6.36	2.50	--	N/A			
MW-25	9.29	N/A				N/A				--	6.88	2.41	--	N/A			
MW-27	9.55	N/A				N/A				--	7.29	2.26	--	N/A			
MW-28	9.10	N/A				N/A				--	6.75	2.35	--	N/A			
MW-30	8.70	N/A				N/A				--	7.06	1.64	--	N/A			
MW-31	9.27	N/A				N/A				8.00	8.21	1.22	0.21	N/A			
MW-32	7.76	N/A				N/A					6.18	1.58	--	N/A			
MW-33	9.49	N/A				N/A				7.39	8.20	1.90	0.81	7.55	7.60	1.93	0.05
MW-34	8.30	N/A				N/A				--	6.76	1.54	--	--	7.43	0.87	--
MW-35	NR	N/A				N/A				7.68	7.79	NC	0.11	N/A			
MW-36	9.11	N/A				N/A				--	7.07	2.04	--	--	7.42	1.69	--
MW-37	4.45	N/A				N/A				--	1.02	3.43	--	N/A			
MW-38	4.44	N/A				N/A				--	NM	NM	--	--	3.00	1.44	--
MW-40	8.49	N/A				N/A				N/A				7.23	7.26	1.25	0.03
MW-41	8.51	N/A				N/A				N/A				--	7.04	1.47	--
MW-42	9.37	N/A				N/A				N/A				--	7.92	1.45	--
MW-43	7.81	N/A				N/A				N/A				--	6.22	1.59	--
MW-44	9.15	N/A				N/A				N/A				--	7.51	1.64	--
MW-45	8.69	N/A				N/A				N/A				7.07	7.13	1.61	0.06
MW-46	7.69	N/A				N/A				N/A				--	6.70	0.99	--
MW-47	8.03	N/A				N/A				N/A				--	6.45	1.58	--
MW-48	11.43	N/A				N/A				N/A				--	9.87	1.56	--
Recovery Wells																	
RW-1	8.26	N/A				N/A				N/A				--	6.71	1.55	--
RW-2	9.81	N/A				N/A				N/A				--	7.34	2.47	--
RW-3	9.83	N/A				N/A				N/A				8.36	8.38	1.47	0.02
RW-4	10.2	N/A				N/A				N/A				8.65	8.66	1.55	0.01
RW-5	10.27	N/A				N/A				N/A				--	8.45	1.82	--

Well ID	October 26, 2016				November 15, 2016				December 1, 2016				January 19, 2017			
	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																
MW-1/1R	N/A				N/A				N/A				N/A			
MW-2R	7.69	8.24	1.40	0.55	7.85	8.31	1.27	0.46	6.66	6.82	2.53	0.16	7.5	7.52	1.73	0.02
MW-3	7.18	7.9	1.04	0.72	7.21	8.15	0.96	0.94	6.60	6.97	1.71	0.37	6.98	7.66	1.25	0.68
MW-4	10.05	10.12	1.50	0.07	10.29	10.34	1.27	0.05	6.50	6.58	5.05	0.08	9.81	9.82	1.76	0.01
MW-5	--	6.68	1.67	--	--	NM	NM	--	N/A				N/A			
MW-6	N/A				N/A				N/A				N/A			
MW-6R	N/A				N/A				N/A				N/A			
MW-7	3.11	3.19	1.35	0.08	2.98	3.06	1.48	0.08	2.36	2.43	2.10	0.07	2.62	2.78	1.82	0.16
MW-7R	--	3.02	1.46	--	--	NM	NM	--	--	3.32	1.16	--	--	2.52	1.96	--
MW-8	N/A				N/A				N/A				N/A			
MW-9	N/A				N/A				N/A				N/A			
MW-10	--	2.37	5.45	--	--	4.65	3.17	--	--	6.15	1.67	--	--	7.62	0.20	--
MW-11	--	6.78	1.04	--	--	5.97	1.85	--	--	5.61	2.21	--	--	6.63	1.19	--
MW-12	N/A				N/A				N/A				N/A			
MW-13	N/A				N/A				N/A				N/A			
MW-14	--	9.95	1.68	--	--	NM	NM	--	--	8.44	3.19	--	--	8.22	3.41	--
MW-15	--	NM	NM	--	--	10.12	1.39	--	--	NM	NM	--	--	9.55	1.96	--
MW-16	N/A				N/A				N/A				N/A			
MW-17	--	6.98	1.8	--	--	NM	NM	--	--	9.23	-0.45	--	--	6.94	1.84	--
MW-18	--	7.03	1.37	--	--	NM	NM	--	--	6.58	1.82	--	--	6.87	1.53	--
MW-19	3.29	3.44	1.08	0.15	3.08	3.1	1.33	0.02	2.80	2.92	1.58	0.12	2.72	2.75	1.68	0.03
MW-20	--	10.19	1.5	--	--	NM	NM	--	--	NM	NM	--	--	NM	NM	--
MW-21	--	6.19	1.98		--	NM	NM		--	6.55	1.62		--	5.91	2.26	
MW-22	10.08	10.22	1.52	0.14	10.31	10.42	1.29	0.11	9.52	9.61	2.09	0.09	9.89	9.93	1.73	0.04
MW-23	N/A				N/A				N/A				N/A			
MW-24	N/A				N/A				N/A				N/A			
MW-25	N/A				N/A				N/A				N/A			
MW-27	N/A				N/A				N/A				N/A			
MW-28	N/A				N/A				N/A				N/A			
MW-30	N/A				N/A				N/A				N/A			
MW-31	N/A				N/A				N/A				N/A			
MW-32	N/A				N/A				N/A				N/A			
MW-33	--	7.55	1.94	--	--	5.87	3.62	--	--	6.10	3.39	--	--	7.33	2.16	--
MW-34	--	7.55	0.75	--	--	7.18	1.12	--	--	6.82	1.48	--	--	7.20	1.10	--
MW-35	N/A				N/A				N/A				N/A			
MW-36	--	1.07	8.04	--	--	NM	NM	--	--	3.8	5.31	--	--	6.85	2.26	--
MW-37	--	2.98	1.47	--	--	NM	NM	--	--	2.78	1.67	--	--	2.66	1.79	--
MW-38	--	3.17	1.27	--	--	3.04	1.4	--	--	2.82	1.62	--	--	2.83	1.61	--
MW-40	7.30	7.32	1.19	0.02	7.39	7.40	1.10	0.01	--	6.80	1.69	--	--	7.01	1.48	--
MW-41	--	6.98	1.53	--	--	7.10	1.41	--	--	6.18	2.33	--	--	6.55	1.96	--
MW-42	--	7.88	1.49	--	--	8.08	1.29	--	7.44	7.45	1.93	0.01	7.47	7.48	1.90	0.01
MW-43	--	6.22	1.59	--	--	6.57	1.24	--	--	4.86	2.95	--	--	6.13	1.68	--
MW-44	--	7.51	1.64	--	--	7.90	1.25	--	--	6.18	2.97	--	--	7.38	1.77	--
MW-45	7.07	7.13	1.61	0.06	7.41	7.50	1.26	0.09	5.75	5.80	2.93	0.05	6.90	6.91	1.79	0.01
MW-46	--	6.70	0.99	--	--	6.91	0.78	--	--	5.75	1.94	--	--	5.89	1.80	--
MW-47	--	6.45	1.58	--	--	6.77	1.26	--	--	5.10	2.93	--	--	6.26	1.77	--
MW-48	--	9.87	1.56	--	--	10.10	1.33	--	--	6.28	5.15	--	--	9.65	1.78	--
Recovery Wells																
RW-1	--	6.84	1.42	--	--	7.2	1.06	--	--	6.51	1.75	--	--	6.63	1.63	--
RW-2	--	7.4	2.41	--	--	7.6	2.21	--	--	6.54	3.27	--	--	7.38	2.43	--
RW-3	--	8.04	1.79	--	--	7.29	2.54	--	--	6.67	3.16	--	--	7.87	1.96	--
RW-4	--	8.3	1.9	--	--	8.68	1.52	--	--	6.98	3.22	--	--	8.2	2.00	--
RW-5	8.1	8.12	2.17	0.02	--	8.46	1.81	--	6.74	6.75	3.53	0.01	7.94	7.95	2.33	0.01

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period),destroyed (October 2016 monitoring event) when monitoring event was performed, or is not included in the monitoring network
* - Measurement data collected for monitoring wells MW-43 to MW-48 were collected on 10/17/2016; following installation

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75

From: Jordanna Kendrot
Sent: Friday, March 10, 2017 5:42 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report February 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (February 14, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

The quarterly groundwater monitoring report was submitted via email and hardcopy to NYSDEC on February 10, 2017.

On February 14, 2017, the wells within the SMP sampling network were gauged. A summary of the gauging data collected during the reporting period is provided in the attached table.

The presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-22, MW-42 and MW-45. If the presence of free-product in the monitoring wells was observed to be greater than 0.10-feet, the monitoring well was manually bailed. Approximately 0.4 gallons of free-product were removed in total from monitoring wells MW-3 and MW-7 during this reporting period, with the recovered product being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed.

As discussed in the submitted quarterly groundwater monitoring report, alternative methods of LNAPL recovery would be implemented to supplement LNAPL recovery when manual recovery (e.g., physical bailing) became less effective. Monitoring wells with trace amounts of product had an oil absorbent sock installed within the well at the height of the groundwater table. The oil absorbent socks installed repel water and only absorb oil based fluids, up to 0.25 gallons of LNAPL per installed absorbent sock (for the specific absorbent socks utilized for the 2" diameter monitoring wells). Socks will be removed the week prior to the quarterly groundwater sampling event to monitor the presence of LNAPL recovery.

Also discussed in the quarterly groundwater monitoring report was the evaluation if the continued operation of the on-site LNAPL recovery system was warranted. During the previous quarter and this reporting period, product was only observed at trace amounts (i.e., <0.10-feet) in recovery well RW-5. Based on the lack of recoverable amounts of product, Roux Associates proposes a momentary pause in operation of the LNAPL recovery system until reportable levels of product become present in the recovery system wells.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (March 1, 2017 to March 31, 2017):

- Preparation and completion of quarterly gauging and collection of groundwater samples from monitoring wells within proposed SMP monitoring network;
- Continued monthly O&M of LNAPL recovery system;
- Continued monthly gauging of monitoring wells within SMP monitoring network;
- Evaluation of LNAPL recovery efforts at RW-1 through RW-5 to determine if continued operation of the on-site LNAPL recovery system is warranted; and
- Develop and submit Design Plan for 1st post-remediation in-situ chemical oxidation (ISCO) treatment tentatively scheduled to be performed in April 2017.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot | Project Engineer | Roux Associates, Inc.
209 Shafter Street Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2356 | Mobile: 631.741.7142
Email: jkendrot@rouxinc.com | Website: www.rouxinc.com

Summary of Water Level Elevations and LNAPL Thickness; February 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		October 13, 2016*				October 26, 2016				November 15, 2016				December 1, 2016				January 19, 2017				February 14, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-1/1R	7.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-2R	9.23	7.65	8.3	1.42	0.65	7.69	8.24	1.40	0.55	7.85	8.31	1.27	0.46	6.66	6.82	2.53	0.16	7.5	7.52	1.73	0.02	7.44	7.45	1.79	0.01
MW-3	8.40	7.08	7.81	1.14	0.73	7.18	7.9	1.04	0.72	7.21	8.15	0.96	0.94	6.60	6.97	1.71	0.37	6.98	7.66	1.25	0.68	6.99	7.48	1.29	0.49
MW-4	11.57	10.13	10.21	1.42	0.08	10.05	10.12	1.50	0.07	10.29	10.34	1.27	0.05	6.50	6.58	5.05	0.08	9.81	9.82	1.76	0.01	9.60	9.62	1.97	0.02
MW-5	8.35	--	6.57	1.78	--	--	6.68	1.67	--	--	NM	NM	--	N/A				N/A				N/A			
MW-6	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-6R	11.73	N/A				N/A				N/A				N/A				N/A				N/A			
MW-7	4.48	2.80	3.20	1.58	0.4	3.11	3.19	1.35	0.08	2.98	3.06	1.48	0.08	2.36	2.43	2.10	0.07	2.62	2.78	1.82	0.16	2.62	2.76	1.83	0.14
MW-7R	4.48	--	2.95	1.53	--	--	3.02	1.46	--	--	NM	NM	--	--	3.32	1.16	--	--	2.52	1.96	--	--	2.52	1.96	--
MW-8	8.00	N/A				N/A				N/A				N/A				N/A				N/A			
MW-9	8.81	N/A				N/A				N/A				N/A				N/A				N/A			
MW-10	7.82	--	5.03	2.79	--	--	2.37	5.45	--	--	4.65	3.17	--	--	6.15	1.67	--	--	7.62	0.20	--	--	6.60	1.22	--
MW-11	7.82	--	6.05	1.77	--	--	6.78	1.04	--	--	5.97	1.85	--	--	5.61	2.21	--	--	6.63	1.19	--	--	6.15	1.67	--
MW-12	9.12	N/A				N/A				N/A				N/A				N/A				N/A			
MW-13	9.13	N/A				N/A				N/A				N/A				N/A				N/A			
MW-14	11.63	--	10.09	1.54	--	--	9.95	1.68	--	--	NM	NM	--	--	8.44	3.19	--	--	8.22	3.41	--	--	9.42	2.21	--
MW-15	11.51	--	9.99	1.52	--	--	NM	NM	--	--	10.12	1.39	--	--	NM	NM	--	--	9.55	1.96	--	--	9.46	2.05	--
MW-16	8.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-17	8.78	--	7.00	1.78	--	--	6.98	1.8	--	--	NM	NM	--	--	9.23	-0.45	--	--	6.94	1.84	--	--	6.89	1.89	--
MW-18	8.40	--	6.69	1.71	--	--	7.03	1.37	--	--	NM	NM	--	--	6.58	1.82	--	--	6.87	1.53	--	--	6.77	1.63	--
MW-19	4.41	2.9	2.93	1.50	0.03	3.29	3.44	1.08	0.15	3.08	3.1	1.33	0.02	2.80	2.92	1.58	0.12	2.72	2.75	1.68	0.03	--	2.62	1.79	--
MW-20	11.69	--	10.26	1.43	--	--	10.19	1.5	--	--	NM	NM	--	--	NM	NM	--	--	NM	NM	--	--	9.71	1.98	--
MW-21	8.17	--	6.28	1.89		--	6.19	1.98		--	NM	NM		--	6.55	1.62		--	5.91	2.26		--	5.92	2.25	
MW-22	11.63	10.18	10.32	1.42	0.14	10.08	10.22	1.52	0.14	10.31	10.42	1.29	0.11	9.52	9.61	2.09	0.09	9.89	9.93	1.73	0.04	9.62	9.70	1.99	0.08
MW-23	8.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-24	8.86	N/A				N/A				N/A				N/A				N/A				N/A			
MW-25	9.29	N/A				N/A				N/A				N/A				N/A				N/A			
MW-27	9.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-28	9.10	N/A				N/A				N/A				N/A				N/A				N/A			
MW-30	8.70	N/A				N/A				N/A				N/A				N/A				N/A			
MW-31	9.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-32	7.76	N/A				N/A				N/A				N/A				N/A				N/A			
MW-33	9.49	7.55	7.60	1.93	0.05	--	7.55	1.94	--	--	5.87	3.62	--	--	6.10	3.39	--	--	7.33	2.16	--	--	7.33	2.16	--
MW-34	8.30	--	7.43	0.87	--	--	7.55	0.75	--	--	7.18	1.12	--	--	6.82	1.48	--	--	7.20	1.10	--	--	7.19	1.11	--
MW-35	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-36	9.11	--	7.42	1.69	--	--	1.07	8.04	--	--	NM	NM	--	--	3.8	5.31	--	--	6.85	2.26	--	--	6.70	2.41	--
MW-37	4.45	N/A				--	2.98	1.47	--	--	NM	NM	--	--	2.78	1.67	--	--	2.66	1.79	--	--	2.12	2.33	--
MW-38	4.44	--	3.00	1.44	--	--	3.17	1.27	--	--	3.04	1.4	--	--	2.82	1.62	--	--	2.83	1.61	--	--	2.58	1.86	--
MW-40	8.49	7.23	7.26	1.25	0.03	7.30	7.32	1.19	0.02	7.39	7.40	1.10	0.01	--	6.80	1.69	--	--	7.01	1.48	--	--	6.63	1.86	--
MW-41	8.51	--	7.04	1.47	--	--	6.98	1.53	--	--	7.10	1.41	--	--	6.18	2.33	--	--	6.55	1.96	--	--	6.21	2.3	--
MW-42	9.37	--	7.92	1.45	--	--	7.88	1.49	--	--	8.08	1.29	--	7.44	7.45	1.93	0.01	7.47	7.48	1.90	0.01	7.43	7.44	1.94	0.01
MW-43	7.81	--	6.22	1.59	--	--	6.22	1.59	--	--	6.57	1.24	--	--	4.86	2.95	--	--	6.13	1.68	--	--	5.82	1.99	--
MW-44	9.15	--	7.51	1.64	--	--	7.51	1.64	--	--	7.90	1.25	--	--	6.18	2.97	--	--	7.38	1.77	--	--	7.09	2.06	--
MW-45	8.69	7.07	7.13	1.61	0.06	7.07	7.13	1.61	0.06	7.41	7.50	1.26	0.09	5.75	5.80	2.93	0.05	6.90	6.91	1.79	0.01	6.60	6.61	2.09	0.01
MW-46	7.69	--	6.70	0.99	--	--	6.70	0.99	--	--	6.91	0.78	--	--	5.75	1.94	--	--	5.89	1.80	--	--	6.65	1.04	--
MW-47	8.03	--	6.45	1.58	--	--	6.45	1.58	--	--	6.77	1.26	--	--	5.10	2.93	--	--	6.26	1.77	--	--	5.99	2.04	--
MW-48	11.43	--	9.87	1.56	--	--	9.87	1.56	--	--	10.10	1.33	--	--	6.28	5.15	--	--	9.65	1.78	--	--	9.40	2.03	--
Recovery Wells																									
RW-1	8.26	--	6.71	1.55	--	--	6.84	1.42	--	--	7.2	1.06	--	--	6.51	1.75	--	--	6.63	1.63	--	--	6.65	1.61	--
RW-2	9.81	--	7.34	2.47	--	--	7.4	2.41	--	--	7.6	2.21	--	--	6.54	3.27	--	--	7.38	2.43	--	--	7.29	2.52	--
RW-3	9.83	8.36	8.38	1.47	0.02	--	8.04	1.79	--	--	7.29	2.54	--	--	6.67	3.16	--	--	7.87	1.96	--	--	7.78	2.05	--
RW-4	10.2	8.65	8.66	1.55	0.01	--	8.3	1.9	--	--	8.68	1.52	--	--	6.98	3.22	--	--	8.2	2.00	--	--	7.84	2.36	--
RW-5	10.27	--	8.45	1.82	--	8.1	8.12	2.17	0.02	--	8.46	1.81	--	6.74	6.75	3.53	0.01	7.94	7.95	2.33	0.01	7.64	7.65	2.63	0.01

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured

Notes (cont.):

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period),destroyed (October 2016 monitoring event) when monitoring event was performed, or is not included in the monitoring network

* - Measurement data collected for monitoring wells MW-43 to MW-48 were collected on 10/17/2016; following installation

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75

From: Jordanna Kendrot
Sent: Tuesday, April 11, 2017 10:53 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report March 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (March 30, 2017).pdf

Ms. Martinkat,

I apologize for the delay in this submittal. In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Operation, Maintenance and Monitoring Activities:

On March 30, 2017, Roux Associates completed the quarterly groundwater gauging and sampling of the 21 monitoring wells included in the SMP monitoring network. If the presence of free-product was observed, the monitoring well was not sampled. The remaining monitoring wells within the network were sampled and analyzed for VOCs. The five (5) recovery wells (RW-1 through RW-5) onsite and an additional nine (9) monitoring wells both onsite and offsite were gauged in addition to the monitoring wells above to determine the presence of LNAPL.

A summary of the gauging data collected during the reporting period is provided in the attached table.

As discussed in the previous month's Progress Report, alternative methods of LNAPL recovery were implemented to supplement LNAPL recovery when manual recovery (e.g., physical bailing) became less effective. Monitoring wells with trace amounts of product had an oil absorbent sock installed within the well at the height of the groundwater table. These absorbent socks were installed in monitoring wells MW-3, MW-4, MW-22, MW-42, and MW-45 during the previous reporting period. These absorbent socks were removed March 10, 2017. During this three-week period, product did not return to monitoring wells MW-4, MW-22, MW-42 and MW-45. It is estimated that approximately 0.65 gallons of free-product was removed in total from these monitoring wells based on the saturation of the absorbent sock.

The presence of free-product was noted in monitoring wells MW-2R, MW-3, MW-7, and MW-19. If the presence of free-product in the monitoring wells was observed to be greater than 0.10-feet, the monitoring well was manually bailed. Approximately 0.4 gallons of free-product were removed in total from the monitoring wells mentioned above, excluding MW-7, during this reporting period, with the recovered product being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed.

Due to the lack of free-product present in the recovery wells (RW-1 to RW-5), Roux Associates has paused in operation of the LNAPL until reportable levels of product become present in the recovery system wells.

Sampling/ Sample Results:

During this reporting period, 18 groundwater samples were collected from the following monitoring wells:

- MW-4
- MW-7R
- MW-10
- MW-11
- MW-21
- MW-33

- MW-34
- MW-37
- MW-38
- MW-40
- MW-41
- MW-42
- MW-43
- MW-44
- MW-45
- MW-46
- MW-47
- MW-48

The results of this quarterly sampling round will be presented and discussed in a Quarterly Status Report. This report will be submitted under separate cover in the upcoming reporting period (April 2017).

Planned Actions:

The following activities are scheduled for the next reporting period (April 1 through April 30, 2017):

- Preparation and submittal Design Plan for 1st post-remediation in-situ chemical oxidation (ISCO) treatment;
- Implementation of 1st post-remediation ISCO injection event;
- Continued monthly O&M of LNAPL recovery system (as necessary);
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Preparation and submittal of quarterly status report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

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We solve our clients' most challenging environmental problems.

Summary of Water Level Elevations and LNAPL Thickness; March 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		October 26, 2016				November 15, 2016				December 1, 2016				January 19, 2017				February 14, 2017				March 30, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-1/1R	7.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-2R	9.23	7.69	8.24	1.40	0.55	7.85	8.31	1.27	0.46	6.66	6.82	2.53	0.16	7.5	7.52	1.73	0.02	7.44	7.45	1.79	0.01	4.31	4.32	4.92	0.01
MW-3	8.40	7.18	7.9	1.04	0.72	7.21	8.15	0.96	0.94	6.60	6.97	1.71	0.37	6.98	7.66	1.25	0.68	6.99	7.48	1.29	0.49	6.79	7.81	1.36	1.02
MW-4	11.57	10.05	10.12	1.50	0.07	10.29	10.34	1.27	0.05	6.50	6.58	5.05	0.08	9.81	9.82	1.76	0.01	9.60	9.62	1.97	0.02	--	9.7	1.87	--
MW-5	8.35	--	6.68	1.67	--	--	NM	NM	--	N/A				N/A				N/A				N/A			
MW-6	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-6R	11.73	N/A				N/A				N/A				N/A				N/A				N/A			
MW-7	4.48	3.11	3.19	1.35	0.08	2.98	3.06	1.48	0.08	2.36	2.43	2.10	0.07	2.62	2.78	1.82	0.16	2.62	2.76	1.83	0.14	2.72	3.10	1.67	0.38
MW-7R	4.48	--	3.02	1.46	--	--	NM	NM	--	--	3.32	1.16	--	--	2.52	1.96	--	--	2.52	1.96	--	--	2.75	1.73	--
MW-8	8.00	N/A				N/A				N/A				N/A				N/A				N/A			
MW-9	8.81	N/A				N/A				N/A				N/A				N/A				N/A			
MW-10	7.82	--	2.37	5.45	--	--	4.65	3.17	--	--	6.15	1.67	--	--	7.62	0.20	--	--	6.60	1.22	--	--	5.91	1.91	--
MW-11	7.82	--	6.78	1.04	--	--	5.97	1.85	--	--	5.61	2.21	--	--	6.63	1.19	--	--	6.15	1.67	--	--	6.69	1.13	--
MW-12	9.12	N/A				N/A				N/A				N/A				N/A				N/A			
MW-13	9.13	N/A				N/A				N/A				N/A				N/A				N/A			
MW-14	11.63	--	9.95	1.68	--	--	NM	NM	--	--	8.44	3.19	--	--	8.22	3.41	--	--	9.42	2.21	--	--	6.37	5.26	--
MW-15	11.51	--	NM	NM	--	--	10.12	1.39	--	--	NM	NM	--	--	9.55	1.96	--	--	9.46	2.05	--	--	6.38	5.13	--
MW-16	8.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-17	8.78	--	6.98	1.8	--	--	NM	NM	--	--	9.23	-0.45	--	--	6.94	1.84	--	--	6.89	1.89	--	--	6.64	2.14	--
MW-18	8.40	--	7.03	1.37	--	--	NM	NM	--	--	6.58	1.82	--	--	6.87	1.53	--	--	6.77	1.63	--	--	6.77	1.63	--
MW-19	4.41	3.29	3.44	1.08	0.15	3.08	3.1	1.33	0.02	2.80	2.92	1.58	0.12	2.72	2.75	1.68	0.03	--	2.62	1.79	--	2.82	2.9	1.57	0.08
MW-20	11.69	--	10.19	1.5	--	--	NM	NM	--	--	NM	NM	--	--	NM	NM	--	--	9.71	1.98	--	--	9.81	1.88	--
MW-21	8.17	--	6.19	1.98		--	NM	NM	--	--	6.55	1.62	--	--	5.91	2.26	--	--	5.92	2.25	--	--	5.89	2.28	--
MW-22	11.63	10.08	10.22	1.52	0.14	10.31	10.42	1.29	0.11	9.52	9.61	2.09	0.09	9.89	9.93	1.73	0.04	9.62	9.70	1.99	0.08	--	9.74	1.89	--
MW-23	8.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-24	8.86	N/A				N/A				N/A				N/A				N/A				N/A			
MW-25	9.29	N/A				N/A				N/A				N/A				N/A				N/A			
MW-27	9.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-28	9.10	N/A				N/A				N/A				N/A				N/A				N/A			
MW-30	8.70	N/A				N/A				N/A				N/A				N/A				N/A			
MW-31	9.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-32	7.76	N/A				N/A				N/A				N/A				N/A				N/A			
MW-33	9.49	--	7.55	1.94	--	--	5.87	3.62	--	--	6.10	3.39	--	--	7.33	2.16	--	--	7.33	2.16	--	--	7.00	2.49	--
MW-34	8.30	--	7.55	0.75	--	--	7.18	1.12	--	--	6.82	1.48	--	--	7.20	1.10	--	--	7.19	1.11	--	--	7.03	1.27	--
MW-35	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-36	9.11	--	1.07	8.04	--	--	NM	NM	--	--	3.8	5.31	--	--	6.85	2.26	--	--	6.70	2.41	--	--	6.47	2.64	--
MW-37	4.45	--	2.98	1.47	--	--	NM	NM	--	--	2.78	1.67	--	--	2.66	1.79	--	--	2.12	2.33	--	--	2.64	1.81	--
MW-38	4.44	--	3.17	1.27	--	--	3.04	1.4	--	--	2.82	1.62	--	--	2.83	1.61	--	--	2.58	1.86	--	--	2.83	1.61	--
MW-40	8.49	7.30	7.32	1.19	0.02	7.39	7.40	1.10	0.01	--	6.80	1.69	--	--	7.01	1.48	--	--	6.63	1.86	--	--	6.98	1.51	--
MW-41	8.51	--	6.98	1.53	--	--	7.10	1.41	--	--	6.18	2.33	--	--	6.55	1.96	--	--	6.21	2.30	--	--	6.75	1.76	--
MW-42	9.37	--	7.88	1.49	--	--	8.08	1.29	--	7.44	7.45	1.93	0.01	7.47	7.48	1.90	0.01	7.43	7.44	1.94	0.01	--	7.60	1.77	--
MW-43	7.81	--	6.22	1.59	--	--	6.57	1.24	--	--	4.86	2.95	--	--	6.13	1.68	--	--	5.82	1.99	--	--	5.71	2.1	--
MW-44	9.15	--	7.51	1.64	--	--	7.90	1.25	--	--	6.18	2.97	--	--	7.38	1.77	--	--	7.09	2.06	--	--	6.95	2.2	--
MW-45	8.69	7.07	7.13	1.61	0.06	7.41	7.50	1.26	0.09	5.75	5.80	2.93	0.05	6.90	6.91	1.79	0.01	6.60	6.61	2.09	0.01	--	6.49	2.2	--
MW-46	7.69	--	6.70	0.99	--	--	6.91	0.78	--	--	5.75	1.94	--	--	5.89	1.80	--	--	6.65	1.04	--	--	5.52	2.17	--
MW-47	8.03	--	6.45	1.58	--	--	6.77	1.26	--	--	5.10	2.93	--	--	6.26	1.77	--	--	5.99	2.04	--	--	5.84	2.19	--
MW-48	11.43	--	9.87	1.56	--	--	10.10	1.33	--	--	6.28	5.15	--	--	9.65	1.78	--	--	9.40	2.03	--	--	9.47	1.96	--
Recovery Wells																									
RW-1	8.26	--	6.84	1.42	--	--	7.2	1.06	--	--	6.51	1.75	--	--	6.63	1.63	--	--	6.65	1.61	--	--	6.66	1.6	--
RW-2	9.81	--	7.4	2.41	--	--	7.6	2.21	--	--	6.54	3.27	--	--	7.38	2.43	--	--	7.29	2.52	--	--	7.02	2.79	--
RW-3	9.83	--	8.04	1.79	--	--	7.29	2.54	--	--	6.67	3.16	--	--	7.87	1.96	--	--	7.78	2.05	--	--	7.48	2.35	--
RW-4	10.2	--	8.3	1.9	--	--	8.68	1.52	--	--	6.98	3.22	--	--	8.2	2.00	--	--	7.84	2.36	--	--	7.69	2.51	--
RW-5	10.27	8.1	8.12	2.17	0.02	--	8.46	1.81	--	6.74	6.75	3.53	0.01	7.94	7.95	2.33	0.01	7.64	7.65	2.63	0.01	--	7.5	2.77	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid

MPE - Measuring Point Elevation (top of well casing)

DTW - Depth to Water

DTP - Depth to Product

GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])

FPT - Free Product Thickness

NR - Not Recorded

NC - Not Calculated[2]

NM - Not Measured

Notes (cont.):

N/A - No data as monitoring/ recovery well was either not constructed (March 2013 to January 2015 monitoring period),destroyed (October 2016 monitoring event) when monitoring event was performed, or is not included in the monitoring network

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:

Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)

Assumes a specific gravity of 0.75

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April 28, 2017

Ms. Sondra Martinkat
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
Region Two
47-40 21st Street
Long Island City, New York 11101

Re: Quarterly Inspection and Monitoring Report
January to March 2017
Paragon Paint and Varnish Corp., Long Island, New York, Site No. C241108

Dear Ms. Martinkat:

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering), on behalf of Vernon 4540 Realty, LLC, have generated this quarterly inspection and monitoring report to summarize the operation, maintenance and monitoring activities being performed at the Paragon Paint and Varnish Corp. located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, Queens, New York (Site). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241108, which is administered by New York State Department of Environmental Conservation (NYSDEC), and the controls described are in accordance with the NYSDEC-approved Site Management Plan (SMP) dated November 2016. During this reporting period (January to March 2017), the composite cover system and institutional controls (ICs) were not modified. In addition, the following activities, as described herein, were specifically performed:

- Monthly operation and maintenance (O&M) of the Light Non-Aqueous Phase Liquid (LNAPL) recovery system;
- Monthly gauging of Site monitoring and recovery wells to assess presence of LNAPL;
- Monthly LNAPL recovery using manual bailing techniques, where applicable, at Site monitoring wells; and
- Quarterly monitoring (gauging and sampling) of Site monitoring wells.

O&M of the LNAPL Recovery System

As per the SMP, O&M of the LNAPL recovery system and its respective recovery wells (RW-1 through RW-5) was completed monthly. The completed site-wide monitoring, inspection, and maintenance forms are included in Attachment 1. During this reporting period, the LNAPL recovery system was operational and recovering LNAPL. Although maintenance of the system was not required, adjustments were made to optimize LNAPL recovery at selected recovery wells (i.e., RW-4 and RW-5) that contained recoverable amounts of LNAPL. 0 gallons of LNAPL has been recovered from the operation of the LNAPL recovery system during this reporting period. Gauging data generated during the reporting period for each recovery well is presented in tabular form in Attachment 2. The following summarizes LNAPL present at each recovery well as of March 30, 2017:

Recovery Well	LNAPL Thickness
RW-1	Not present
RW-2	Not present
RW-3	Not present
RW-4	Not present
RW-5	Not present

Based on the lack of recoverable amounts of product at each recovery well, the operation of the LNAPL recovery system has been temporarily paused starting March 30, 2017. Accordingly, the presence of LNAPL at these specific recovery wells will continue to be evaluated in the next quarter to determine if continued operation of the on-site LNAPL recovery system is necessary.

Gauging and Manual LNAPL Recovery

As required by the SMP, the approved monitoring well network must be gauged on a monthly basis to support the ongoing assessment of measurable LNAPL in on-site and off-site monitoring and recovery wells. In addition, accessible Site monitoring wells outside the approved SMP monitoring network will be gauged periodically to determine if LNAPL is present and needs to also be addressed at those particular locations. Specifically, the gauging of these additional monitoring wells will be performed monthly for a six (6) month period through June 2017 following the recent issuance of the Site-specific Certificate of Completion (COC) on December 15, 2016. After June 2017, these activities will then be performed at all Site monitoring wells during the quarterly groundwater sampling event. LNAPL assessment and manual recovery efforts, where applicable, will continue to be performed on a monthly basis at monitoring wells where LNAPL continues to be present.

During this reporting period, if the presence of LNAPL in the monitoring wells was observed to be greater than trace amount (i.e., >0.01’), the monitoring well was manually bailed. A total of approximately 2.575 gallons of LNAPL was manually recovered from the aforementioned monitoring wells. As noted earlier, LNAPL was not recovered from the operation of the LNAPL system at recovery wells RW-1 through RW-5. Note, oil absorbing socks were installed at monitoring wells MW-2, MW-4, MW-22, MW-42 and MW-45 to facilitate removal of trace product at those locations.

All gauging and manual LNAPL recovery data generated during the reporting period is provided in tabular form in Attachment 3 with a more focused and condensed summary of monitoring wells with the presence of LNAPL provided below:

Monitoring Well	LNAPL Thickness Measurements			LNAPL Recovered
	January 2017 (1 event)	February 2017 (1 event)	March 2017 (1 event)	
MW-2R	0.02 feet	0.01 feet (absorbent sock installed)	0.01 feet	0.55 gallons
MW-3 (Off-Site)	0.68 feet	0.49 feet	1.02 feet	0.8 gallons
MW-4	0.01 feet	0.03 feet (absorbent sock installed)	Not Present	0.325 gallons
MW-7	0.16 feet	0.14 feet	0.38 feet	0.2 gallons
MW-19	0.03 feet	Not Present	0.08 feet	0.2 gallons
MW-22	0.04 feet	0.08 feet (absorbent sock installed)	Not Present	0.225 gallons
MW-42	0.01 feet	0.01 feet (absorbent sock installed)	Not Present	0.05 gallons
MW-45	0.01 feet	0.05 feet (absorbent sock installed)	Not Present	0.225 gallons

Based on a review of the gauging and manual LNAPL recovery data generated during the reporting period, the following key observations and trends are provided below:

- The presence of LNAPL was noted in eight (8) monitoring wells MW-2R, MW-3, MW-4, MW-7, MW-19, MW-22, MW-42 and MW-45 at one point during the monitoring period.

- Based on the most recent, March 2017, gauging event of the eight monitoring wells that had LNAPL at one point during the monitoring period:
  - LNAPL is currently not present at four (4) on-site locations (MW-4, MW-22, MW-42 and MW-45);
  - LNAPL thickness at remaining three (3) on-site locations is currently less than 0.4 feet; and
  - LNAPL thickness at one (1) off-site location is currently 1.02 feet.

- Manual bailing and installation of oil absorbent socks are effectively removing residual LNAPL at some Site monitoring wells.

Based on the summary provided herein, manual bailing of LNAPL and the installation of oil absorbent socks at various monitoring wells highlighted herein appears to be effective. These LNAPL recovery techniques will continue to be utilized during the next quarter.

Groundwater Monitoring

Groundwater is monitored by a combination of gauging and sampling of groundwater monitoring wells within the SMP monitoring network. As discussed earlier, groundwater monitoring wells are gauged monthly to check for the presence of LNAPL and confirm thickness of LNAPL, if present. Site monitoring wells are then sampled on a quarterly basis to determine the presence of volatile organic compounds (VOCs), in particular the four Site-specific chemicals of concern (benzene, ethylbenzene, isopropylbenzene and total xylenes). The monitoring wells were sampled for Target Compound List (TCL) of VOCs using United States Environmental Protection Agency (USEPA) SW846 Method 8260.

Water/ LNAPL level data was collected during the March 2017 gauging event (Attachment 3). If the presence of LNAPL was noted in groundwater monitoring wells outside the radius of influence of Site recovery wells, the product thickness was noted and the monitoring well was manually bailed to the extent practical. The respective LNAPL measurements collected from the March 2017 gauging round is highlighted on Figure 1.

On March 2017, the required quarterly groundwater gauging and sampling round was performed. The current monitoring well network consists of the following:

- three off-site monitoring wells along the southern perimeter of the site (MW-3, MW-21, and MW-34); and

- 18 on-site monitoring wells (MW-2R, MW-4, MW-7, MW-10, MW-11, MW-15, MW-19, MW-33, MW-38, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, and MW-48).

For each event, if the presence of product was noted at a monitoring well to be sampled within the respective monitoring network, the monitoring well was not sampled. Instead of being sampled, LNAPL was manually recovered to the extent practical. A total of 2.575 gallons of LNAPL were recovered by bailing during this reporting period.

Groundwater samples were collected using low-flow groundwater sampling procedures. The pump intake was set within the saturated portion of the well screen during purging and sampling activities. Prior to collecting groundwater samples, each monitoring well was purged at a flow rate of approximately .12 liters per minute (L/min). Flow rates were adjusted to maintain minimal drawdown in the well during purging activities. A portable water-quality meter, equipped with an in-line flow-through cell, was used to monitor water quality indicator parameters (pH, conductivity, dissolved oxygen [DO], oxidation-reduction potential [ORP], temperature, and turbidity). Groundwater quality measurements were collected every three to five minutes until the field parameters stabilized (Attachment 4).

Purging was considered complete when the field parameters had stabilized, after which groundwater samples were collected and submitted for TCL VOC analysis. The results of these samples are summarized in Table 1 and presented in Figure 1.

The following monitoring wells were sampled during the quarterly event:

March 2017 (18 Monitoring Wells Sampled)		
MW-4	MW-34	MW-43
MW-7R	MW-37	MW-44
MW-10	MW-38	MW-45
MW-11	MW-40	MW-46
MW-21	MW-41	MW-47
MW-33	MW-42	MW-48

A review of the groundwater data generated indicated the following:

- Four (4) of the twenty-one (21) monitoring wells within the NYSDEC-approved monitoring network were not sampled during the March 2017 sampling event due to the presence of LNAPL at those locations as discussed previously.

- VOCs were detected, but at concentrations below AWQSGVs in six (6) monitoring wells (MW-10, MW-11, MW-41, MW-42, MW-46 and MW-48).

- COC exceedances of AWQSGVs are noted below:
  - Benzene results exceeded their respective AWQSGV of 1 µg/L at two monitoring well locations (1.4 µg/L at MW-21 and 9.3 µg/L at MW-40).

  - Ethylbenzene results exceeded their respective AWQSGV of 5 µg/L at four monitoring well locations (6.8 µg/L at MW-43, 9.7 µg/L at MW-44, 39 µg/L at MW-45 and 15 µg/L at MW-47).

  - Isopropylbenzene results exceeded their respective AWQSGV of 5 µg/L at ten monitoring well locations. Exceedances ranged from 5.4 to 51 µg/L.

  - Xylene results exceeded their respective AWQSGV of 5 µg/L at four monitoring well locations (22 µg/L at MW-43, 52 µg/L at MW-44, 54 µg/L at MW-45 and 56 µg/L at MW-47).

Based on the presence of VOCs above the NYSDEC AWQSGVs in groundwater, treatment of VOCs utilizing In-situ Chemical Oxidation (ISCO) will be required. As contemplated in the SMP, ISCO will also be required to address residual soil gross contamination in areas depicted on Figure 9 of the SMP. An ISCO Design Plan was submitted to the NYSDEC via email on April 11, 2017, with implementation anticipated to occur during the week of April 24, 2017.

Modifications or Amendments to the SMP
No modifications or amendments to the SMP were implemented this reporting period.

Actions Planned for the Next Quarterly Reporting Period
The following actions are planned for the next reporting period:

- Continued monthly operation and maintenance of LNAPL recovery system;
- Continued monthly gauging and manual LNAPL recovery, where applicable, at Site monitoring and recovery wells;
- Continued quarterly monitoring (gauging and sampling) of Site monitoring wells within SMP network;
- Evaluation of LNAPL recovery efforts at RW-1 through RW-5 to determine if operation of the on-site LNAPL recovery system continues to not be warranted; and
- Continued use of alternative (i.e., oil absorbing socks), practical methods to supplement recovery of LNAPL at Site monitoring wells where manual recovery efforts become ineffective.

If there are any follow-up questions or concerns with regards to the information provided in this quarterly report, please don’t hesitate to contact our office.

Sincerely,

REMEDIAL ENGINEER, P.C.

Omar Ramotar

Omar Ramotar, P.E.
Principal Engineer

Attachments

cc: Jane O’Connell, NYSDEC
Andrew Till, Simon Baron Development
Robert Hendrickson, Quadrum Global
Joseph Duminuco, Roux Associates, Inc.
Glenn Netuschil, P.E., Remedial Engineering, P.C.
Jordanna Kendrot, Roux Associates, Inc.

TABLE

1. Summary of Volatile Organic Compounds in Groundwater

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-4	MW-5	MW-7R	MW-7R	MW-10	MW-10	MW-10
		Sample Date:	03/30/2017	09/08/2016	09/08/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	20 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	10 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**14**	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	2500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	14	50 U	5 U	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	20 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-4	MW-5	MW-7R	MW-7R	MW-10	MW-10	MW-10
		Sample Date:	03/30/2017	09/08/2016	09/08/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	1.6 J	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**5.4**	2.5 U	**11**	**14 J**	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	1.6 J	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5.5	50 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**5.8**	2.5 U	**19**	**25**	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**6.6**	2.5 U	**12**	**12 J**	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**7.3**	2.5 U	**6**	**7 J**	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	0.99 J	25 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	10 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	1.6 J	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-11	MW-11	MW-11	MW-11	MW-19	MW-21	MW-21
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	03/30/2017	09/08/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	N	N	FD	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**7**	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	2.2 J	1.9 J	5.6	5 U	5 U
Benzene	**1**	UG/L	0.64	0.68	1	1	0.46 J	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-11	MW-11	MW-11	MW-11	MW-19	MW-21	MW-21
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	03/30/2017	09/08/2016	09/08/2016	09/08/2016
		Normal or Field Duplicate:	N	N	N	FD	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**25**	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**33**	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	**23**	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	4.7	4.1	4.4	4.5	**13**	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-21	MW-33	MW-33	MW-34	MW-34	MW-34
		Sample Date:	12/01/2016	03/30/2017	12/01/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	3	5 U	1.3 J	0.98 J	0.94 J
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	23	5.7 J	5 U	5 U	2.4 J
Benzene	**1**	UG/L	0.5 U	**1.4**	0.5 U	1 U	0.42 J	0.26 J	0.5
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-21	MW-33	MW-33	MW-34	MW-34	MW-34
		Sample Date:	12/01/2016	03/30/2017	12/01/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	0.76 J	2.3 J	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	1.3 J	4.2 J	**30**	**22**	**18**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	1.1 J	5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	3.2 J	9.9 J	5 U	5 U	3 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	1.2 J
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.2 J	**8.2**	**39**	**33**	**25**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	1.5 J	5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.6	4.6 J	**16**	**15**	**13**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	1.8 J	2.3 J	**7**	**6.9**	**7.2**
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.46 J	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.6 J	5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-37	MW-37	MW-37	MW-38	MW-38	MW-38	MW-40
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	7.5 U	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	0.74 J	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	10 U	10 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	3.6 J	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	1200 U	1200 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	25 U	25 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	3.4 J	39	25 U	3.5 J	1.6 J	5 U	2 J
Benzene	**1**	UG/L	0.19 J	2.5 U	2.5 U	0.27 J	0.28 J	0.5 U	**8.6**
Bromochloromethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	10 U	10 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	25 U	25 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-37	MW-37	MW-37	MW-38	MW-38	MW-38	MW-40
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	09/08/2016	12/01/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	25 U	25 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**14**	**28**	**34**	**15**	**26**	**36**	**44**
m,p-Xylene	**5**	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	1 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	7.4	25 U	25 U	6.8	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	25 U	25 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**20**	**50**	**68**	**16**	**34**	**55**	**69**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	0.78 J
Sec-Butylbenzene	**5**	UG/L	**5.1**	**21**	**30**	5	**11**	**16**	**16**
Styrene	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.8	**7.1 J**	**8.8 J**	2.5	4.3	**6.8**	3.5
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	1.2 J	12 U	12 U	1 J	0.97 J	2.5 U	1.7 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	12 U	12 U	2.5 U	2.5 U	2.5 U	1.8 J

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
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- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-40	MW-41	MW-41	MW-41	MW-42	MW-42	MW-43
		Sample Date:	03/30/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**12**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	2.3 J	5 U	5 U	5 U	5 U	5 U	7.4
Benzene	**1**	UG/L	**9.3**	0.26 J	0.5 U	0.62	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-40	MW-41	MW-41	MW-41	MW-42	MW-42	MW-43
		Sample Date:	03/30/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**47**	1.3 J	0.73 J	2.5	4.7	0.73 J	1.4 J
m,p-Xylene	**5**	UG/L	1 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.3 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**38**	1.7 J	0.8 J	3.1	3.5	2.5 U	1.9 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	0.72 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8 J
Sec-Butylbenzene	**5**	UG/L	**20**	2.3 J	1.1 J	3.9	2.9	1.4 J	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**5.3**	1.2 J	0.78 J	2.4 J	1.2 J	1.7 J	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	1.7 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.1 J

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-44	MW-44	MW-45	MW-46	MW-46	MW-47
		Sample Date:	03/30/2017	12/01/2016	03/30/2017	03/30/2017	12/01/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	3 U	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	4 U	2 U	2 U	5 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	2 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**78**	**41**	**81**	**230**	2.5 U	2.5 U	**40**
1,3-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	500 U	250 U	250 U	620 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	10 U	5 U	5 U	12 U	5 U	5 U	5 U
Acetone	**50**	UG/L	28	**98**	**53**	32	4.2 J	5 U	**110**
Benzene	**1**	UG/L	0.5 J	1	0.63	0.78 J	0.5 U	0.5 U	0.98
Bromochloromethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	4 U	2 U	2 U	5 U	2 U	2 U	2 U
Bromomethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	10 U	5 U	5 U	12 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-44	MW-44	MW-45	MW-46	MW-46	MW-47
		Sample Date:	03/30/2017	12/01/2016	03/30/2017	03/30/2017	12/01/2016	03/30/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	10 U	5 U	5 U	12 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	**6.8**	**9.9**	**9.7**	**39**	2.5 U	2.5 U	**11**
Isopropylbenzene (Cumene)	**5**	UG/L	**13**	**6.8**	**13**	**51**	2.5 U	2.5 U	**9.2**
m,p-Xylene	**5**	UG/L	**15**	**24**	**30**	**47**	2.5 U	2.5 U	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	10 U	12	5 U	12 U	5 U	5 U	14
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	10 U	5 U	5 U	12 U	5 U	5 U	1.1 J
Methylene Chloride	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**22**	**8.5**	**19**	**88**	2.5 U	2.5 U	**13**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**7.2**	**17**	**22**	**7.4**	2.5 U	2.5 U	**14**
Sec-Butylbenzene	**5**	UG/L	**5.8**	1.8 J	**6.2**	**16**	2.5 U	2.5 U	2.1 J
Styrene	5	UG/L	5 U	2.5 U	1.1 J	6.2 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.4 J	1.2 J	2.4 J	4.8 J	2.5 U	2.5 U	0.95 J
Tert-Butyl Methyl Ether	10	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1 U	0.5 U	0.23 J	1.2 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	5 U	3.8	3.6	6.2 U	2.5 U	2.5 U	3.8
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	1 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	2 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	**22**	**41**	**52**	**54**	2.5 U	2.5 U	**38**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-47	MW-47	MW-48	MW-48
		Sample Date:	12/01/2016	03/30/2017	12/01/2016	03/30/2017
		Normal or Field Duplicate:	FD	N	N	N
Parameter	NYSDEC AWQSGVs	Units				
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**41**	**78**	2.2 J	0.92 J
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	1.1 J	5 U	5 U	5 U
Acetone	**50**	UG/L	**110**	39	5 U	5 U
Benzene	**1**	UG/L	**1.1**	0.66	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	1.2 J	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-47	MW-47	MW-48	MW-48
		Sample Date:	12/01/2016	03/30/2017	12/01/2016	03/30/2017
		Normal or Field Duplicate:	FD	N	N	N
Parameter	NYSDEC AWQSGVs	Units				
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	**11**	**15**	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**9.9**	**16**	4	2.6
m,p-Xylene	**5**	UG/L	**25**	**36**	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	16	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**14**	**23**	3.1	2.4 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**15**	**20**	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.2 J	4.6	4.7	4.3
Styrene	5	UG/L	2.5 U	1.1 J	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	0.99 J	2 J	4.1	3.1
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	4	2.9	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	**40**	**56**	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

ATTACHMENTS

1. Monitoring, Inspection, and Maintenance Forms
2. LNAPL Recovery System Monitoring Logs
3. Gauging and Manual LNAPL Recovery Data
4. March 2017 Well Sampling Data Forms

ATTACHMENT 1

Monitoring, Inspection, and
Maintenance Forms

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Thursday, January 19, 2017**

Site Observations: Performed by (MS) on (1/19/17)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (1/19/17)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (1/19/17)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (1/19/17)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (1/19/17)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **1/19/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Tuesday, February 14, 2017**

Site Observations: Performed by (MS) on (2/14/17)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (2/14/17)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (2/14/17)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (2/14/17)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (2/14/17)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **2/14/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Thursday, March 30, 2017**

Site Observations: Performed by (MS) on (3/30/17)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (3/30/17)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (3/30/17)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (3/30/17)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (3/30/17)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[X]	[ ]	Were all five (5) AC Sipper reels operating properly?
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **3/30/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in the SMP monitoring network.

Recovery system to be shut off due to lack of recoverable product. Continue to inspect recovery system going forward.

ATTACHMENT 2

LNAPL Recovery System
Monitoring Logs

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - January 19, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	**Value**	**Unit**			**Comments**
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.63	--	
Recovery Well RW-2	N	--	7.38	--	
Recovery Well RW-3	N	--	7.87	--	
Recovery Well RW-4	N	--	8.20	--	
Recovery Well RW-5	Y	7.94	7.95	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how?

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - February 14, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.65	--	
Recovery Well RW-2	N	--	7.29	--	
Recovery Well RW-3	Y	--	7.78	--	
Recovery Well RW-4	N	--	7.84	--	
Recovery Well RW-5	Y	7.64	7.65	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how?

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - March 30, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.66	--	
Recovery Well RW-2	N	--	7.02	--	
Recovery Well RW-3	N	--	7.48	--	
Recovery Well RW-4	N	--	7.69	--	
Recovery Well RW-5	N	--	7.50	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? No product present in recovery wells, turn off system until reportable levels of product become present in the recovery system wells.

Form Completed By:

Michael Sarni

ATTACHMENT 3

Gauging and Manual LNAPL Recovery Data

Groundwater Gauging Former Paragon Paint Varnish Corp - January 19, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
1/19/2017	MW-2R	7.50	7.52	4	0.02	0.2	1.05
1/19/2017	MW-3	6.98	7.66	2	0.68	0.3	2.65
1/19/2017	MW-4	9.81	9.82	2	0.01	0.3	0.6
1/19/2017	MW-7	2.62	2.78	1	0.16	0.1	0.3
1/19/2017	MW-7R	--	2.52	1.96	--	--	
1/19/2017	MW-9	Monitoring well destroyed/paved over by asphalt					
1/19/2017	MW-10	--	7.62	2	--	--	
1/19/2017	MW-11	--	6.63	2	--	--	
1/19/2017	MW-14	--	8.22	2	--	--	
1/19/2017	MW-15	--	9.55	2	--	--	
1/19/2017	MW-17	--	6.94	4	--	--	
1/19/2017	MW-18	--	6.87	4	--	--	
1/19/2017	MW-19	2.72	2.75	2	0.03	0.1	0.2
1/19/2017	MW-20	--	NM	2	--	--	
1/19/2017	MW-21	--	5.91	4	--	--	
1/19/2017	MW-22	9.89	9.93	2	0.04	0.1	0.45
1/19/2017	MW-33	--	7.33	2	--	--	
1/19/2017	MW-34	--	7.20	4	--	--	
1/19/2017	MW-36	--	6.85	4	--	--	
1/19/2017	MW-37	--	2.66	2	--	--	
1/19/2017	MW-38	--	2.83	2	--	--	
1/19/2017	MW-40	--	7.01	2	--	--	
1/19/2017	MW-41	--	6.55	2	--	--	
1/19/2017	MW-42	7.47	7.48	2	0.01	--	0.0
1/19/2017	MW-43	--	6.13	2	--	--	
1/19/2017	MW-44	--	7.38	2	--	--	
1/19/2017	MW-45	6.90	6.91	2	0.01	0.1	0.4
1/19/2017	MW-46	--	5.89	2	--	--	
1/19/2017	MW-47	--	6.26	2	--	--	
1/19/2017	MW-48	--	9.65	2	--	--	
						Total	**5.65**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - February 14, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
2/14/2017	MW-2R	7.44	7.45	4	0.01	Sock Installed	1.05
2/14/2017	MW-3	6.99	7.48	2	0.49	0.3	2.95
2/14/2017	MW-4	9.6	9.62	2	0.02	Sock Installed	0.6
2/14/2017	MW-7	2.62	2.76	1	0.14	0.1	0.4
2/14/2017	MW-7R	--	2.52	2	--	--	
2/14/2017	MW-9	Monitoring well destroyed/paved over by asphalt					
2/14/2017	MW-10	--	6.60	2	--	--	
2/14/2017	MW-11	--	6.15	2	--	--	
2/14/2017	MW-14	--	9.42	2	--	--	
2/14/2017	MW-15	--	9.46	2	--	--	
2/14/2017	MW-17	--	6.89	4	--	--	
2/14/2017	MW-18	--	6.77	4	--	--	
2/14/2017	MW-19		2.62	2	--	--	0.2
2/14/2017	MW-20		9.71	2	--	--	
2/14/2017	MW-21	--	5.92	4	--	--	
2/14/2017	MW-22	9.62	9.70	2	0.08	Sock Installed	0.45
2/14/2017	MW-33	--	7.33	2	--	--	
2/14/2017	MW-34	--	7.19	4	--	--	
2/14/2017	MW-36	--	6.70	4	--	--	
2/14/2017	MW-37	--	2.12	2	--	--	
2/14/2017	MW-38	--	2.58	2	--	--	
2/14/2017	MW-40	--	6.63	2	--	--	
2/14/2017	MW-41	--	6.21	2	--	--	
2/14/2017	MW-42	7.43	7.44	2	0.01	Sock Installed	0.0
2/14/2017	MW-43	--	5.82	2	--	--	
2/14/2017	MW-44	--	7.09	2	--	--	
2/14/2017	MW-45	6.60	6.61	2	0.05	Sock Installed	0.4
2/14/2017	MW-46	--	6.65	2	--	--	
2/14/2017	MW-47	--	5.99	2	--	--	
2/14/2017	MW-48	--	9.40	2	--	--	
						Total	**6.05**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Sock Installed - An oil absorbent sock was installed within the well at the height of the groundwater table instaed of bailing due to trace amounts of product.

Groundwater Gauging Former Paragon Paint Varnish Corp - March 30, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged* (g)	Cumulative (g)
3/30/2017	MW-2R	4.31	4.32	4	0.01	0.1	1.40
3/30/2017	MW-3	6.79	7.81	2	1.02	0.2	3.15
3/30/2017	MW-4	--	9.70	2	--	--	0.63
3/30/2017	MW-7	2.72	3.10	1	0.38	trace removal	0.4
3/30/2017	MW-7R	--	2.75	2	--	--	
3/30/2017	MW-9	Monitoring well destroyed/paved over by asphalt					
3/30/2017	MW-10	--	5.91	2	--	--	
3/30/2017	MW-11	--	6.69	2	--	--	
3/30/2017	MW-14	--	6.37	2	--	--	
3/30/2017	MW-15	--	6.38	2	--	--	
3/30/2017	MW-17	--	6.64	4	--	--	
3/30/2017	MW-18	--	6.77	4	--	--	
3/30/2017	MW-19	2.82	2.90	2	0.08	0.1	0.3
3/30/2017	MW-20	--	9.81	2	--	--	
3/30/2017	MW-21	--	5.89	4	--	--	
3/30/2017	MW-22	--	9.74	2	--	--	0.58
3/30/2017	MW-33	--	7.00	2	--	--	
3/30/2017	MW-34	--	7.03	4	--	--	
3/30/2017	MW-36	--	6.47	4	--	--	
3/30/2017	MW-37	--	2.64	2	--	--	
3/30/2017	MW-38	--	2.83	2	--	--	
3/30/2017	MW-40	--	6.98	2	--	--	
3/30/2017	MW-41	--	6.75	2	--	--	
3/30/2017	MW-42	--	7.60	2	--	--	0.05
3/30/2017	MW-43	--	5.71	2	--	--	
3/30/2017	MW-44	--	6.95	2	--	--	
3/30/2017	MW-45	--	6.49	2	--	--	0.53
3/30/2017	MW-46	--	5.52	2	--	--	
3/30/2017	MW-47	--	5.84	2	--	--	
3/30/2017	MW-48	--	9.47	2	--	--	
						Total	**7.03**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

* - Purged total shown during this reporting month is the cumulative sum of bailed free-product on March 30, 2017 and the calculated total of product recovered from the use of the oil absorbent sock as installed during February 2017 based on absorbency.

ATTACHMENT 4

March 2017 Well Sampling
Data Forms

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-4
Intake depth: Approx. 15'
DTW: 9.69
Vol Purged: 1.5
DTB: 17.60
Sampler: RH
Purge Start: 11:15
Purge End Time: 11:40
Purge Water Description: Clear, no odor

Sample Time: 11:40

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:15	10.35	200	7.24	0.160	100.3	7.73	-89	129
11:20	10.50	200	13.09	0.264	0.00	7.33	-129	40.7
11:25	10.62	200	13.15	0.263	0.00	7.30	-131	27.4
11:30	10.73	200	13.31	0.263	0.00	7.28	-133	18.7
11:33	10.55	200	13.33	0.265	0.00	7.26	-133	15.0
11:36	10.55	200	13.35	0.266	0.00	7.24	-133	11.6
11:39	10.55	200	13.36	0.268	0.00	7.25	-134	11.0

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Sunny, 41F
Date: 3/30/2017
Well ID: MW-7R
Intake depth: Approx. 5'
DTW: 2.52
Vol Purged: 1 gal
DTB: 6.85
Sampler: MS
Purge Start: 13:00
Purge End Time: 13:30
Purge Water Description: Clear/grey - sediment floating

Sample time 1330

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
13:00	3.50	100	9.69	2.38	2.29	6.99	-94	265
13:03	3.50	100	9.72	2.39	1.79	6.89	-86	247
13:06	3.50	100	9.74	2.39	1.66	6.79	-79	246
13:09	3.50	100	9.74	2.39	1.67	6.76	-75	243
13:12	3.50	100	9.73	2.39	1.79	6.73	-73	238
13:15	3.50	100	9.73	2.40	1.79	6.71	-71	234
13:18	3.50	100	9.72	2.40	1.87	6.70	-69	231
13:21	3.50	100	9.71	2.40	1.98	6.69	-67	229
13:24	3.50	100	9.70	2.41	2.11	6.68	-66	225
13:27	3.50	100	9.71	2.41	2.17	6.69	-64	220
13:30	3.50	100	9.70	2.41	2.14	6.68	-63	217

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F Date: 3/30/2017

Well ID: MW-10 Intake depth: Approx. 9'

DTW: 6.64 Vol Purged: .5 gal

DTB: 10.86

Sampler: AF

Purge Start: 9:54 Purge End Time: 10:18

Purge Water Description: Clear from to start to end

Sample time 10:20

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:54	6.66	75	9.18	31.9	4.69	7.02	132	92.9
9:57	6.63	75	8.96	31.9	4.02	7.13	135	31.3
10:00	6.61	75	8.64	32.0	3.94	7.24	137	17.2
10:03	6.59	75	8.30	32.1	3.81	7.29	139	15.1
10:06	6.59	75	8.16	32.3	3.76	7.31	140	12.6
10:09	6.57	75	8.01	32.3	3.73	7.33	144	10.4
10:12	6.56	75	7.83	32.3	3.70	7.34	146	9.3
10:15	6.56	75	7.79	32.3	3.69	7.35	146	8.7
10:18	6.56	75	7.75	32.4	3.67	7.35	148	8.1

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-11
Intake depth: Approx. 21'
DTW: 6.14
Vol Purged: 0.75 gal
DTB: 23.87
Sampler: AF
Purge Start: 9:17
Purge End Time: 9:44
Purge Water Description: Clear from start to finish
Sample time: 0945
Duplicate sample collected from MW-11 (DUP-033017) at 0950

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:17	7.22	150	12.97	6.88	2.46	6.44	196	201
9:20	7.41	150	13.03	6.73	0.92	6.90	61	98.6
9:23	7.49	100	12.99	6.63	0.32	7.38	2	31.6
9:26	7.53	100	12.96	6.63	0.14	7.40	-14	30.5
9:29	7.55	100	12.94	6.62	0.09	7.43	-26	27.3
9:32	7.57	100	12.91	6.61	0.08	7.47	-28	24.9
9:35	7.58	100	12.89	6.61	0.07	7.48	-29	24.0
9:38	7.58	100	12.90	6.61	0.07	7.49	-30	23.6
9:41	7.59	100	12.89	6.61	0.06	7.49	-30	23.5
9:44	7.60	100	12.89	6.61	0.05	7.49	-30	23.2

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-21
Intake depth: Approx. 14'
DTW: 6.20
Vol Purged: 1 gal
DTB: 15
Sampler: MS
Purge Start: 9:30
Purge End Time: 10:00
Purge Water Description: Orange to Clear during purge
Sample time: 1000

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:30	6.26	100	13.99	10.5	1.08	6.69	-38	103
9:33	6.26	100	14.01	10.5	0.95	6.64	-29	110
9:36	6.26	100	13.97	10.6	0.81	6.62	-23	68.0
9:39	6.26	100	13.88	10.6	0.72	6.60	-18	115
9:42	6.26	100	13.85	10.6	0.72	6.59	-15	58.1
9:45	6.26	100	13.77	10.7	0.64	6.58	-11	43.0
9:48	6.26	100	13.75	10.7	0.57	6.58	-9	16.0
9:51	6.26	100	13.74	10.7	0.54	6.57	-6	3.7
9:54	6.26	100	13.72	10.7	0.53	6.57	-4	3.5
9:57	6.26	100	13.72	10.7	0.52	6.57	-1	4.7
10:00	6.26	100	13.73	10.7	0.51	6.57	-2	3.9

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Sunny, 40F Date: 3/30/2017

Well ID: MW-33 Intake depth: Approx. 11.5'

DTW: 7.92 Vol Purged: .75 gal

DTB: 13.5

Sampler: MS

Purge Start: 10:15 Purge End Time: 10:45

Purge Water Description: Clear

Sample time: 1045

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:15	7.93	100	12.66	1.52	0.87	7.09	-16	19.9
10:18	7.93	100	12.54	1.51	0.85	7.08	-26	20.6
10:21	7.93	100	12.30	1.45	0.63	7.08	-37	21.0
10:24	7.93	100	12.25	1.42	0.53	7.08	-40	19.5
10:27	7.93	100	12.12	1.40	0.45	7.03	-44	19.9
10:30	7.93	100	11.81	1.38	0.35	7.07	-59	20.6
10:33	7.93	100	11.72	1.38	0.35	7.07	-60	20.0
10:36	7.93	100	11.65	1.38	0.35	7.07	-61	19.6
10:39	7.93	100	11.58	1.38	0.33	7.06	-62	20.0
10:42	7.93	100	11.42	1.38	0.30	7.06	-63	19.8
10:45	7.93	100	11.38	1.38	0.31	7.07	-63	19.7

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: windy, clear, 39F
Date: 3/30/2017
Well ID: MW-34
Intake depth: Approx. 12.5'
DTW: 7.83
Vol Purged: 1 gal
DTB: 13.5
Sampler: MS
Purge Start: 8:00
Purge End Time: 8:30
Purge Water Description: Clear
Sample time 830

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:00	7.83	100	12.81	3.87	1.79	6.89	-50	8.6
8:03	7.83	100	12.78	3.85	1.56	6.90	-58	8.4
8:06	7.83	100	12.44	3.85	1.33	6.91	-70	8.3
8:09	7.83	100	12.39	3.85	1.28	6.91	-74	9.4
8:12	7.83	100	12.33	3.85	1.19	6.91	-77	8.7
8:15	7.83	100	12.27	3.85	1.13	6.92	-80	9.5
8:18	7.83	100	12.26	3.85	1.03	6.92	-82	8.9
8:21	7.83	100	12.28	3.86	1.07	6.92	-84	9.1
8:24	7.83	100	12.30	3.86	0.95	6.92	-84	9.0
8:27	7.83	100	12.32	3.86	0.92	6.92	-85	9.1
8:30	7.83	100	12.35	3.86	0.90	6.92	-86	9.0

SITE NAME:	5-49 46th Ave. Long Island City, NY	**Project Number:**	2051.0001Y002

Weather:	clear, 40F	Date:	3/30/2017
Well ID:	MW-37	Intake depth:	Approx. 4'
DTW:	2.63	Vol Purged:	0.6 gal
DTB:	4.57		
Sampler:	AF		
Purge Start:	12:49	Purge End Time:	13:16
Purge Water Description:	Clear from start to finish		

Sample time: 1320
During collection of the sample, the well went dry. Waited 10min for recharge

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:49	2.89	75	10.55	1.72	3.96	8.03	-206	93.6
12:52	2.92	75	10.16	1.75	1.22	7.79	-183	77.2
12:55	2.99	75	9.87	1.77	0.37	7.75	-161	65.3
12:58	3.06	75	9.76	1.78	0.11	7.71	-158	60.1
13:01	3.17	75	9.64	1.79	0.00	7.67	-153	56.4
13:04	3.22	75	9.59	1.80	0.00	7.65	-146	51.7
13:07	3.29	75	9.41	1.81	0.00	7.63	-143	49.9
13:10	3.40	75	9.36	1.82	0.00	7.63	-141	48.3
13:13	3.47	75	9.31	1.82	0.00	7.62	-140	48.0
13:16	3.52	75	9.27	1.83	0.00	7.62	-139	47.3

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-38
Intake depth: Approx. 3.5'
DTW: 2.80
Vol Purged: 1.2 gal
DTB: 4.98
Sampler: RH
Purge Start: 12:55
Purge End Time: 13:15
Purge Water Description: Clear, no odor
Sample time 1320

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:55	3.05	200	9.51	1.41	1.40	6.99	7	92.8
12:58	3.15	200	9.33	1.43	0.00	7.00	-6	85.2
13:01	3.28	200	9.28	1.44	0.00	6.99	-13	79.0
13:04	3.43	200	9.21	1.47	0.00	6.98	-21	71.0
13:07	3.60	200	9.20	1.47	0.00	6.98	-26	66.8
13:10	3.69	200	9.22	1.48	0.00	6.97	-28	65.0
13:13	3.90	200	9.23	1.49	0.00	6.99	-32	61.4

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Mostly Cloudy, 43F
Date: 3/30/2017
Well ID: MW-40
Intake depth: Approx. 16'
DTW: 6.98
Vol Purged: 2.5 gal
DTB: 18.82
Sampler: RH
Purge Start: 8:45
Purge End Time: 9:14
Purge Water Description: odor, clear
Sample time: 0915
MS/MSD collected

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:45	7.84	200	11.29	0.407	1.33	6.88	33	65.7
8:50	7.85	200	11.62	0.398	0.00	7.47	-80	50.6
8:55	7.91	200	11.60	0.392	0.00	7.68	-144	33.5
9:00	7.97	200	11.53	0.387	0.00	7.79	-184	32.0
9:05	8.00	200	11.56	0.377	0.00	7.85	-220	19.2
9:08	8.01	200	11.61	0.376	0.00	7.87	-224	17.9
9:11	8.02	200	11.61	0.374	0.00	7.87	-227	14.6
9:14	8.02	200	11.55	0.371	0.00	7.88	-233	13.4

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40's
Date: 3/30/2017
Well ID: MW-41
Intake depth: Approx. 9.5'
DTW: 6.75
Vol Purged: 2 gal
DTB: 11.4
Sampler: RH
Purge Start: 9:40
Purge End Time: 10:05
Purge Water Description: Clear
Sample time 10:05

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:40	6.80	200	9.76	1.29	3.05	8.25	-170	11.5
9:45	6.84	200	9.69	1.31	0.00	8.22	-182	4.6
9:50	6.87	200	9.72	1.32	0.00	8.20	-197	0.5
9:55	6.93	200	9.69	1.33	0.00	8.18	-82	0.0
9:58	6.98	200	9.71	1.34	0.00	8.17	-213	0.0
10:01	6.98	200	9.71	1.34	0.00	8.16	-216	0.0
10:04	6.98	200	9.71	1.34	0.00	8.15	-218	0.0

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: clear, 40F
Date: 3/30/2017
Well ID: MW-42
Intake depth: Approx. 9.5'
DTW: 7.52
Vol Purged: 2 gal
DTB: 11.08
Sampler: RH
Purge Start: 10:20
Purge End Time: 10:50
Purge Water Description: clear
Sample time 10:51

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:20	7.52	200	8.43	0.743	1.27	8.14	-148	41.2
10:25	7.59	200	8.50	0.732	0.00	8.00	-154	20.7
10:30	7.72	200	8.54	0.728	0.00	7.84	-161	6.5
10:35	7.89	200	8.66	0.719	0.00	7.74	-158	0.0
10:40	7.95	200	8.68	0.718	0.00	7.71	-159	0.0
10:43	7.98	200	8.68	0.720	0.00	7.68	-160	0.0
10:46	8.00	200	8.72	0.722	0.00	7.65	-161	0.0
10:49	8.01	200	8.68	0.725	0.00	7.64	-162	0.0

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Sunny, 40F
Date: 3/30/2017
Well ID: MW-43
Intake depth: Approx. 18
DTW: 5.65
Vol Purged: 1 gal
DTB: 20.00
Sampler: MS
Purge Start: 11:45
Purge End Time: 12:15
Purge Water Description: Clear
Sample time: 1215

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:45	5.65	100	11.21	1.72	0.91	11.82	-256	10.1
11:48	5.65	100	10.89	1.70	0.69	11.81	-146	9.5
11:51	5.65	100	10.92	1.70	0.69	11.85	-160	9.7
11:54	5.65	100	10.91	1.68	0.35	11.88	-180	10.0
11:57	5.65	100	10.88	1.68	0.32	11.88	-185	9.6
12:00	5.65	100	10.71	1.64	0.20	11.88	-191	9.3
12:03	5.65	100	10.70	1.64	0.19	11.85	-191	9.3
12:06	5.65	100	10.80	1.63	0.19	11.89	-190	9.4
12:09	5.65	100	10.82	1.63	0.18	11.85	-190	9.5
12:12	5.65	100	10.79	1.63	0.18	11.82	-189	9.6
12:15	5.65	100	10.77	1.63	0.18	11.84	-189	9.6

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-44
Intake depth: approx. 16
DTW: 6.89
Vol Purged: 1.2 gal
DTB: 19.10
Sampler: A.F.
Purge Start: 10:55
Purge End Time: 11:22
Purge Water Description: Clear from start to finish
Sample time: 1125
Recalibrated the hariba due to unusual high pH readings

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:55	6.89	150	12.89	1.99	2.68	11.13	-38	31.7
10:58	6.89	150	12.70	1.99	0.83	11.82	-41	26.3
11:01	6.89	150	12.61	1.99	0.12	12.09	-47	23.2
11:04	6.89	150	12.32	2.01	0.00	12.26	-54	20.1
11:07	6.89	150	12.07	2.01	0.00	12.44	-57	18.4
11:10	6.89	150	11.83	2.01	0.00	12.51	-62	16.5
11:13	6.89	150	11.64	2.02	0.00	12.53	-66	13.2
11:16	6.89	150	11.51	2.02	0.00	12.53	-67	11.6
11:19	6.89	150	11.47	2.02	0.00	12.52	-68	10.9
11:22	6.89	150	11.42	2.02	0.00	12.52	-69	10.3

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-45
Intake depth: approx. 15
DTW: 6.44
Vol Purged: 1.25 gal
DTB: 18.05
Sampler: A.F.
Purge Start: 11:29
Purge End Time: 12:02
Purge Water Description: Clear from start to finish
Start time:1205

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:29	6.47	150	11.36	1.69	1.22	10.46	-80	12.3
11:32	6.48	150	11.52	1.72	0.33	11.56	-88	2.3
11:35	6.48	150	11.67	1.72	0.00	11.70	-97	1.6
11:38	6.48	150	11.73	1.74	0.00	11.88	-112	0.0
11:41	6.48	150	11.76	1.74	0.00	11.90	-120	0.0
11:44	6.48	150	11.77	1.76	0.00	12.03	-121	0.0
11:47	6.48	150	11.80	1.76	0.00	12.13	-122	0.0
11:50	6.48	150	11.82	1.77	0.00	12.20	-123	0.0
11:53	6.48	150	11.84	1.78	0.00	12.29	-123	0.0
11:56	6.48	150	11.86	1.78	0.00	12.32	-123	0.0
11:59	6.48	150	11.87	1.78	0.00	12.36	-123	0.0
12:02	6.48	150	11.87	1.77	0.00	12.39	-123	0.0

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Sunny Date: 3/30/2017

Well ID: MW-46 Intake depth: Approx. 18'

DTW: 5.51 Vol Purged: 1 gal

DTB: 19.50

Sampler: MS

Purge Start: 11:00 Purge End Time: 11:30

Purge Water Description: clear

Sample time 11:30

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:00	5.51	100	11.22	1.66	0.28	8.27	-88	23.1
11:03	5.51	100	11.21	1.66	0.29	8.27	-89	21.8
11:06	5.51	100	11.19	1.66	0.36	8.28	-90	18.5
11:09	5.51	100	11.07	1.65	0.37	8.29	-91	18.5
11:12	5.51	100	10.90	1.65	0.31	8.30	-92	18.2
11:15	5.51	100	10.71	1.65	0.31	8.30	-92	18.5
11:18	5.51	100	10.51	1.65	0.25	8.31	-92	19.0
11:21	5.51	100	10.38	1.65	0.22	8.31	-93	18.9
11:24	5.51	100	10.30	1.65	0.22	8.31	-93	18.7
11:27	5.51	100	10.28	1.65	0.21	8.31	-93	18.8
11:30	5.51	100	10.26	1.65	0.21	8.31	-93	18.9

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-47
Intake depth: ~17
DTW: 5.79
Vol Purged: 0.6 GAL
DTB: 20.22
Sampler: AF
Purge Start: 10:27
Purge End Time: 10:48
Purge Water Description: clear, from start to finish
Sample time 1050
Horiba recalibrated following sampling due to high pH readings

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:27	5.80	100	11.40	2.33	3.36	9.78	-39	92.6
10:30	5.80	100	11.43	1.72	1.29	11.33	-45	70.3
10:33	5.80	100	11.51	1.69	0.83	11.88	-53	64.2
10:36	5.80	100	11.62	1.63	0.51	12.06	-59	50.9
10:39	5.80	100	11.69	1.57	0.36	12.09	-62	38.3
10:42	5.80	100	11.75	1.55	0.18	12.16	-66	26.4
10:45	5.80	100	11.77	1.55	0.16	12.17	-67	26.0
10:48	5.80	100	11.82	1.54	0.14	12.17	-67	25.1

SITE NAME: 5-49 46th Ave. Long Island City, NY **Project Number:** 2051.0001Y002

Weather: Clear, 40F
Date: 3/30/2017
Well ID: MW-48
Intake depth: Approx. 19'
DTW: 9.47
Vol Purged: 1.75 gal
DTB: 20.0
Sampler: RH
Purge Start: 11:50
Purge End Time: 12:18
Purge Water Description: clear, no apparent odor
Sample time: 1218

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:50	9.56	200	11.78	0.251	4.00	8.23	-80	216.0
11:55	9.69	200	12.39	0.260	0.00	7.29	-79	29.7
12:00	9.74	200	12.55	0.268	0.00	7.23	-75	21.6
12:05	9.87	200	12.60	0.271	0.00	7.16	-68	23.2
12:10	9.90	200	12.68	0.266	0.00	7.11	-60	13.7
12:13	9.91	200	12.68	0.265	0.00	7.09	-57	8.1
12:16	9.92	200	12.68	0.265	0.00	7.08	-54	6.2

PLATE

1. VOCs and LNAPL Detected in Groundwater March 2017

LEGEND

MW-5 — LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)

MW-3 — LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)

RW-1 — LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)

IP-2 — LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT

(0.38 ft) — LNAPL THICKNESS

ft — FEET

LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID

ISCO — IN-SITU CHEMICAL OXIDATION

CONCRETE VAULT

PROPERTY BOUNDARY

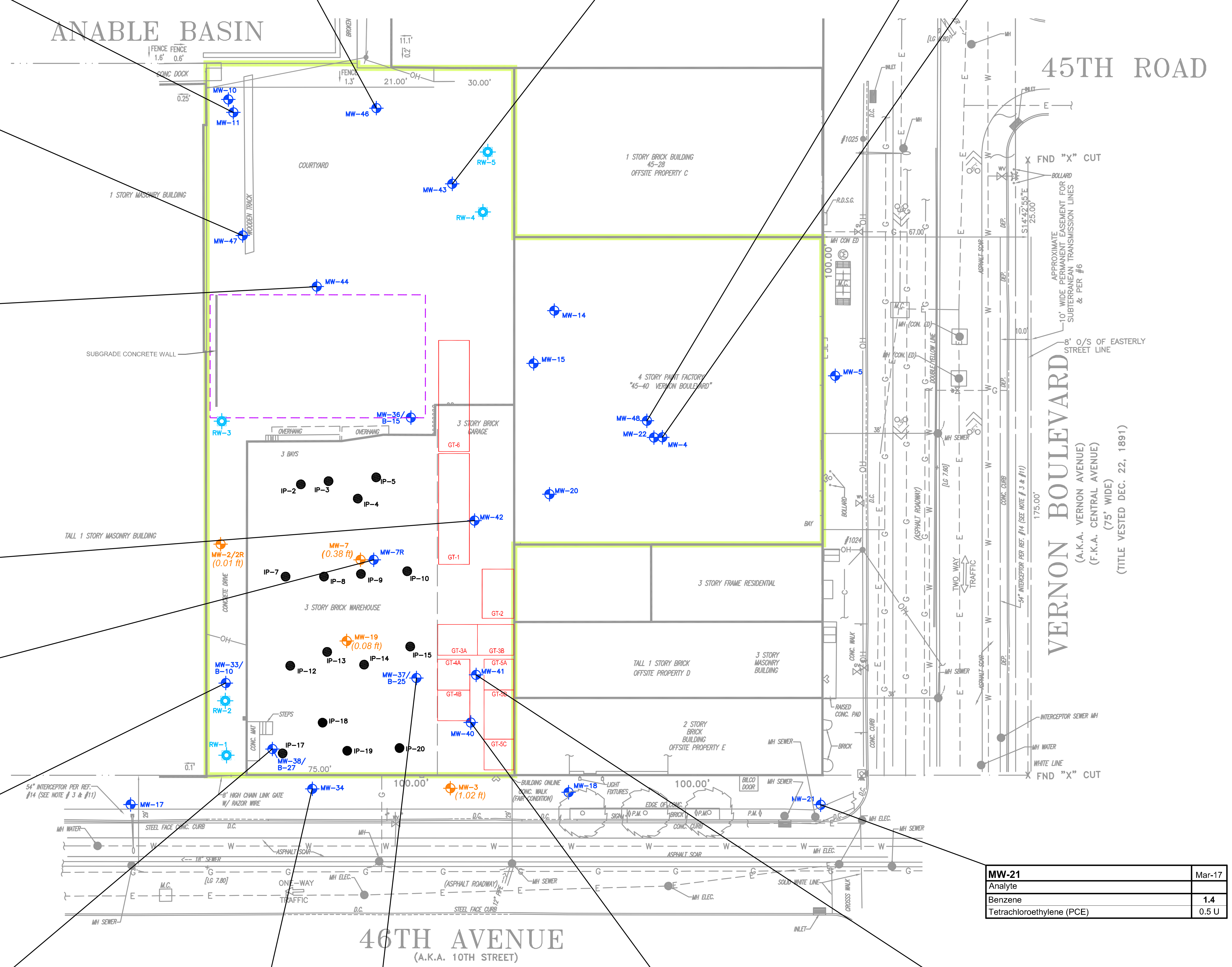
GT-6 — APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)

CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. → MW-11 | Mar-17 ← SAMPLE DATE

ANALYTES: Acetone 2.2 J; Benzene 1; T-Butylbenzene 4.4 — CONCENTRATIONS (IN µg/L)



MW-11	Mar-17
Analyte	
Acetone	2.2 J
Benzene	1
T-Butylbenzene	4.4

MW-45	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**230**
Acetone	32
Benzene	0.78 J
Ethylbenzene	**39**
Isopropylbenzene (Cumene)	**51**
m,p-Xylene	**47**
N-Propylbenzene	**88**
O-Xylene (1,2-Dimethylbenzene)	**7.4**
Sec-Butylbenzene	**16**
T-Butylbenzene	4.8 J
Xylenes	**54**

MW-43	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**78**
Acetone	28
Benzene	0.5 J
Ethylbenzene	**6.8**
Isopropylbenzene (Cumene)	**13**
m,p-Xylene	**15**
N-Propylbenzene	**22**
O-Xylene (1,2-Dimethylbenzene)	**7.2**
Sec-Butylbenzene	**5.8**
T-Butylbenzene	2.4 J
Xylenes	**22**

MW-48	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	0.92 J
Isopropylbenzene (Cumene)	2.6
N-Propylbenzene	2.4 J
Sec-Butylbenzene	4.3
T-Butylbenzene	3.1

MW-4	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**14**
Ethylbenzene	1.6 J
Isopropylbenzene (Cumene)	**5.4**
m,p-Xylene	1.6 J
N-Propylbenzene	**5.8**
Sec-Butylbenzene	**6.6**
T-Butylbenzene	**7.3**
Xylenes	1.6 J

MW-47	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**78**
2-Hexanone	5 U
Acetone	**39**
Benzene	0.66
Chloromethane	2.5 U
Ethylbenzene	**15**
Isopropylbenzene (Cumene)	**16**
m,p-Xylene	**36**
Methyl Ethyl Ketone (2-Butanone)	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	5 U
N-Propylbenzene	**23**
O-Xylene (1,2-Dimethylbenzene)	**20**
Sec-Butylbenzene	4.6
Styrene	1.1 J
T-Butylbenzene	2 J
Toluene	2.9
Xylenes	**56**

MW-44	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	**81**
Acetone	**53**
Benzene	0.63
Ethylbenzene	**9.7**
Isopropylbenzene (Cumene)	**13**
m,p-Xylene	**30**
Methyl Ethyl Ketone (2-Butanone)	5 U
N-Propylbenzene	**19**
O-Xylene (1,2-Dimethylbenzene)	**22**
Sec-Butylbenzene	**6.2**
Styrene	1.1 J
T-Butylbenzene	2.4 J
Tetrachloroethylene (PCE)	0.23 J
Toluene	3.6
Xylenes	**52**

MW-42	Mar-17
Analyte	
Isopropylbenzene (Cumene)	0.73 J
N-Propylbenzene	2.5 U
Sec-Butylbenzene	1.4 J
T-Butylbenzene	1.7 J

MW-7R	Mar-17
Analyte	
Acetone	50 U
Isopropylbenzene (Cumene)	**14 J**
Methyl Ethyl Ketone (2-Butanone)	50 U
N-Propylbenzene	**25**
Sec-Butylbenzene	**12 J**
T-Butylbenzene	**7 J**
Toluene	25 U

MW-33	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	5 U
Acetone	5.7 J
Ethylbenzene	2.3 J
Isopropylbenzene (Cumene)	4.2 J
m,p-Xylene	5 U
Methyl Ethyl Ketone (2-Butanone)	9.9 J
N-Propylbenzene	**8.2**
O-Xylene (1,2-Dimethylbenzene)	5 U
Sec-Butylbenzene	4.6 J
T-Butylbenzene	2.3 J
Xylenes	5 U

MW-38	Mar-17
Analyte	
Acetone	5 U
Benzene	0.5 U
Isopropylbenzene (Cumene)	**36**
Methyl Ethyl Ketone (2-Butanone)	5 U
N-Propylbenzene	**55**
Sec-Butylbenzene	**16**
T-Butylbenzene	6.8
Toluene	2.5 U

MW-34	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	0.94 J
Acetone	2.4 J
Benzene	0.5
Isopropylbenzene (Cumene)	**18**
Methyl Ethyl Ketone (2-Butanone)	3 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.2 J
N-Propylbenzene	**25**
Sec-Butylbenzene	**13**
T-Butylbenzene	**7.2**

MW-37	Mar-17
Analyte	
1,3,5-Trimethylbenzene (Mesitylene)	12 U
Acetone	25 U
Benzene	2.5 U
Isopropylbenzene (Cumene)	**34**
Methyl Ethyl Ketone (2-Butanone)	25 U
N-Propylbenzene	**68**
Sec-Butylbenzene	**30**
T-Butylbenzene	**8.8 J**
Toluene	12 U

MW-40	Mar-17
Analyte	
Acetone	2.3 J
Benzene	**9.3**
Isopropylbenzene (Cumene)	**47**
m,p-Xylene	1 J
N-Propylbenzene	**38**
O-Xylene (1,2-Dimethylbenzene)	0.72 J
Sec-Butylbenzene	**20**
T-Butylbenzene	**5.3**
Toluene	2.5 U
Xylenes	1.7 J

MW-21	Mar-17
Analyte	
Benzene	**1.4**
Tetrachloroethylene (PCE)	0.5 U

MW-41	Mar-17
Analyte	
Benzene	0.62
Isopropylbenzene (Cumene)	2.5
N-Propylbenzene	3.1
Sec-Butylbenzene	3.9
T-Butylbenzene	2.4 J

PARAMETER (CONCENTRATIONS IN µg/L)	STANDARDS* (µg/L)
1,2-Dichloropropane	1
1,3,5-Trimethylbenzene (Mesitylene)	5
1,3-Dichlorobenzene	3
2-Hexanone	50
Acetone	50
Benzene	1
Chloromethane	--
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
Methyl Ethyl Ketone (2-Butanone)	50
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--
N-Propylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
T-Butylbenzene	5
Tetrachloroethylene (PCE)	5
Toluene	5

CONCENTRATIONS IN µg/L

µg/L — MICROGRAMS PER LITER

* — NYSDEC AWQSGVs

NYSDEC — NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AWQSGVs — AMBIENT WATER-QUALITY STANDARDS AND GUIDANCE VALUES

J — ESTIMATED VALUE

U — COMPOUND WAS ANALYZED FOR BUT NOT DETECTED

NS — NOT SAMPLED

FD — DUPLICATE

– – – — NO NYSDEC AWQSGV AVAILABLE

BOLD — INDICATES THAT PARAMETER WAS DETECTED ABOVE THE NYSDEC AWQSGVS

N

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NO.	DATE	REVISION DESCRIPTION	INT.

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Remedial

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PROJECT NAME:
QUARTERLY MONITORING REPORT Q1 OF 2017
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
VERNON 4540 REALTY LLC

TITLE:
VOCs AND LNAPL DETECTED IN GROUNDWATER
MARCH 2017

FIGURE
1

V:\CAD\PROJECTS\2051Y\0001Y\242\2051.0001Y242.01.DWG

From: Jordanna Kendrot
Sent: Tuesday, May 9, 2017 6:08 PM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report April 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (April 24, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

ISCO Implementation and Monitoring Activities:

On April 11, 2017, the in-situ chemical oxidation (ISCO) Design Plan required by the Site Management Plan (SMP) was submitted via email and hardcopy to the NYSDEC. Roux Associates also submitted Form 7250-16 ("Inventory of Injection Wells") to the United States Environmental Protection Agency (USEPA) as part of this ISCO Design Plan.

On April 24 to 26, 2017, Roux Associates completed the implementation of the ISCO Design Plan detailed in the aforementioned submittal that provides the injection plan for the initial injection at the Site. As noted, in the ISCO Design Plan, the performance of ISCO at the Site will be performed in a phased approach. With regards to this initial treatment phase, injections were completed in eight (8) representative areas across the Site that had residual gross contamination in soil or NYSDEC Ambient Water-Quality Standards and Guidance Values (AWQSGVs) exceedances in groundwater. The PersulfOx™ material utilized in the injections were delivered to the subsurface at a controlled rate of either 15-percent or 20-percent (by weight) solution. A total of 2,975.40 lbs of PersulfOx™ was mixed with 1,690 gallons of water. Details pertaining to exact mixture concentrations and injection locations were provided via the Daily Construction Report, submitted to the NYSDEC via email on April 27, 2017.

In accordance with the SMP and as detailed in the ISCO Design Plan, ISCO performance monitoring will be conducted bi-weekly for approximately two months following completion of the injections or until parameters return to baseline conditions. The first monitoring event will be completed during the next reporting period. Only monitoring wells that are both within the SMP monitoring network and located in the targeted injection area will be specifically monitored during the aforementioned schedule. The monitoring well network for the first ISCO injection event will consist of monitoring wells MW-36, MW-38, MW-40, MW-41, MW-42, MW-44, and MW-47.

Routine Operation, Maintenance, Monitoring and Reporting Activities:

On April 24, 2017, prior to implementation of the ISCO Design Plan, the wells within the SMP sampling network were gauged. A summary of the gauging data collected during the reporting period is provided in the attached table.

As discussed in the prior progress report, alternative methods of LNAPL recovery have been implemented to supplement LNAPL recovery when manual recovery (e.g., physical bailing) became less effective. Absorbent socks that were installed in monitoring wells MW-2R, MW-3, MW-19, and MW-42, during the previous reporting period were removed prior to gauging. The presence of free-product was noted in monitoring well MW-7, with free-product continuing to be present in off-site monitoring well MW-3 following removal of the absorbent sock. It is estimated that approximately 0.675 gallons of free-product was removed in total from these monitoring wells based on the saturation of the absorbent sock. Absorbent socks were not reinstalled following the gauging event to determine if any free-product recharge will occur at these monitoring wells during the next reporting period.

Due to the lack of free-product present in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

The Second Quarterly Inspection and Monitoring Report was submitted via email and hardcopy to the NYSDEC on April 28, 2017 and was based on inspection and monitoring results from January to March 2017.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (May 1 through May 31, 2017):

- Implementation of bi-weekly ISCO performance monitoring;
- Continued monthly O&M of LNAPL recovery system (as necessary); and
- Continued monthly gauging of monitoring wells within SMP monitoring network.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot | Project Engineer | Roux Associates, Inc.
209 Shafter Street Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2356 | Mobile: 631.741.7142
Email: jkendrot@rouxinc.com | Website: www.rouxinc.com

Summary of Water Level Elevations and LNAPL Thickness; April 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		November 15, 2016				December 1, 2016				January 19, 2017				February 14, 2017				March 30, 2017				April 24, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-1/1R	7.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-2R	9.23	7.85	8.31	1.27	0.46	6.66	6.82	2.53	0.16	7.5	7.52	1.73	0.02	7.44	7.45	1.79	0.01	4.31	4.32	4.92	0.01	--	7.28	1.95	--
MW-3	8.40	7.21	8.15	0.96	0.94	6.60	6.97	1.71	0.37	6.98	7.66	1.25	0.68	6.99	7.48	1.29	0.49	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13
MW-4	11.57	10.29	10.34	1.27	0.05	6.50	6.58	5.05	0.08	9.81	9.82	1.76	0.01	9.60	9.62	1.97	0.02	--	9.7	1.87	--	--	9.72	1.85	--
MW-5	8.35	--	NM	NM	--	N/A				N/A				N/A				N/A				N/A			
MW-6	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-6R	11.73	N/A				N/A				N/A				N/A				N/A				N/A			
MW-7	4.48	2.98	3.06	1.48	0.08	2.36	2.43	2.10	0.07	2.62	2.78	1.82	0.16	2.62	2.76	1.83	0.14	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13
MW-7R	4.48	--	NM	NM	--	--	3.32	1.16	--	--	2.52	1.96	--	--	2.52	1.96	--	--	2.75	1.73	--	--	2.37	2.11	--
MW-8	8.00	N/A				N/A				N/A				N/A				N/A				N/A			
MW-9	8.81	N/A				N/A				N/A				N/A				N/A				N/A			
MW-10	7.82	--	4.65	3.17	--	--	6.15	1.67	--	--	7.62	0.20	--	--	6.60	1.22	--	--	5.91	1.91	--	--	5.36	2.46	--
MW-11	7.82	--	5.97	1.85	--	--	5.61	2.21	--	--	6.63	1.19	--	--	6.15	1.67	--	--	6.69	1.13	--	--	5.72	2.10	--
MW-12	9.12	N/A				N/A				N/A				N/A				N/A				N/A			
MW-13	9.13	N/A				N/A				N/A				N/A				N/A				N/A			
MW-14	11.63	--	NM	NM	--	--	8.44	3.19	--	--	8.22	3.41	--	--	9.42	2.21	--	--	6.37	5.26	--	--	9.57	2.06	--
MW-15	11.51	--	10.12	1.39	--	--	NM	NM	--	--	9.55	1.96	--	--	9.46	2.05	--	--	6.38	5.13	--	--	9.48	2.03	--
MW-16	8.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-17	8.78	--	NM	NM	--	--	9.23	-0.45	--	--	6.94	1.84	--	--	6.89	1.89	--	--	6.64	2.14	--	--	6.21	2.57	--
MW-18	8.40	--	NM	NM	--	--	6.58	1.82	--	--	6.87	1.53	--	--	6.77	1.63	--	--	6.77	1.63	--	--	6.76	1.64	--
MW-19	4.41	3.08	3.1	1.33	0.02	2.80	2.92	1.58	0.12	2.72	2.75	1.68	0.03	--	2.62	1.79	--	2.82	2.9	1.57	0.08	--	2.37	2.04	--
MW-20	11.69	--	NM	NM	--	--	NM	NM	--	--	NM	NM	--	--	9.71	1.98	--	--	9.81	1.88	--	--	9.85	1.84	--
MW-21	8.17	--	NM	NM	--	--	6.55	1.62	--	--	5.91	2.26	--	--	5.92	2.25	--	--	5.89	2.28	--	--	6.01	2.16	--
MW-22	11.63	10.31	10.42	1.29	0.11	9.52	9.61	2.09	0.09	9.89	9.93	1.73	0.04	9.62	9.70	1.99	0.08	--	9.74	1.89	--	--	9.78	1.85	--
MW-23	8.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-24	8.86	N/A				N/A				N/A				N/A				N/A				N/A			
MW-25	9.29	N/A				N/A				N/A				N/A				N/A				N/A			
MW-27	9.55	N/A				N/A				N/A				N/A				N/A				N/A			
MW-28	9.10	N/A				N/A				N/A				N/A				N/A				N/A			
MW-30	8.70	N/A				N/A				N/A				N/A				N/A				N/A			
MW-31	9.27	N/A				N/A				N/A				N/A				N/A				N/A			
MW-32	7.76	N/A				N/A				N/A				N/A				N/A				N/A			
MW-33	9.49	--	5.87	3.62	--	--	6.10	3.39	--	--	7.33	2.16	--	--	7.33	2.16	--	--	7.00	2.49	--	--	6.79	2.7	--
MW-34	8.30	--	7.18	1.12	--	--	6.82	1.48	--	--	7.20	1.10	--	--	7.19	1.11	--	--	7.03	1.27	--	--	6.69	1.61	--
MW-35	NR	N/A				N/A				N/A				N/A				N/A				N/A			
MW-36	9.11	--	NM	NM	--	--	3.8	5.31	--	--	6.85	2.26	--	--	6.70	2.41	--	--	6.47	2.64	--	--	6.69	2.42	--
MW-37	4.45	--	NM	NM	--	--	2.78	1.67	--	--	2.66	1.79	--	--	2.12	2.33	--	--	2.64	1.81	--	--	2.28	2.17	--
MW-38	4.44	--	3.04	1.4	--	--	2.82	1.62	--	--	2.83	1.61	--	--	2.58	1.86	--	--	2.83	1.61	--	--	2.32	2.12	--
MW-40	8.49	7.39	7.40	1.10	0.01	--	6.80	1.69	--	--	7.01	1.48	--	--	6.63	1.86	--	--	6.98	1.51	--	--	6.81	1.68	--
MW-41	8.51	--	7.10	1.41	--	--	6.18	2.33	--	--	6.55	1.96	--	--	6.21	2.30	--	--	6.75	1.76	--	--	6.30	2.21	--
MW-42	9.37	--	8.08	1.29	--	7.44	7.45	1.93	0.01	7.47	7.48	1.90	0.01	7.43	7.44	1.94	0.01	--	7.60	1.77	--	--	7.33	2.04	--
MW-43	7.81	--	6.57	1.24	--	--	4.86	2.95	--	--	6.13	1.68	--	--	5.82	1.99	--	--	5.71	2.1	--	--	5.78	2.03	--
MW-44	9.15	--	7.90	1.25	--	--	6.18	2.97	--	--	7.38	1.77	--	--	7.09	2.06	--	--	6.95	2.2	--	--	7.05	2.1	--
MW-45	8.69	7.41	7.50	1.26	0.09	5.75	5.80	2.93	0.05	6.90	6.91	1.79	0.01	6.60	6.61	2.09	0.01	--	6.49	2.2	--	--	6.58	2.11	--
MW-46	7.69	--	6.91	0.78	--	--	5.75	1.94	--	--	5.89	1.80	--	--	6.65	1.04	--	--	5.52	2.17	--	--	5.60	2.09	--
MW-47	8.03	--	6.77	1.26	--	--	5.10	2.93	--	--	6.26	1.77	--	--	5.99	2.04	--	--	5.84	2.19	--	--	5.94	2.09	--
MW-48	11.43	--	10.10	1.33	--	--	6.28	5.15	--	--	9.65	1.78	--	--	9.40	2.03	--	--	9.47	1.96	--	--	9.55	1.88	--
Recovery Wells																									
RW-1	8.26	--	7.2	1.06	--	--	6.51	1.75	--	--	6.63	1.63	--	--	6.65	1.61	--	--	6.66	1.6	--	--	6.48	1.78	--
RW-2	9.81	--	7.6	2.21	--	--	6.54	3.27	--	--	7.38	2.43	--	--	7.29	2.52	--	--	7.02	2.79	--	--	6.77	3.04	--
RW-3	9.83	--	7.29	2.54	--	--	6.67	3.16	--	--	7.87	1.96	--	--	7.78	2.05	--	--	7.48	2.35	--	--	7.51	2.32	--
RW-4	10.2	--	8.68	1.52	--	--	6.98	3.22	--	--	8.2	2.00	--	--	7.84	2.36	--	--	7.69	2.51	--	--	7.82	2.38	--
RW-5	10.27	--	8.46	1.81	--	6.74	6.75	3.53	0.01	7.94	7.95	2.33	0.01	7.64	7.65	2.63	0.01	--	7.5	2.77	--	--	7.59	2.68	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured
N/A - No data as monitoring well was destroyed during the Remedial Action or was excluded from the monitoring network.

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:

Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
Assumes a specific gravity of 0.75

From: Jordanna Kendrot
Sent: Monday, June 12, 2017 11:17 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report May 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (May 25, 2017).pdf; Paragon.ISCO.Monitoring.pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

ISCO Implementation and Monitoring Activities:

Roux Associates completed the implementation of the April 11, 2017 in-situ chemical oxidation (ISCO) Design Plan submitted during the prior reporting period. As documented in the ISCO Design Plan, Site-wide ISCO treatment will be performed in a phased approach. Roux Associates initially addressed several representative areas across the Site that require some level of treatment. Once the effectiveness of this injection event has been demonstrated, the remaining areas will be treated. In accordance with the SMP, ISCO monitoring was conducted bi-weekly starting the week of May 15, 2017, with two monitoring events completed on May 18 and 25, 2017. Monitoring will continue into the next reporting period for approximately another month or until groundwater parameters return to baseline conditions.

The monitoring well network for this first ISCO injection event consists of monitoring wells MW-36, MW-38, MW-40, MW-41, MW-42, MW-44, and MW-47. The groundwater parameters that were specifically monitored to determine ISCO material influence are: pH, oxidation-reduction potential, conductivity, and dissolved oxygen. A summary of the parameters collected during this reporting period is provided in the attached figures. Effectiveness and influence of the ISCO injections will be discussed in the quarterly Inspection and Monitoring Report that will address all activities performed in the second quarter of 2017.

Routine Operation, Maintenance, Monitoring and Reporting Activities:

The monitoring wells within the SMP monitoring network were gauged during the two (2) monitoring events noted above. A summary of the gauging data collected during the reporting period is provided in the attached table.

Trace free-product was present in on-site monitoring wells MW-7, MW-17, and MW-19, with free-product continuing to be present in off-site monitoring wells MW-3. Absorbent socks were installed in these monitoring wells, with approximately 0.325 gallons of free-product absorbed in total from these monitoring wells based on the saturation of the absorbent sock. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product present in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (June 1 through June 30, 2017):

- Continue bi-weekly ISCO performance monitoring;
- Preparation and completion of quarterly gauging and collection of groundwater samples from monitoring wells within proposed SMP monitoring network;
- Evaluation of groundwater results and ISCO performance;
- Continued monthly O&M of LNAPL recovery system (as necessary);

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Jordanna Kendrot | Project Engineer | Roux Associates, Inc.
209 Shafter Street Islandia, New York 11749
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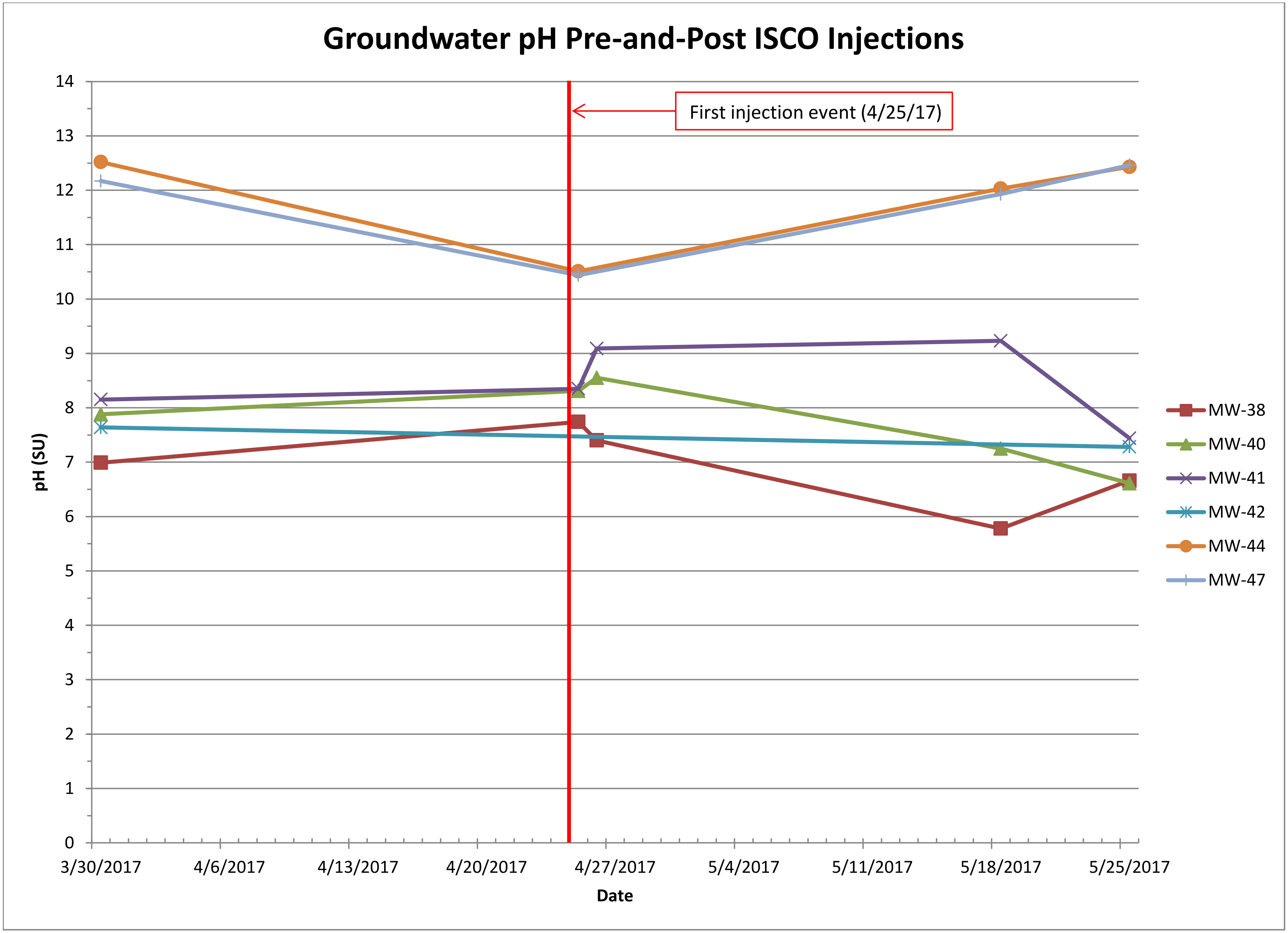
Summary of Water Level Elevations and LNAPL Thickness; May 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		January 19, 2017				February 14, 2017				March 30, 2017				April 24, 2017				May 18, 2017				May 25, 2017			
Well ID	**MPE (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**
Monitoring Wells																									
MW-2R	9.23	7.5	7.52	1.73	0.02	7.44	7.45	1.79	0.01	4.31	4.32	4.92	0.01	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--
MW-3	8.40	6.98	7.66	1.25	0.68	6.99	7.48	1.29	0.49	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21
MW-4	11.57	9.81	9.82	1.76	0.01	9.60	9.62	1.97	0.02	--	9.7	1.87	--	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--
MW-7	4.48	2.62	2.78	1.82	0.16	2.62	2.76	1.83	0.14	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01
MW-7R	4.48	--	2.52	1.96	--	--	2.52	1.96	--	--	2.75	1.73	--	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--
MW-10	7.82	--	7.62	0.20	--	--	6.60	1.22	--	--	5.91	1.91	--	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--
MW-11	7.82	--	6.63	1.19	--	--	6.15	1.67	--	--	6.69	1.13	--	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--
MW-14	11.63	--	8.22	3.41	--	--	9.42	2.21	--	--	6.37	5.26	--	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--
MW-15	11.51	--	9.55	1.96	--	--	9.46	2.05	--	--	6.38	5.13	--	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--
MW-17	8.78	--	6.94	1.84	--	--	6.89	1.89	--	--	6.64	2.14	--	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--
MW-18	8.40	--	6.87	1.53	--	--	6.77	1.63	--	--	6.77	1.63	--	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--
MW-19	4.41	2.72	2.75	1.68	0.03	--	2.62	1.79	--	2.82	2.9	1.57	0.08	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--
MW-20	11.69	--	NM	NM	--	--	9.71	1.98	--	--	9.81	1.88	--	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--
MW-21	8.17	--	5.91	2.26	--	--	5.92	2.25	--	--	5.89	2.28	--	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--
MW-22	11.63	9.89	9.93	1.73	0.04	9.62	9.70	1.99	0.08	--	9.74	1.89	--	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--
MW-33	9.49	--	7.33	2.16	--	--	7.33	2.16	--	--	7.00	2.49	--	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--
MW-34	8.30	--	7.20	1.10	--	--	7.19	1.11	--	--	7.03	1.27	--	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--
MW-36	9.11	--	6.85	2.26	--	--	6.70	2.41	--	--	6.47	2.64	--	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--
MW-37	4.45	--	2.66	1.79	--	--	2.12	2.33	--	--	2.64	1.81	--	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--
MW-38	4.44	--	2.83	1.61	--	--	2.58	1.86	--	--	2.83	1.61	--	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--
MW-40	8.49	--	7.01	1.48	--	--	6.63	1.86	--	--	6.98	1.51	--	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--
MW-41	8.51	--	6.55	1.96	--	--	6.21	2.30	--	--	6.75	1.76	--	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--
MW-42	9.37	7.47	7.48	1.90	0.01	7.43	7.44	1.94	0.01	--	7.60	1.77	--	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--
MW-43	7.81	--	6.13	1.68	--	--	5.82	1.99	--	--	5.71	2.1	--	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--
MW-44	9.15	--	7.38	1.77	--	--	7.09	2.06	--	--	6.95	2.2	--	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--
MW-45	8.69	6.90	6.91	1.79	0.01	6.60	6.61	2.09	0.01	--	6.49	2.2	--	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--
MW-46	7.69	--	5.89	1.80	--	--	6.65	1.04	--	--	5.52	2.17	--	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--
MW-47	8.03	--	6.26	1.77	--	--	5.99	2.04	--	--	5.84	2.19	--	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--
MW-48	11.43	--	9.65	1.78	--	--	9.40	2.03	--	--	9.47	1.96	--	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--
Recovery Wells																									
RW-1	8.26	--	6.63	1.63	--	--	6.65	1.61	--	--	6.66	1.6	--	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--
RW-2	9.81	--	7.38	2.43	--	--	7.29	2.52	--	--	7.02	2.79	--	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--
RW-3	9.83	--	7.87	1.96	--	--	7.78	2.05	--	--	7.48	2.35	--	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--
RW-4	10.2	--	8.2	2.00	--	--	7.84	2.36	--	--	7.69	2.51	--	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--
RW-5	10.27	7.94	7.95	2.33	0.01	7.64	7.65	2.63	0.01	--	7.5	2.77	--	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--

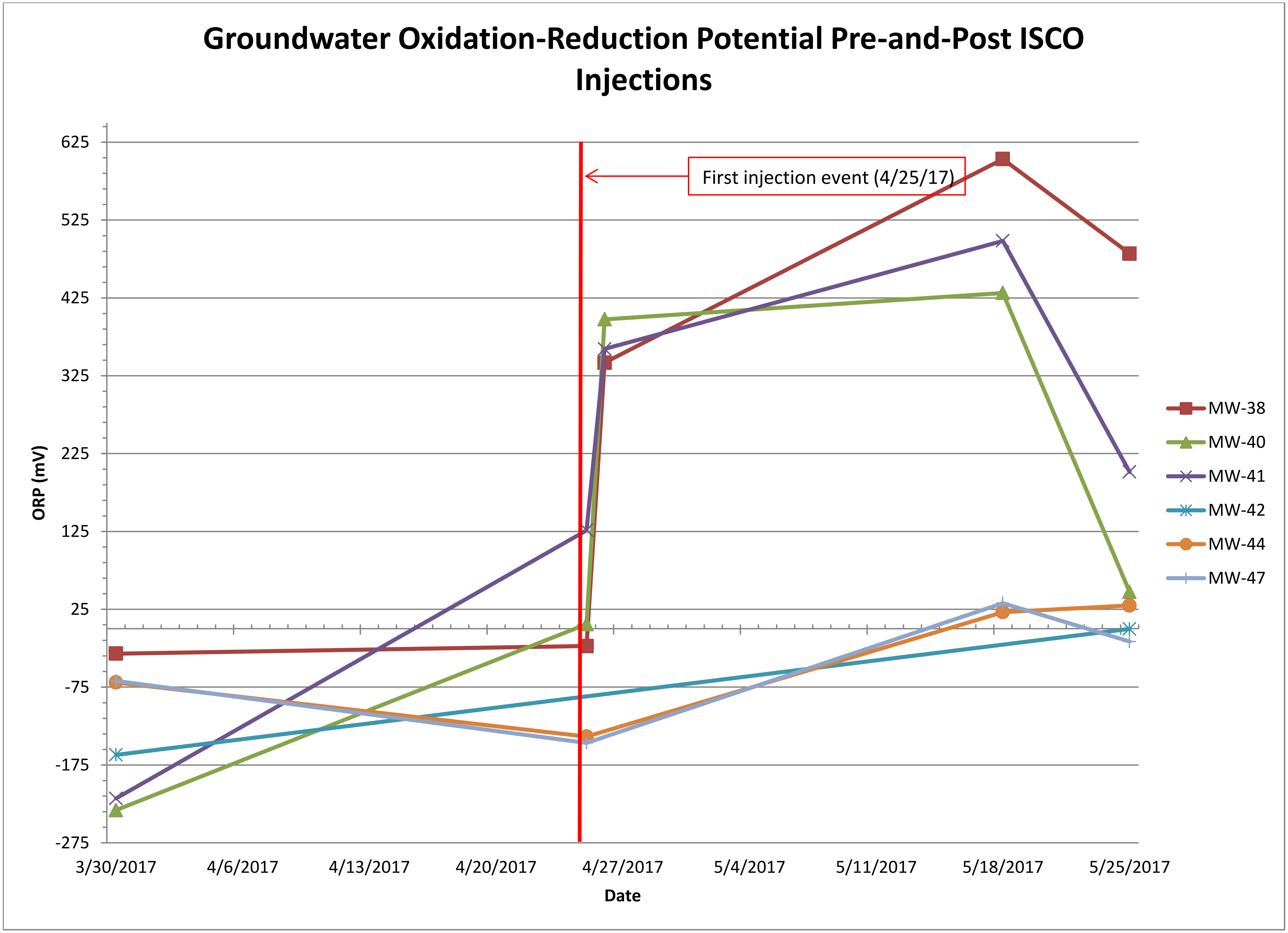
Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured
N/A - No data as monitoring well was destroyed during the Remedial Action or was excluded from the monitoring network.

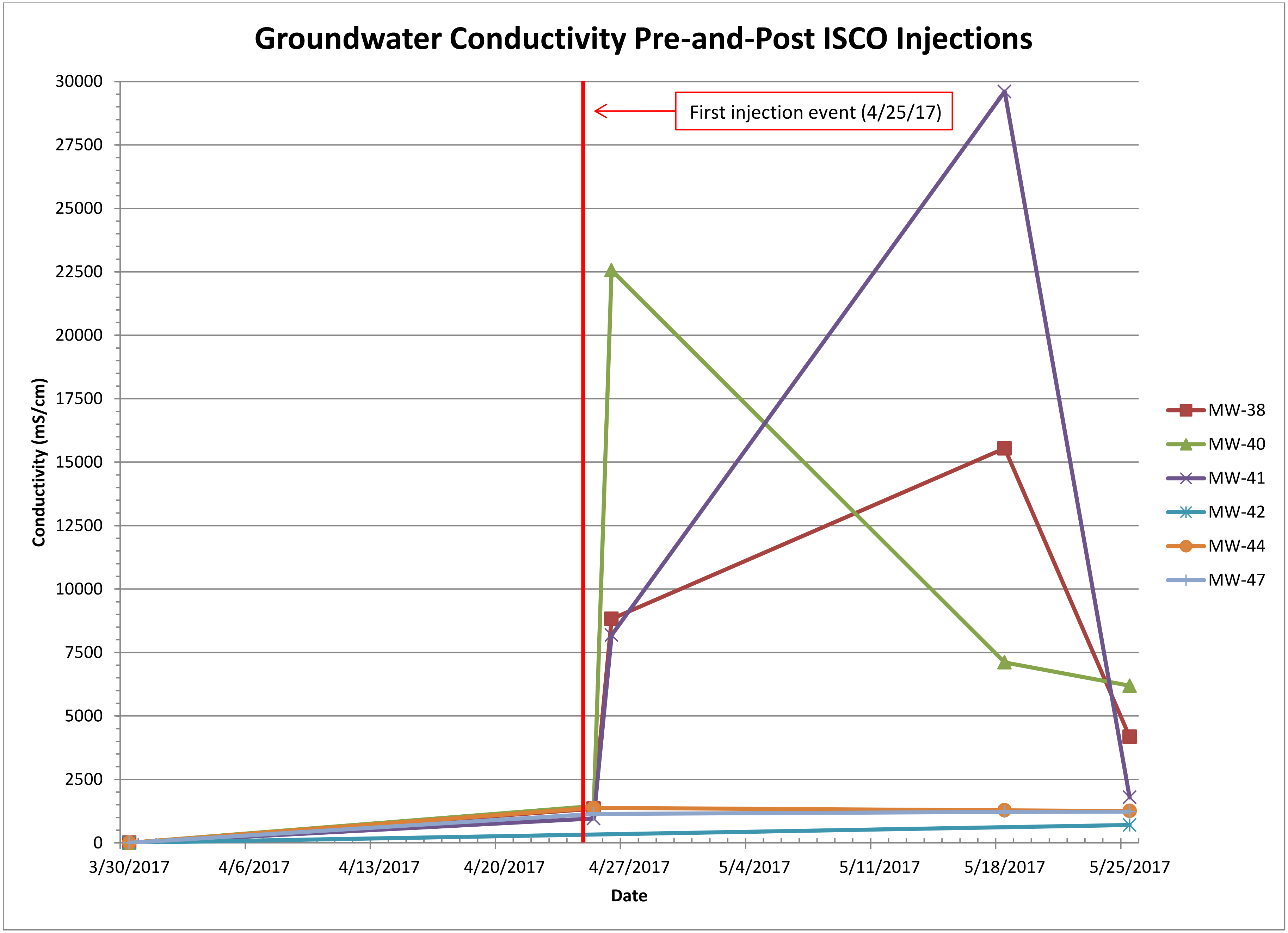
1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.



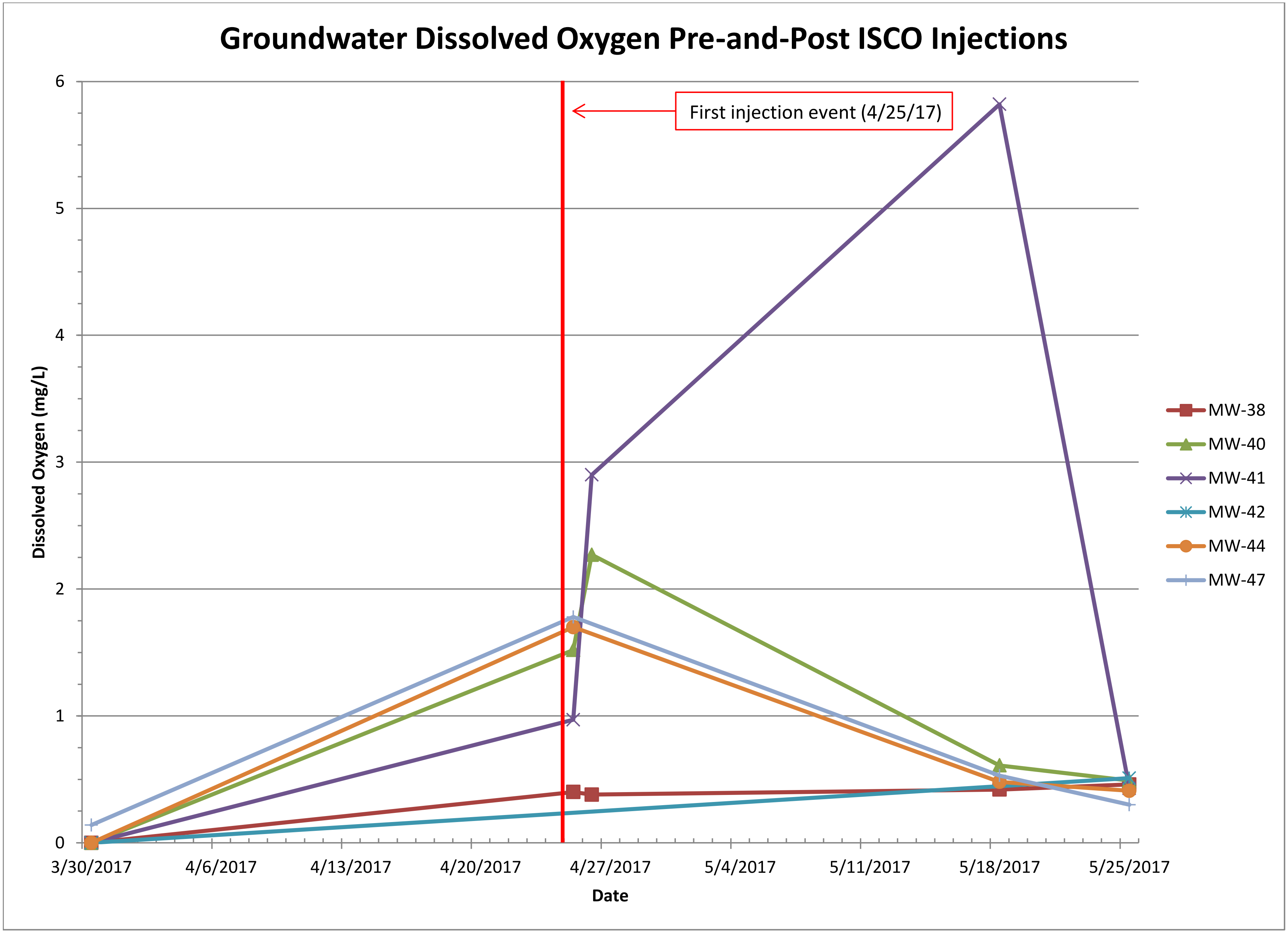
Groundwater pH Pre-and-Post ISCO Injections
First injection event (4/25/17)
pH (SU)
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47



Groundwater Oxidation-Reduction Potential Pre-and-Post ISCO Injections
First injection event (4/25/17)
ORP (mV)
625
525
425
325
225
125
25
-75
-175
-275
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47



Groundwater Conductivity Pre-and-Post ISCO Injections
First injection event (4/25/17)
Conductivity (mS/cm)
30000
27500
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47


Groundwater Dissolved Oxygen Pre-and-Post ISCO Injections
First injection event (4/25/17)
Dissolved Oxygen (mg/L)
0
1
2
3
4
5
6
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47

From: Jordanna Kendrot
Sent: Tuesday, July 11, 2017 4:29 AM
To: Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc: O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report June 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (June 22, 2017).pdf; Paragon.ISCO.Monitoring.06.22.17.pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

ISCO Implementation and Monitoring Activities:

As part of the NYSDEC-approved in-situ chemical oxidation (ISCO) Design Plan, effectiveness of the injection event would be monitored to confirm influence. In accordance with the SMP, ISCO monitoring was conducted bi-weekly starting the week of May 15, 2017, with two monitoring events completed this reporting period on June 6 and 22, 2017. During this reporting period it was observed that groundwater parameters returned to approximate baseline conditions and thus were sampled during the quarterly groundwater monitoring and sampling event, further discussed below.

The monitoring well network for this first ISCO injection event consisted of monitoring wells MW-36, MW-38, MW-40, MW-41, MW-42, MW-44, and MW-47. The groundwater parameters that were specifically monitored to determine ISCO material influence are: pH, oxidation-reduction potential, conductivity, and dissolved oxygen. A summary of the parameters collected during this reporting period is provided in the attached figures. Effectiveness and influence of the ISCO injections will be discussed in the quarterly Inspection and Monitoring Report that will address all activities performed in the second quarter of 2017.

Routine Operation, Maintenance, Monitoring and Reporting Activities:

The monitoring wells within the SMP monitoring network were gauged during the two (2) monitoring events noted above. A summary of the gauging data collected during the reporting period is provided in the attached table.

On March 30, 2017, Roux Associates completed the quarterly groundwater gauging and sampling of the 21 monitoring wells included in the SMP monitoring network. If the presence of free-product was observed, the monitoring well was not sampled. The remaining monitoring wells within the network were sampled and analyzed for VOCs. The five (5) recovery wells (RW-1 through RW-5) onsite and an additional nine (9) monitoring wells both onsite and offsite were gauged in addition to the monitoring wells above to determine the presence of LNAPL.

Trace free-product was present in on-site monitoring well MW-7, with free-product continuing to be present in off-site monitoring wells MW-3. Absorbent socks were installed in these monitoring wells, with approximately 0.438 gallons of free-product absorbed in total from these monitoring wells based on the saturation of the absorbent sock. An additional 1.5 gallons of product was manually bailed from monitoring well MW-3, with the recovered product and saturated absorbent socks being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product present in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling/ Sample Results:

During this reporting period, 19 groundwater samples were collected from the following monitoring wells:

- MW-2R
- MW-4
- MW-7
- MW-10
- MW-11
- MW-19
- MW-21
- MW-33
- MW-34
- MW-38
- MW-40
- MW-41
- MW-42
- MW-43
- MW-44
- MW-45
- MW-46
- MW-47
- MW-48

The results of this quarterly sampling round will be presented and discussed in a Quarterly Status Report. This report will be submitted under separate cover in the upcoming reporting period (July 2017).

Planned Actions:

The following activities are scheduled for the next reporting period (July 1 through July 31, 2017):

- Evaluation of groundwater results and ISCO performance;
- Preparation and submittal of quarterly status report;
- Continued monthly gauging of monitoring wells within SMP monitoring network; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

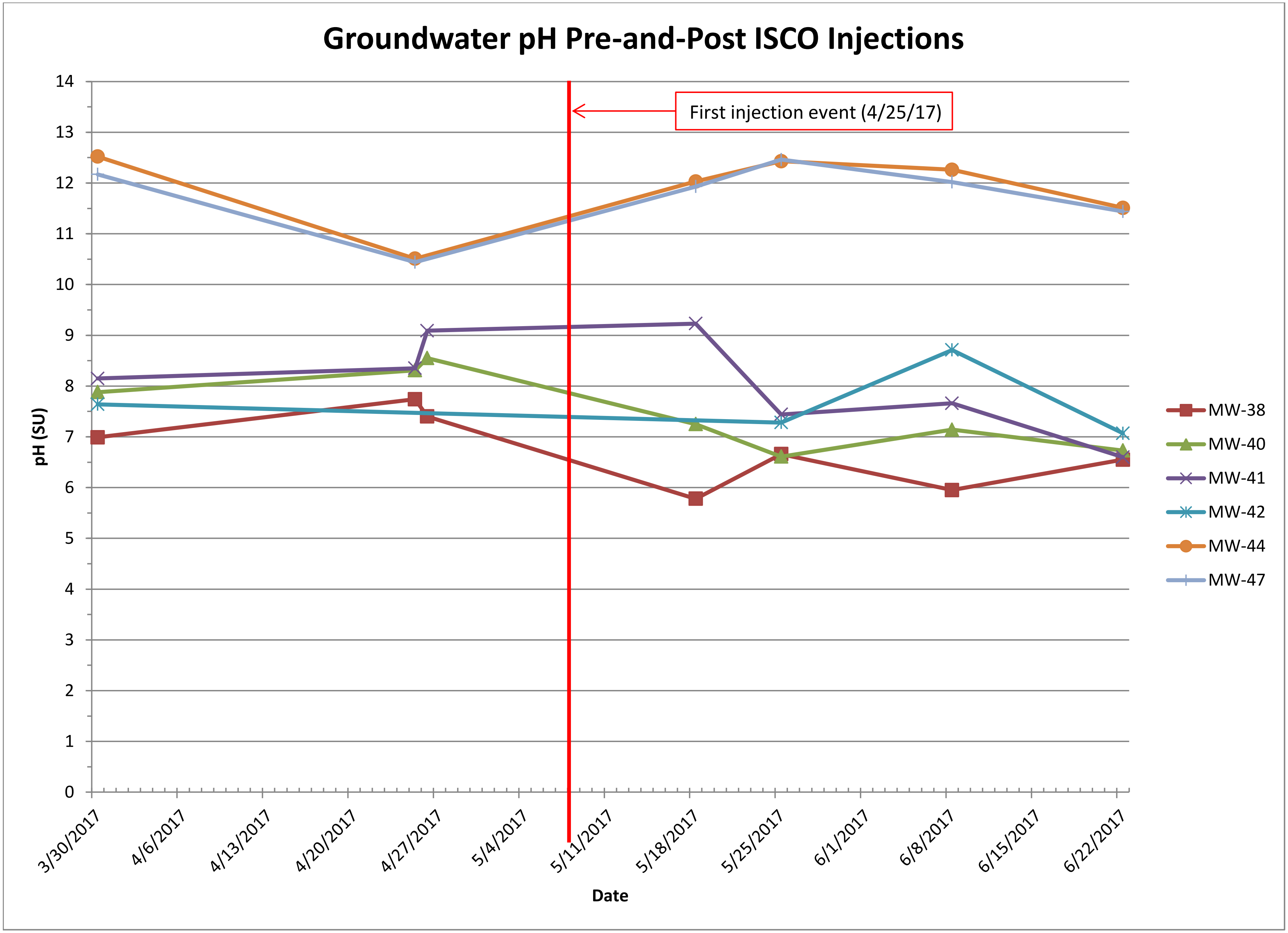
Jordanna Kendrot | Project Engineer | Roux Associates, Inc.
209 Shafter Street Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2356 | Mobile: 631.741.7142
Email: jkendrot@rouxinc.com | Website: www.rouxinc.com

Summary of Water Level Elevations and LNAPL Thickness; May 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

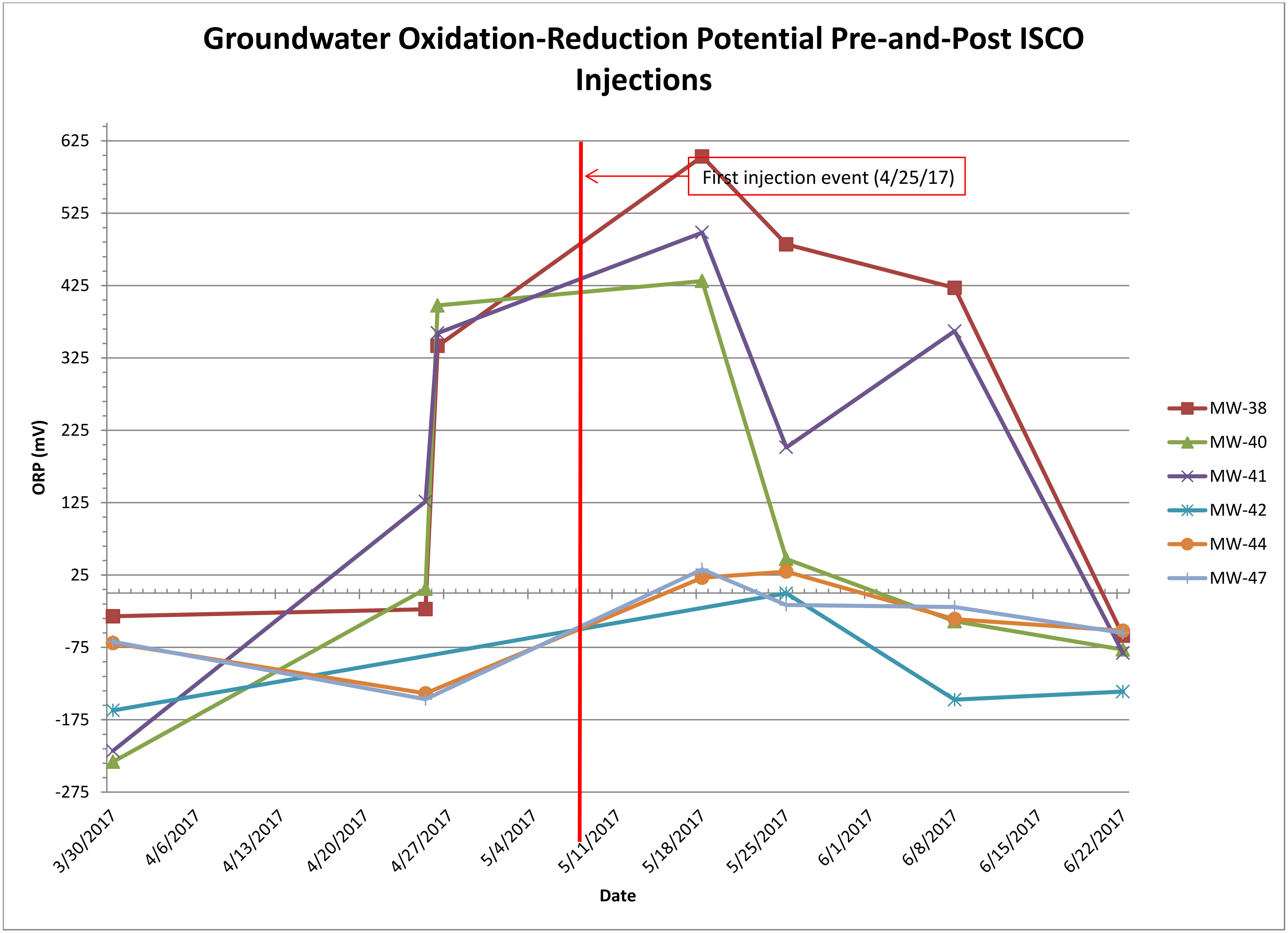
		January 19, 2017				February 14, 2017				March 30, 2017				April 24, 2017				May 18, 2017				May 25, 2017				June 8, 2017				June 22, 2017			
Well ID	**MPE (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**
Monitoring Wells																																	
MW-2R	9.23	7.5	7.52	1.73	0.02	7.44	7.45	1.79	0.01	4.31	4.32	4.92	0.01	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--	--	7.05	2.18	--	--	6.95	2.28	--
MW-3	8.40	6.98	7.66	1.25	0.68	6.99	7.48	1.29	0.49	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78
MW-4	11.57	9.81	9.82	1.76	0.01	9.60	9.62	1.97	0.02	--	9.7	1.87	--	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--	--	9.77	1.80	--	--	9.79	1.78	--
MW-7	4.48	2.62	2.78	1.82	0.16	2.62	2.76	1.83	0.14	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01
MW-7R	4.48	--	2.52	1.96	--	--	2.52	1.96	--	--	2.75	1.73	--	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--	--	2.27	2.21	--	--	2.14	2.34	--
MW-10	7.82	--	7.62	0.20	--	--	6.60	1.22	--	--	5.91	1.91	--	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--	--	5.82	2.00	--	--	6.40	1.42	--
MW-11	7.82	--	6.63	1.19	--	--	6.15	1.67	--	--	6.69	1.13	--	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--	--	5.79	2.03	--	--	5.85	1.97	--
MW-14	11.63	--	8.22	3.41	--	--	9.42	2.21	--	--	6.37	5.26	--	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--	--	9.56	2.07	--	--	9.33	2.30	--
MW-15	11.51	--	9.55	1.96	--	--	9.46	2.05	--	--	6.38	5.13	--	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--	--	9.50	2.01	--	--	9.36	2.15	--
MW-17	8.78	--	6.94	1.84	--	--	6.89	1.89	--	--	6.64	2.14	--	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--	--	6.08	2.70	--	--	6.18	2.60	--
MW-18	8.40	--	6.87	1.53	--	--	6.77	1.63	--	--	6.77	1.63	--	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--	--	6.96	1.44	--	--	7.06	1.34	--
MW-19	4.41	2.72	2.75	1.68	0.03	--	2.62	1.79	--	2.82	2.9	1.57	0.08	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--	--	2.17	2.24	--	--	2.24	2.17	--
MW-20	11.69	--	NM	NM	--	--	9.71	1.98	--	--	9.81	1.88	--	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--	--	9.89	1.80	--	--	9.88	1.81	--
MW-21	8.17	--	5.91	2.26	--	--	5.92	2.25	--	--	5.89	2.28	--	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--	--	6.26	1.91	--	--	6.03	2.14	--
MW-22	11.63	9.89	9.93	1.73	0.04	9.62	9.70	1.99	0.08	--	9.74	1.89	--	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--	--	9.80	1.83	--	--	9.81	1.82	--
MW-33	9.49	--	7.33	2.16	--	--	7.33	2.16	--	--	7.00	2.49	--	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--	--	6.79	2.70	--	--	6.19	3.30	--
MW-34	8.30	--	7.20	1.10	--	--	7.19	1.11	--	--	7.03	1.27	--	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--	--	6.84	1.46	--	--	7.07	1.23	--
MW-36	9.11	--	6.85	2.26	--	--	6.70	2.41	--	--	6.47	2.64	--	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--	--	6.53	2.58	--	--	6.19	2.92	--
MW-37	4.45	--	2.66	1.79	--	--	2.12	2.33	--	--	2.64	1.81	--	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--	--	2.04	2.41	--	--	2.30	2.15	--
MW-38	4.44	--	2.83	1.61	--	--	2.58	1.86	--	--	2.83	1.61	--	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--	--	2.26	2.18	--	--	2.41	2.03	--
MW-40	8.49	--	7.01	1.48	--	--	6.63	1.86	--	--	6.98	1.51	--	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--	--	7.09	1.40	--	--	7.16	1.33	--
MW-41	8.51	--	6.55	1.96	--	--	6.21	2.30	--	--	6.75	1.76	--	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--	--	6.52	1.99	--	--	6.78	1.73	--
MW-42	9.37	7.47	7.48	1.90	0.01	7.43	7.44	1.94	0.01	--	7.60	1.77	--	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--	--	7.40	1.97	--	--	7.54	1.83	--
MW-43	7.81	--	6.13	1.68	--	--	5.82	1.99	--	--	5.71	2.1	--	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--	--	5.57	2.24	--	--	5.19	2.62	--
MW-44	9.15	--	7.38	1.77	--	--	7.09	2.06	--	--	6.95	2.2	--	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--	--	6.85	2.3	--	--	6.43	2.72	--
MW-45	8.69	6.90	6.91	1.79	0.01	6.60	6.61	2.09	0.01	--	6.49	2.2	--	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--	--	6.40	2.29	--	--	5.84	2.85	--
MW-46	7.69	--	5.89	1.80	--	--	6.65	1.04	--	--	5.52	2.17	--	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--	--	5.39	2.30	--	--	4.96	2.73	--
MW-47	8.03	--	6.26	1.77	--	--	5.99	2.04	--	--	5.84	2.19	--	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--	--	5.70	2.33	--	--	5.32	2.71	--
MW-48	11.43	--	9.65	1.78	--	--	9.40	2.03	--	--	9.47	1.96	--	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--	--	9.89	1.54	--	--	9.53	1.90	--
Recovery Wells																																	
RW-1	8.26	--	6.63	1.63	--	--	6.65	1.61	--	--	6.66	1.6	--	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--	--	6.36	1.90	--	--	6.29	1.97	--
RW-2	9.81	--	7.38	2.43	--	--	7.29	2.52	--	--	7.02	2.79	--	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--	--	6.66	3.15	--	--	6.79	3.02	--
RW-3	9.83	--	7.87	1.96	--	--	7.78	2.05	--	--	7.48	2.35	--	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--	--	7.30	2.53	--	--	6.92	2.91	--
RW-4	10.2	--	8.2	2.00	--	--	7.84	2.36	--	--	7.69	2.51	--	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--	--	7.62	2.58	--	--	7.70	2.50	--
RW-5	10.27	7.94	7.95	2.33	0.01	7.64	7.65	2.63	0.01	--	7.5	2.77	--	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--	--	7.58	2.69	--	--	6.98	3.29	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NR - Not Recorded
NC - Not Calculated[2]
NM - Not Measured
N/A - No data as monitoring well was destroyed during the Remedial Action or was excluded from the monitoring network.

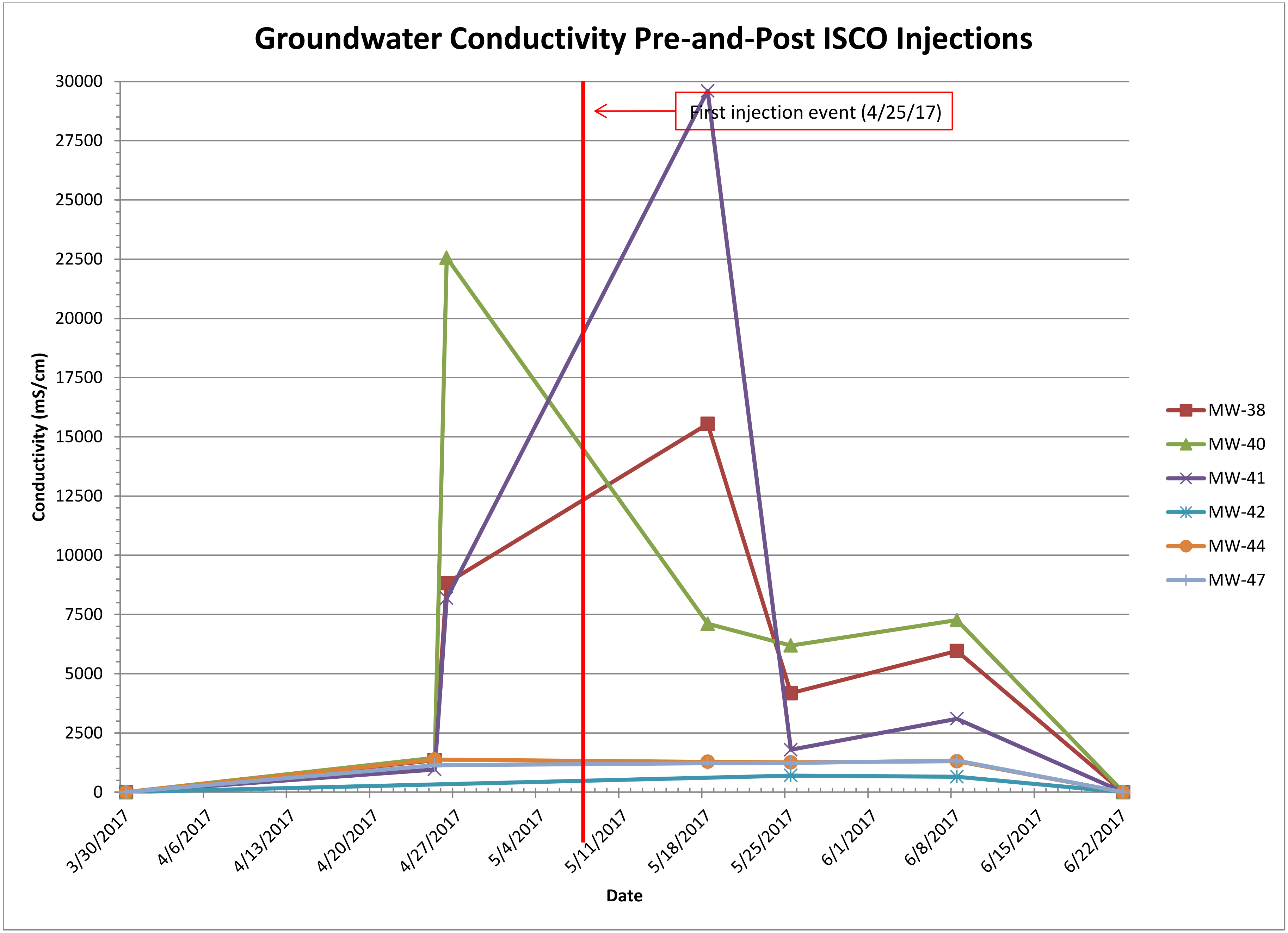
1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

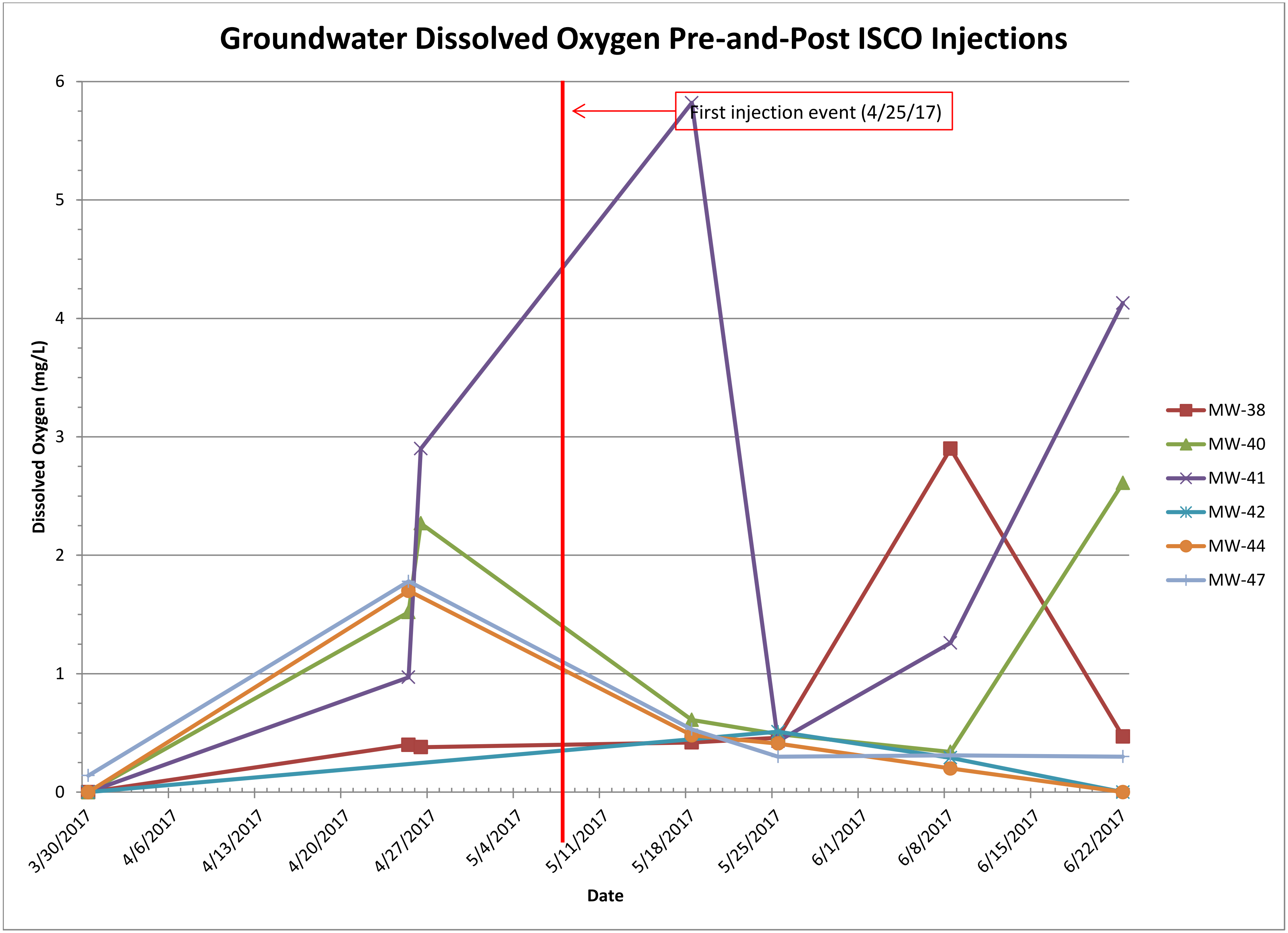


Groundwater pH Pre-and-Post ISCO Injections
First injection event (4/25/17)
pH (SU)
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
6/1/2017
6/8/2017
6/15/2017
6/22/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47



Groundwater Oxidation-Reduction Potential Pre-and-Post ISCO Injections
First injection event (4/25/17)
ORP (mV)
625
525
425
325
225
125
25
-75
-175
-275
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
6/1/2017
6/8/2017
6/15/2017
6/22/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47


Groundwater Conductivity Pre-and-Post ISCO Injections
Conductivity (mS/cm)
30000
27500
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
First injection event (4/25/17)
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
6/1/2017
6/8/2017
6/15/2017
6/22/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47



Groundwater Dissolved Oxygen Pre-and-Post ISCO Injections
First injection event (4/25/17)
Dissolved Oxygen (mg/L)
0
1
2
3
4
5
6
3/30/2017
4/6/2017
4/13/2017
4/20/2017
4/27/2017
5/4/2017
5/11/2017
5/18/2017
5/25/2017
6/1/2017
6/8/2017
6/15/2017
6/22/2017
Date
MW-38
MW-40
MW-41
MW-42
MW-44
MW-47

From:	Jordanna Kendrot
Sent:	Wednesday, August 9, 2017 2:12 PM
To:	Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)
Cc:	O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov); Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov); Brent Carrier (CRE Development) (bcarrier@credevelopment.com); 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject:	Progress Report July 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments:	Water Level Elevations and LNAPL thickness (July 27, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Routine Operation, Maintenance, Monitoring and Reporting Activities:
To continue the ongoing assessment of measureable LNAPL in on-site and off-site monitoring and recovery wells, the SMP monitoring well network has been gauged on a monthly basis. Additional monitoring wells outside this network were gauged to determine the presence of LNAPL. The gauging of these additional monitoring wells has been performed monthly for the six (6) month period following Certificate of Completion issuance.

As of June 2017, the gauging of the entire SMP monitoring well network will be performed on a quarterly basis during the quarterly groundwater sampling event. Consistent with the requirements of the SMP, LNAPL monitoring and manual recovery efforts will continue to be performed on a monthly basis at all recovery wells (RW-1 through RW-5) and monitoring wells where LNAPL was observed during the last quarter (MW-2R, MW-3, MW-4, MW-7, MW-17, and MW-19). As necessary, monitoring wells can be added to this LNAPL assessment network.

On July 27, 2017, the wells noted above were gauged. A summary of the gauging data collected during the reporting period is provided in the attached table.

Trace free-product (<0.1 feet) was detected in on-site monitoring wells MW-2R and MW-7, with free-product continuing to be present in off-site monitoring wells MW-3. Manual bailing was completed at monitoring wells MW-2R and MW-7 with approximately 0.2 gallons of free-product recovered from the on-site monitoring wells (0.1 gallons each) and an additional 1.5 gallons of product manually bailed from monitoring well MW-3. Absorbent socks were installed at these monitoring wells. Recovered product and saturated absorbent socks are being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product present in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling/ Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (August 1 through August 31, 2017):

- Evaluation of groundwater results and ISCO performance;

- Preparation and submittal of quarterly status report;
- Continued monthly gauging of monitoring wells within SMP monitoring network with a historic presence of LNAPL; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Jordanna Kendrot | Project Engineer | Roux Associates, Inc.
209 Shafter Street Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2356 | Mobile: 631.741.7142
Email: jkendrot@rouxinc.com | Website: www.rouxinc.com

Summary of Water Level Elevations and LNAPL Thickness; July 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		March 30, 2017				April 24, 2017				May 18, 2017				May 25, 2017				June 8, 2017				June 22, 2017				July 27, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																													
MW-2R	9.23	4.31	4.32	4.92	0.01	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--	--	7.05	2.18	--	--	6.95	2.28	--	6.92	6.94	2.29	0.02
MW-3	8.40	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78	6.78	8.39	1.22	1.61
MW-4	11.57	--	9.7	1.87	--	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--	--	9.77	1.80	--	--	9.79	1.78	--	--	9.76	1.81	--
MW-7	4.48	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01	2.75	2.76	1.73	0.01
MW-7R	4.48	--	2.75	1.73	--	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--	--	2.27	2.21	--	--	2.14	2.34	--	--	NM	NC	--
MW-10	7.82	--	5.91	1.91	--	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--	--	5.82	2.00	--	--	6.40	1.42	--	--	NM	NC	--
MW-11	7.82	--	6.69	1.13	--	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--	--	5.79	2.03	--	--	5.85	1.97	--	--	NM	NC	--
MW-14	11.63	--	6.37	5.26	--	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--	--	9.56	2.07	--	--	9.33	2.30	--	--	NM	NC	--
MW-15	11.51	--	6.38	5.13	--	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--	--	9.50	2.01	--	--	9.36	2.15	--	--	NM	NC	--
MW-17	8.78	--	6.64	2.14	--	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--	--	6.08	2.70	--	--	6.18	2.60	--	--	5.90	2.88	--
MW-18	8.40	--	6.77	1.63	--	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--	--	6.96	1.44	--	--	7.06	1.34	--	--	NM	NC	--
MW-19	4.41	2.82	2.9	1.57	0.08	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--	--	2.17	2.24	--	--	2.24	2.17	--	--	2.33	2.08	--
MW-20	11.69	--	9.81	1.88	--	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--	--	9.89	1.80	--	--	9.88	1.81	--	--	NM	NC	--
MW-21	8.17	--	5.89	2.28	--	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--	--	6.26	1.91	--	--	6.03	2.14	--	--	NM	NC	--
MW-22	11.63	--	9.74	1.89	--	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--	--	9.80	1.83	--	--	9.81	1.82	--	--	NM	NC	--
MW-33	9.49	--	7.00	2.49	--	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--	--	6.79	2.70	--	--	6.19	3.30	--	--	NM	NC	--
MW-34	8.30	--	7.03	1.27	--	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--	--	6.84	1.46	--	--	7.07	1.23	--	--	NM	NC	--
MW-36	9.11	--	6.47	2.64	--	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--	--	6.53	2.58	--	--	6.19	2.92	--	--	NM	NC	--
MW-37	4.45	--	2.64	1.81	--	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--	--	2.04	2.41	--	--	2.30	2.15	--	--	NM	NC	--
MW-38	4.44	--	2.83	1.61	--	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--	--	2.26	2.18	--	--	2.41	2.03	--	--	NM	NC	--
MW-40	8.49	--	6.98	1.51	--	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--	--	7.09	1.40	--	--	7.16	1.33	--	--	NM	NC	--
MW-41	8.51	--	6.75	1.76	--	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--	--	6.52	1.99	--	--	6.78	1.73	--	--	NM	NC	--
MW-42	9.37	--	7.60	1.77	--	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--	--	7.40	1.97	--	--	7.54	1.83	--	--	NM	NC	--
MW-43	7.81	--	5.71	2.1	--	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--	--	5.57	2.24	--	--	5.19	2.62	--	--	NM	NC	--
MW-44	9.15	--	6.95	2.2	--	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--	--	6.85	2.3	--	--	6.43	2.72	--	--	NM	NC	--
MW-45	8.69	--	6.49	2.2	--	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--	--	6.40	2.29	--	--	5.84	2.85	--	--	NM	NC	--
MW-46	7.69	--	5.52	2.17	--	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--	--	5.39	2.30	--	--	4.96	2.73	--	--	NM	NC	--
MW-47	8.03	--	5.84	2.19	--	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--	--	5.70	2.33	--	--	5.32	2.71	--	--	NM	NC	--
MW-48	11.43	--	9.47	1.96	--	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--	--	9.89	1.54	--	--	9.53	1.90	--	--	NM	NC	--
Recovery Wells																													
RW-1	8.26	--	6.66	1.6	--	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--	--	6.36	1.90	--	--	6.29	1.97	--	--	6.24	2.02	--
RW-2	9.81	--	7.02	2.79	--	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--	--	6.66	3.15	--	--	6.79	3.02	--	--	6.52	3.29	--
RW-3	9.83	--	7.48	2.35	--	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--	--	7.30	2.53	--	--	6.92	2.91	--	--	7.01	2.82	--
RW-4	10.2	--	7.69	2.51	--	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--	--	7.62	2.58	--	--	7.70	2.50	--	--	7.31	2.89	--
RW-5	10.27	--	7.5	2.77	--	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--	--	7.58	2.69	--	--	6.98	3.29	--	--	7.1	3.17	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

209 SHAFTER STREET
ISLANDIA, NEW YORK 11749
TEL: 631-232-2600
FAX: 631 232-9898

August 23, 2017

Ms. Sondra Martinkat
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
Region Two
47-40 21st Street
Long Island City, New York 11101

Re: Quarterly Inspection and Monitoring Report - April to June 2017
Paragon Paint and Varnish Corp., Long Island, New York, Site No. C241108

Dear Ms. Martinkat:

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering), on behalf of CSC 4540 Property Co. LLC, have generated this quarterly inspection and monitoring report to summarize operation, maintenance and monitoring activities being performed at the Paragon Paint and Varnish Corp. located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, Queens, New York (Site). The Site is currently under site management pursuant to Site Management Plan (SMP) approved by the New York State Department of Environmental Conservation (NYSDEC) in November 2016 under the NYSDEC Brownfield Cleanup Program (BCP), Site No. C241108. During this reporting period (April to June 2017), the composite cover system and institutional controls (ICs) were not modified. In addition, the following activities, as described herein, were specifically performed:

- Monthly operation and maintenance (O&M) of the Light Non-Aqueous Phase Liquid (LNAPL) recovery system (as necessary);
- Monthly gauging of SMP monitoring network to assess presence of LNAPL;
- Monthly LNAPL recovery using manual bailing techniques, where applicable, within SMP monitoring network;
- Quarterly monitoring (gauging and sampling) of Site monitoring wells;
- Preparation and submittal Design Plan for 1st post-remediation in-situ chemical oxidation (ISCO) treatment;
- Implementation of 1st post-remediation ISCO injection event; and
- Implementation and completion of bi-weekly ISCO performance monitoring.

Site-Wide Inspection and O&M of the LNAPL Recovery System

Based on the lack of recoverable amounts of product identified during the previous reporting period, the operation and monthly maintenance of the LNAPL recovery system has been temporarily paused starting March 30, 2017 as documented in prior monthly progress report to the NYSDEC. Inspection of the Site and the system itself, while not operating, are included in Attachment 1. Monthly monitoring of the recovery wells (RW-1 through RW-5) was continued to confirm the lack of LNAPL. Gauging data generated during the reporting period for each recovery well is presented in tabular form in Attachment 2. If the presence of recoverable LNAPL returns at these recovery wells, operation of the LNAPL recovery system will resume.

Gauging and Manual LNAPL Recovery

To continue the ongoing assessment of measureable LNAPL in on-site and off-site monitoring and recovery wells, the SMP monitoring well network is gauged on a monthly basis. Additional monitoring wells outside this network were gauged periodically to determine the presence of LNAPL.

Consistent with the requirements of the SMP, LNAPL monitoring and manual recovery efforts will continue to be performed on a monthly basis at all recovery wells (RW-1 through RW-5) and monitoring wells (MW-3, MW-7, and MW-19) where LNAPL continued to be present throughout the entirety of the reporting period. As necessary, monitoring wells can be added to this LNAPL assessment network.

If the presence of LNAPL in the monitoring wells was observed to be greater than trace amounts (i.e., >0.01'), the monitoring well was manually bailed with a total of approximately 3 gallons of LNAPL recovered this reporting period. Note, oil absorbing socks were installed at monitoring wells MW-2R, MW-3, MW-7, MW-17, MW-19, and MW-42 to facilitate removal of trace product at those locations.

All gauging and manual LNAPL recovery data generated during the reporting period is provided in tabular form in Attachment 3 with a more focused and condensed summary of monitoring wells with the presence of LNAPL provided below:

Monitoring Well ID	LNAPL Thickness Measurements					LNAPL Recovered	
	April 2017 (1 event)	May 2017 (2 events)		June 2017 (2 events)		Absorbent Sock **	Manual Bailing
MW-2R*	0.0 feet	0.0 feet	0.0 feet	0.0 feet	0.0 feet	0.20 gallons	N/A
MW-3* (Off-Site)	1.13 feet	0.99 feet	1.21 feet	1.37 feet	1.78 feet	0.938 gallons	1.625 gallons
MW-7*	0.13 feet	0.01 feet (trace)	0.01 feet (trace)	0.01 feet (trace)	0.01 feet (trace)	0.025 gallons	N/A
MW-17	0.0 feet	0.01 feet (trace)	0.0 feet	0.0 feet	0.0 feet	N/A	N/A
MW-19*	0.0 feet	0.01 feet (trace)	0.0 feet	0.0 feet	0.0 feet	0.20 gallons	N/A
MW-42*	0.0 feet	0.0 feet	0.0 feet	0.0 feet	0.0 feet	0.075 gallons	N/A

* - Absorbent sock was removed and/or changed out of the monitoring well on April 24 and May 18, 2017.
** - LNAPL recovered was calculated based on percent-saturation of absorbent socks following removal.

Based on a review of the gauging and manual LNAPL recovery data generated during the reporting period, the following key observations and trends are provided below:

- The presence of LNAPL was noted at one point during the monitoring period at four (4) monitoring wells: MW-3, MW-7, MW-17, and MW-19.
- LNAPL recovery noted at monitoring wells MW-2R and MW-42 was due to removal of oil absorbent sock installed the previous reporting period. No LNAPL has been detected following removal of the oil absorbent socks.
- Based on the June 2017 gauging event, the presence of LNAPL is as follows:
  - Trace amounts of LNAPL is present at one (1) on-site location (MW-7).
  - LNAPL thickness at one (1) off-site location is currently 1.78 feet.
- Manual bailing and installation of oil absorbent socks are effectively removing residual LNAPL at the on-site monitoring wells.

In general, LNAPL recovery efforts have been successful as only trace LNAPL remains on-Site.

Based on the summary provided herein, manual bailing of LNAPL and the installation of oil absorbent socks at various monitoring wells highlighted herein appears to be effective. These LNAPL recovery techniques will continue to be utilized during the next quarter.

<u>ISCO Treatment</u>

On April 11, 2017, the in-situ chemical oxidation (ISCO) Design Plan (Design Plan) required by the SMP was submitted via email and hardcopy to the NYSDEC. Roux Associates also submitted Form 7250-16 to the United States Environmental Protection Agency (USEPA) as part of this Design Plan. As noted in the Design Plan, the implementation of the ISCO injection events would be performed in a phased approach at the Site.

The phased approach described in the approved-Design Plan was chosen so that treatment could be evaluated in representative areas of the Site that continued to have impacts following the performance of the Site remediation activities in 2015 and 2016. The areas that were chosen were a mix of saturated and unsaturated areas where gross contamination was present and observed during source excavation, and areas where groundwater impacts were observed in the March 2016 sampling event. Following implementation of this first-phase of injections, the post-injection data would be evaluated to determine if, and where, continued ISCO treatment would be effective in similarly impacted areas.

The SMP stated that the chemical oxidant that would potentially be used in ISCO events would be RegenOx™ manufactured by Regenesis, Inc. (Regenesis). Due to the nature of the material being treated (i.e., residual grossly contaminated material), a different and more aggressive treatment material manufactured by Regenesis was utilized for the ISCO injection event. Specifications for the injection material utilized, PersulfOx™, were included in the Design Plan. The advantages of using PersulfOx™ is that the material is able to be injected at much higher concentrations, up to 20% to react directly with the organic materials in both residual grossly contaminated material as well impacted groundwater. This injection material also supports the degradation of target chemicals of concern (COCs) for an extended period of time (two-month period) following completion of ISCO injections due to the generation of sulfate as a residual bi-product, which supports additional biodegradation processes.

On April 24 to 26, 2017, Roux Associates completed the first-phase of the Design Plan. This initial treatment consisted of 17 injections completed at representative areas across the Site that had either residual gross contamination in soil and/ or NYSDEC Ambient Water-Quality Standards and Guidance Values (AWQSGVs) exceedances in groundwater (Refer to Figure 1).

The representative treatment areas included:

- Residual Gross Contamination in Unsaturated Soil in the Courtyard Area (GC Area 5);
- Residual Gross Contamination in Saturated Soil in the Courtyard Area (GC Areas 2 and 4);
- Residual Gross Contamination in Saturated Soil in the Driveway (GC Area 3);
- Residual Gross Contamination in Saturated Soil in the Garage (GC Areas 8 and 9);
- Groundwater Impacts at the Previously Treated Warehouse (Near MW-38);
- Groundwater Impacts at the Courtyard (Near Monitoring Wells MW-44 and MW-47);
- Groundwater Impacts at the Garage (Near Monitoring Well MW-40).

Details pertaining to the field activities, including injection point locations, were provided via the Daily Construction Report submitted to the NYSDEC via email on April 27, 2017. A total of 2,975.40 lbs of PersulfOx™ was mixed with 1,690 gallons of water, and the concentrations and mixture volumes in the targeted areas is summarized in the table below:

Area of Concern	No. of Points	Injection Interval (ft bls)	PersulfOx™ lbs Per Area	Gallons of Water Per Area	Mixture Concentration
GC Area 2	3	8 – 16	1065.27	540	26.11%
GC Area 3	1	17.5 – 20	110.2	70	15.85%
GC Area 4	1	11 – 16	110.2	70	15.85%
GC Area 5	1	4 – 9	110.2	120	9.91%
GC Area 8	2	8 – 13	257.13	200	15.58%
GC Area 9	2	8 – 13	551	200	20.86%
Courtyard (near MW-47)	3	8 – 13	330.6	210	15.85%
Warehouse (near MW-38)	4	0 - 5	440.8	280	15.85%

The injectate manufacturer used Site-specific soil and groundwater data to conservatively calculate treatment volumes that would theoretically liberate and treat grossly contaminated soil and reduce contaminant concentration to, or below, the NYSDEC AWQSGVs, where applicable. For reference purposes, it is important to note that the groundwater table at the site is approximately 7 to 8 feet below land surface (ft bls).

Post-Injection Performance Monitoring

In accordance with the SMP, ISCO monitoring was conducted bi-weekly starting the week of May 15, 2017, with four (4) monitoring events in total completed. The monitoring well network for this first ISCO injection event consisted of monitoring wells MW-36, MW-38, MW-40, MW-41, MW-42, MW-44, and MW-47. The groundwater parameters that were specifically monitored to determine ISCO material influence were: pH, oxidation-reduction potential (ORP), conductivity, and dissolved oxygen (DO). Upon groundwater parameters returning to approximate baseline conditions, these monitoring wells were sampled during the quarterly groundwater monitoring and sampling event, discussed below.

Post-Injection Groundwater Monitoring

Groundwater is monitored by a combination of gauging and sampling of groundwater monitoring wells within the SMP monitoring network. As discussed earlier, groundwater monitoring wells are gauged monthly to check for the presence of LNAPL and confirm thickness of LNAPL, if present. Site monitoring wells are then sampled on a quarterly basis to determine the presence of volatile organic compounds (VOCs), in particular the four Site-specific COCs: benzene, ethylbenzene, isopropylbenzene and total xylenes. The monitoring wells were sampled for Target Compound List (TCL) of VOCs using USEPA SW846 Method 8260.

Water/ LNAPL level data was collected during the June 2017 gauging event (Attachment 3). If the presence of LNAPL was noted in a groundwater monitoring well, the product thickness was noted and the monitoring well was manually bailed to the extent practical. The respective LNAPL measurements collected from the June 2017 gauging round is highlighted on Figure 1.

On June 22, 2017, the required quarterly groundwater gauging and sampling round was performed. The current NYSDEC-approved monitoring well network consists of the following:

- Three off-site monitoring wells along the southern perimeter of the site (MW-3, MW-21, and MW-34); and

- 18 on-site monitoring wells (MW-2R, MW-4, MW-7, MW-10, MW-11, MW-15, MW-19, MW-33, MW-38, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, and MW-48).

For each event, if the presence of product was noted at a monitoring well to be sampled within the respective monitoring network, the monitoring well was not sampled. Instead of being sampled, LNAPL was manually recovered to the extent practical as noted above. For this monitoring round, one (1) of the twenty-one (21) monitoring wells within the NYSDEC-approved monitoring network was not sampled due to the continued presence of LNAPL (offsite well MW-3). Another monitoring well was not sampled because it would continuously go "dry" during purging activities (MW-15) and would not yield enough water to sample. If this condition continues to be a problem in future monitoring events, MW-14, which is in close proximity to MW-15, will be sampled instead.

Groundwater samples were collected using low-flow groundwater sampling procedures. The pump intake was set within the saturated portion of the well screen during purging and sampling activities. Prior to collecting groundwater samples, each monitoring well was purged at a flow rate of approximately .12 liters per minute (L/min). Flow rates were adjusted to maintain minimal drawdown in the well during purging activities. A portable water-quality meter, equipped with an in-line flow-through cell, was used to monitor water quality indicator parameters (pH, conductivity, DO, ORP, temperature, and turbidity). Groundwater quality measurements were collected every three to five minutes until the field parameters stabilized (Attachment 4).

Purging was considered complete when the field parameters had stabilized, after which groundwater samples were collected and submitted for TCL VOC analysis.

Groundwater Monitoring Results

The analytical results of the June 2017 quarterly groundwater monitoring event are summarized in Table 1 and presented in Figure 1. A review of the groundwater data generated during this reporting period indicated the following:

- VOCs were analyzed, but not detected, at two (2) monitoring wells (MW-10 and MW-21).

- VOCs were detected, but at concentrations below AWQSGVs in five (5) monitoring wells (MW-11, MW-33, MW-42, MW-46 and MW-48).

- **All groundwater exceedances were less than an order of magnitude above their respective AWQSGV.** The specific COC exceedances of AWQSGVs are noted below:

  - Benzene results exceeded their respective AWQSGV of 1 μg/L at one monitoring well location (5.8 μg/L at MW-40).

  - Ethylbenzene results exceeded their respective AWQSGV of 5 μg/L at three (3) moni4toring well locations (an estimated 5.4 μg/L at MW-2R, 22 μg/L at MW-45, and 9.4 μg/L at MW-47).

  - Isopropylbenzene results exceeded their respective AWQSGV of 5 μg/L at 10 m4onitoring well locations. Exceedances ranged from 5.8 μg/L (MW-44) to 40 μg/L (MW-40).

  - Xylene results exceeded their respective AWQSGV of 5 μg/L at four (4) moni4toring well locations (11.9 μg/L at MW-2R, 18.3 μg/L at MW-44, 30.4 μg/L at MW-45 and 38 μg/L at MW-47).

- While the analytical quality results at MW-38 are referenced and evaluated herein, it is important to note that the results were probably biased **low** based on the respective laboratory analysis of VOCs at this monitoring well. Specifically, headspace was noted in the sample containers submitted for analysis that was collected from MW-38. Headspace in a sample container could allow VOCs to volatilize prior to laboratory analysis.

This groundwater sampling round was the first of the SMP-required quarterly events to be performed following the performance of the initial ISCO treatment event described in the Design Plan. The effectiveness of this initial, post-remediation ISCO injection event at addressing grossly contaminated soil and impacted groundwater is discussed below.

ISCO Treatment Evaluation and Recommendations

Roux Associates has completed an evaluation of the Site-wide groundwater analytical and LNAPL data summarized on Table 1 and presented on Figure 1 for Site-specific COCs that has been generated prior to and following the performance of the recent ISCO injection event. Based on that evaluation, the following key observations and recommendations are noted below for the following areas of concern:

Treatment of Residual Groundwater Contamination (at driveway):

Based on the historical presence of LNAPL in and around driveway at Monitoring Wells 2/2R, Roux Associates believes that the performance of ISCO at this area of the Site could potentially prove beneficial to address impacted groundwater now that LNAPL has been removed. While Site trends indicate that ISCO may not be successful in reducing COC concentrations to their respective NYSDEC AWQSGV, this is a representative area of the Site that was not included in the recent treatment event that was performed. As such, treatment at this area of the Site is recommended.

Key Takeaway → ISCO may be potentially effective at treating impacted groundwater at the driveway.

Treatment of Grossly Contaminated Areas:

Following the ISCO injection event, LNAPL releases were not observed at any monitoring well (MW-40, MW-41, MW-42 and MW-44) or recovery well (RW-3) in close proximity to grossly contaminated areas in unsaturated soil (GC Area 5) and saturated soil (GC Areas 2, 3, 4, 8 and 9) that were specifically targeted for treatment. Based on these results, it is Roux Associates' recommendation that the areas of gross contamination that have not shown a release of LNAPL where ISCO injections were performed, should not be re-treated in upcoming ISCO injection events. Furthermore, these observations do not support the need to perform ISCO treatment in all remaining grossly contaminated areas, which exhibit similar characteristics in terms of product type (i.e., mineral spirits) and lithology, that were not included in this first-phase of ISCO treatment (GC Areas 1, 6 and 7).

Key Takeaway → ISCO is not effective at remediating residual, grossly contaminated areas at this Site.

Treatment of Residual Groundwater Contamination (at the Courtyard):

Isopropylbenzene decreased by 25% from a pre-injection event concentration of 51 ug/L to 38 ug/L at MW-45, and from a concentration of 13 ug/L to a below standard concentration of 1.9 ug/L at MW-43. Note, these monitoring wells are in areas where no ISCO was performed in the courtyard. The respective reductions observed in these untreated areas are attributed to the removal of all LNAPL and accessible source area soils during the previously completed remedial action and subsequent successful operation of the on-site LNAPL recovery system. Although there was an improvement in groundwater quality at a portion of the Courtyard following this ISCO treatment event, COCs at MW-47 were still in exceedance of their respective NYSDEC AWQSGVs. For example, the pre-injection concentration of isopropylbenzene (16 ug/L) decreased by 20% to 13 ug/L after this treatment, which is still above its respective NYSDEC AWQSGV of 5 ug/L. Therefore, based on Roux Associates' experience at this Site and other similar sites, it is unlikely that further ISCO treatments will yield the necessary reductions required to meet the targeted NYSDEC AWQSGVs for Site COCs. As such, it is Roux Associates' recommendation that continued ISCO treatments at the courtyard to address residual groundwater impacts is not performed. However, it is expected that COCs in groundwater at the Courtyard will continue to attenuate towards their respective NYSDEC AWQSGVs based on the post-remediation groundwater data trends associated with MW-43 and MW-45 regardless if additional ISCO treatments will be performed or not.

Key Takeaway ⇨ Remediation of COCs at the courtyard to NYSDEC AWQSGVs utilizing ISCO is highly unlikely.

Treatment of Residual Groundwater Contamination (at the Garage):

With regards to the overall groundwater quality at the garage area, COCs at MW-41 and MW-42, two of the three monitoring wells in the garage, are already below their respective NYSDEC AWQSGVs and have consistently been below those standards following the completion of the remedial action. Although there was an improvement in groundwater quality following this ISCO treatment event, COCs at the other well in the garage, MW-40, were still in exceedance of their respective NYSDEC AWQSGVs. Note, the pre-injection concentration of isopropylbenzene (47 ug/L) decreased by only 15% to 40 ug/L after this treatment, which is still above its respective NYSDEC AWQSGV of 5 ug/L. Therefore, based on Roux Associates' experience at this Site and other similar sites, it is unlikely that further ISCO treatments will yield the necessary reductions required to meet the targeted NYSDEC AWQSGVs for Site COCs. As such, it is Roux Associates' recommendation that continued ISCO treatments at the garage to address residual groundwater impacts is not performed.

Key Takeaway ⇨ Remediation of COCs at the garage to NYSDEC AWQSGVs utilizing ISCO is highly unlikely.

Treatment of Residual Groundwater Contamination (at the Warehouse):

As documented in the FER, the entire Warehouse area was previously treated with ISCO in 2015 during the performance of the remedial action. In general, COC levels decreased slightly following the 2015 injection event, but COC concentrations were still above their respective NYSDEC AWQSGVs. As a result, the NYSDEC recommended that a second round of ISCO treatments be performed in the post-remediation phase considering the fact that there was no soil excavation performed within the warehouse footprint during the remedial action. Although there was an improvement in groundwater quality at a portion of the previously treated warehouse following the recent 2017 ISCO treatment event, the following concerns regarding the effectiveness of this treatment event are noted below:

- The 2017 pre-injection concentration of isopropylbenzene (36 ug/L) at MW-38 only decreased to 24 ug/L after this treatment, which is still above its respective NYSDEC AWQSGV of 5 ug/L.
- The 2017 post-treatment isopropylbenzene concentration of 24 ug/L at MW-38 was similar to recent concentrations (i.e., 23 ug/L at MW-19 and 19 ug/L at MW-7) in Site monitoring wells within the footprint of the warehouse that were not treated by ISCO. On an equally important note, the 2017 results were consistent with the results from the 2015 ISCO event. Specifically, isopropylbenzene analytical results ranged from 5 ug/L to 23 ug/L across the entire warehouse area.

Although there was an improvement in groundwater quality at a representative portion of the previously treated warehouse following the recent 2017 ISCO treatment event, Roux Associates does not consider that improvement significant enough to warrant a second injection across the entire remaining footprint of the Warehouse Area. As highlighted above, it has already been demonstrated that it will be highly unlikely that NYSDEC AWQSGVs will be achieved utilizing ISCO in the basement area. As such, it is Roux Associates' recommendation that continued ISCO treatment at the warehouse to address residual groundwater impacts is not performed.

Key Takeaway ⇨ It is highly unlikely that utilizing multiple ISCO treatments at the warehouse to achieve NYSDEC AWQSGVs in groundwater will be possible.

Treatment of Residual Groundwater Contamination (at the Paint Factory Building):

Though treatment was not completed within the paint factory building during this phase of the Design Plan, evaluation of results observed in both the courtyard and the garage post-injection, with similar COC concentrations noted at the paint factory building, can be applied. As such, Roux Associates does not recommend implementing future ISCO treatments within the footprint of the paint factory building as COCs at MW-48 continue to be below their respective AWQSGVs. Note, while well construction logs for MW-4 and MW-22 that are in close proximity to MW-48 indicate the potential presence of residual soil contamination, it is unlikely that ISCO will effectively treat this contamination as the recent ISCO event has generally demonstrated that it is unlikely LNAPL will be liberated by utilizing ISCO.

Key Takeaway ⇨ COC detections at MW-48 continue to be below their respective AWQSGV.

Modifications or Amendments to the SMP

No modifications or amendments to the SMP were implemented this reporting period.

Actions Planned for the Next Quarterly Reporting Period

The following actions are planned for the next reporting period:

- Continued monthly operation and maintenance of LNAPL recovery system (as necessary);
- Continued monthly gauging and manual LNAPL recovery of monitoring wells within the SMP monitoring network (as necessary);
- Continued use of alternative (i.e., oil absorbing socks), practical methods to supplement recovery of LNAPL at Site monitoring wells where manual recovery efforts become ineffective; and
- Preparation and submission of the design plan for the next phase of planned injections that will target the driveway area near MW-2/2R.

After you have completed your review of this quarterly inspection and status report, Roux Associates would like to setup a conference call or meeting to discuss actions planned for the next reporting period considering the fact that future redevelopment activities may be initiated as early as the second quarter of 2018.

Sincerely,

REMEDIAL ENGINEER, P.C.

Omar Ramotar, P.E.
Principal Engineer

Attachments

cc: Jane O'Connell, NYSDEC
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Robert Hendrickson, Quadrum Global
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Joseph Duminuco, Roux Associates, Inc.
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TABLE

1. Summary of Volatile Organic Compounds in Groundwater

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-2R	MW-4	MW-4	MW-5	MW-7	MW-7R	MW-7R
		Sample Date:	06/22/2017	03/30/2017	06/22/2017	09/08/2016	06/22/2017	09/08/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,1,2,2-Tetrachloroethane	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,1,2-Trichloroethane	1	UG/L	3.8 U	1.5 U	1.5 U	1.5 U	7.5 U	1.5 U	15 U
1,1-Dichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,1-Dichloroethene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
1,2,3-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,2,4-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	5 U	2 U	2 U	2 U	10 U	2 U	20 U
1,2-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,2-Dichloroethane	0.6	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
1,2-Dichloropropane	1	UG/L	2.5 U	1 U	1 U	1 U	5 U	1 U	10 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**76**	**14**	**14**	2.5 U	12 U	2.5 U	25 U
1,3-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,4-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
1,4-Dioxane (P-Dioxane)	--	UG/L	620 U	250 U	250 U	250 U	1200 U	250 U	2500 U
2-Hexanone	50	UG/L	12 U	5 U	5 U	5 U	25 U	5 U	50 U
Acetone	**50**	UG/L	6.2 J	5 U	5 U	5 U	25 U	14	50 U
Benzene	**1**	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Bromochloromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Bromodichloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Bromoform	50	UG/L	5 U	2 U	2 U	2 U	10 U	2 U	20 U
Bromomethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Carbon Disulfide	60	UG/L	23	5 U	5 U	5 U	8.6 J	5 U	50 U
Carbon Tetrachloride	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Chlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Chloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Chloroform	7	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Chloromethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Cis-1,2-Dichloroethylene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Cis-1,3-Dichloropropene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Dibromochloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-2R	MW-4	MW-4	MW-5	MW-7	MW-7R	MW-7R
		Sample Date:	06/22/2017	03/30/2017	06/22/2017	09/08/2016	06/22/2017	09/08/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	12 U	5 U	5 U	5 U	25 U	5 U	50 U
Dichloroethylenes	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Ethylbenzene	**5**	UG/L	**5.4 J**	1.6 J	1.7 J	2.5 U	12 U	2.5 U	25 U
Isopropylbenzene (Cumene)	**5**	UG/L	**17**	**5.4**	**6.5**	2.5 U	**19**	**11**	**14 J**
m,p-Xylene	**5**	UG/L	**6.7**	1.6 J	1.9 J	2.5 U	12 U	2.5 U	25 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	7.6 J	5 U	5 U	5 U	25 U	5.5	50 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	12 U	5 U	5 U	5 U	25 U	5 U	50 U
Methylene Chloride	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
N-Propylbenzene	**5**	UG/L	**29**	**5.8**	**7.6**	2.5 U	**21**	**19**	**25**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**5.2 J**	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Sec-Butylbenzene	**5**	UG/L	**8.5**	**6.6**	**6.7**	2.5 U	**23**	**12**	**12 J**
Styrene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
T-Butylbenzene	**5**	UG/L	5 J	**7.3**	**5.7**	2.5 U	**16**	**6**	**7 J**
Tert-Butyl Methyl Ether	10	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Tetrachloroethylene (PCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	1.6 J	0.5 U	5 U
Toluene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	0.99 J	25 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Trans-1,2-Dichloroethene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Trans-1,3-Dichloropropene	--	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Trichloroethylene (TCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	5 U
Trichlorofluoromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U	25 U
Vinyl Chloride	2	UG/L	2.5 U	1 U	1 U	1 U	5 U	1 U	10 U
Xylenes	**5**	UG/L	**12 J**	1.6 J	1.9 J	2.5 U	12 U	2.5 U	25 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	2.2 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.64	0.68	1
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	4.7	4.1	4.4
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
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FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-11	MW-11	MW-19	MW-19	MW-21	MW-21	MW-21
		Sample Date:	03/30/2017	06/22/2017	09/08/2016	06/22/2017	09/08/2016	09/08/2016	12/01/2016
		Normal or Field Duplicate:	FD	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	5 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	**7**	6.2 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	620 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Acetone	**50**	UG/L	1.9 J	1.7 J	5.6	8.8 J	5 U	5 U	5 U
Benzene	**1**	UG/L	1	0.55	0.46 J	1.2 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-11	MW-11	MW-19	MW-19	MW-21	MW-21	MW-21
		Sample Date:	03/30/2017	06/22/2017	09/08/2016	06/22/2017	09/08/2016	09/08/2016	12/01/2016
		Normal or Field Duplicate:	FD	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	3.4 J	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	**25**	**23**	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5	5.4 J	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	12 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	**33**	**36**	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	**23**	**14**	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	4.5	4	**13**	**8.6**	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.46 J
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U

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Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-21	MW-33	MW-33	MW-33	MW-34	MW-34
		Sample Date:	03/30/2017	06/22/2017	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	3	5 U	2.5 U	1.3 J	0.98 J
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	23	5.7 J	5 U	5 U	5 U
Benzene	**1**	UG/L	**1.4**	0.5 U	0.5 U	1 U	0.5 U	0.42 J	0.26 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-21	MW-21	MW-33	MW-33	MW-33	MW-34	MW-34
Sample Date:			03/30/2017	06/22/2017	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	0.76 J	2.3 J	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	1.3 J	4.2 J	0.87 J	**30**	**22**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	1.1 J	5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	3.2 J	9.9 J	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.2 J	**8.2**	1.5 J	**39**	**33**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	1.5 J	5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.6	4.6 J	1.4 J	**16**	**15**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	1.8 J	2.3 J	0.89 J	**7**	**6.9**
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.35 J	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.6 J	5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38	MW-38
		Sample Date:	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	7.5 U	7.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	0.74 J	12 U	12 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	10 U	10 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	5 U	5 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	0.94 J	0.86 J	2.5 U	3.6 J	12 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	1200 U	1200 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	25 U	25 U	5 U	5 U
Acetone	**50**	UG/L	2.4 J	2.2 J	3.4 J	39	25 U	3.5 J	1.6 J
Benzene	**1**	UG/L	0.5	0.23 J	0.19 J	2.5 U	2.5 U	0.27 J	0.28 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	10 U	10 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	1.4 J	5 U	25 U	25 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38	MW-38
		Sample Date:	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	25 U	25 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**18**	**23**	**14**	**28**	**34**	**15**	**26**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	3 J	5 U	7.4	25 U	25 U	6.8	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	1.2 J	5 U	5 U	25 U	25 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**25**	**32**	**20**	**50**	**68**	**16**	**34**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**13**	**14**	**5.1**	**21**	**30**	5	**11**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**7.2**	**6.6**	2.8	**7.1 J**	**8.8 J**	2.5	4.3
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	1.2 J	12 U	12 U	1 J	0.97 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	5 U	5 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
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U - Compound was analyzed for but not detected
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 - - No NYSDEC AWQSGV available
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Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-38	MW-38	MW-40	MW-40	MW-40	MW-41	MW-41
		Sample Date:	03/30/2017	06/22/2017	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	0.27 J	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	**53**	2 J	2.3 J	**260**	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.43 J	**8.6**	**9.3**	**5.8**	0.26 J	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	2.8 J	5 U	5 U	4.6 J	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	1.2 J	2.5 U	2.5 U	4.2	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-38	MW-38	MW-40	MW-40	MW-40	MW-41	MW-41
Sample Date:			03/30/2017	06/22/2017	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**36**	**24**	**44**	**47**	**40**	1.3 J	0.73 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	1 J	1 J	1.1 J	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	16	5 U	5 U	39	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	1.7 J	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.5 J	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**55**	**31**	**69**	**38**	**64**	1.7 J	0.8 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	0.78 J	0.72 J	0.79 J	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**16**	**8.2**	**16**	**20**	**19**	2.3 J	1.1 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**6.8**	4.2	3.5	**5.3**	4.2	1.2 J	0.78 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	1.7 J	2.5 U	0.72 J	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	1.8 J	1.7 J	1.9 J	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-41	MW-41	MW-42	MW-42	MW-42	MW-43	MW-43
		Sample Date:	03/30/2017	06/22/2017	09/08/2016	03/30/2017	06/22/2017	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	**0.74**	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	0.52 J	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**12**	**78**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Acetone	**50**	UG/L	5 U	**96**	5 U	5 U	5 U	7.4	28
Benzene	**1**	UG/L	0.62	0.43 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.8	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-41	MW-41	MW-42	MW-42	MW-42	MW-43	MW-43
Sample Date:			03/30/2017	06/22/2017	09/08/2016	03/30/2017	06/22/2017	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**6.8**
Isopropylbenzene (Cumene)	**5**	UG/L	2.5	1.1 J	4.7	0.73 J	2.5 U	1.4 J	**13**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.3 J	**15**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	1.2 J	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	**5**	UG/L	3.1	1.3 J	3.5	2.5 U	2.5 U	1.9 J	**22**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8 J	**7.2**
Sec-Butylbenzene	**5**	UG/L	3.9	1.7 J	2.9	1.4 J	1.1 J	2.5 U	**5.8**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
T-Butylbenzene	**5**	UG/L	2.4 J	1.3 J	1.2 J	1.7 J	1.2 J	2.5 U	2.4 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.1 J	**22**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
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- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-44	MW-44	MW-44	MW-45	MW-45	MW-45
		Sample Date:	06/22/2017	12/01/2016	03/30/2017	06/22/2017	03/30/2017	06/22/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	3.8 U	7.5 U	7.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	5 U	10 U	10 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	2.5 U	5 U	5 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**7.1**	**41**	**81**	**42**	**230**	**150**	**180**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	620 U	1200 U	1200 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	12 U	25 U	25 U
Acetone	**50**	UG/L	7	**98**	**53**	**61**	32	45	31
Benzene	**1**	UG/L	0.5 U	1	0.63	0.19 J	0.78 J	2.5 U	2.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	5 U	10 U	10 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	12 U	25 U	25 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-44	MW-44	MW-44	MW-45	MW-45	MW-45
		Sample Date:	06/22/2017	12/01/2016	03/30/2017	06/22/2017	03/30/2017	06/22/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	FD
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	12 U	25 U	25 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Ethylbenzene	**5**	UG/L	0.82 J	**9.9**	**9.7**	3.2	**39**	**22**	**22**
Isopropylbenzene (Cumene)	**5**	UG/L	1.9 J	**6.8**	**13**	**5.8**	**51**	**38**	**41**
m,p-Xylene	**5**	UG/L	1.7 J	**24**	**30**	**9.5**	**47**	**25**	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	12	5 U	5 U	12 U	25 U	25 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	12 U	25 U	25 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
N-Propylbenzene	**5**	UG/L	2.9	**8.5**	**19**	**9.6**	**88**	**59**	**63**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	0.87 J	**17**	**22**	**8.8**	**7.4**	**5.4 J**	**6.4 J**
Sec-Butylbenzene	**5**	UG/L	0.83 J	1.8 J	**6.2**	3.9	**16**	**12**	**12**
Styrene	5	UG/L	2.5 U	2.5 U	1.1 J	2.5 U	6.2 U	12 U	12 U
T-Butylbenzene	**5**	UG/L	2.5 U	1.2 J	2.4 J	1.7 J	4.8 J	3.9 J	4 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.23 J	0.5 U	1.2 U	2.5 U	2.5 U
Toluene	5	UG/L	2.5 U	3.8	3.6	0.99 J	6.2 U	12 U	12 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	2.5 U	5 U	5 U
Xylenes	**5**	UG/L	2.6 J	**41**	**52**	**18**	**54**	**30 J**	**30 J**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
Sample Date:			12/01/2016	03/30/2017	06/22/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2 J	**40**	**41**	**78**	**67**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	1.1 J	5 U	10 U
Acetone	**50**	UG/L	4.2 J	5 U	4.2 J	**110**	**110**	39	27
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.98	**1.1**	0.66	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.2 J	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
		Sample Date:	12/01/2016	03/30/2017	06/22/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**11**	**11**	**15**	**9.4**
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**9.2**	**9.9**	**16**	**13**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**24**	**25**	**36**	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	14	16	5 U	4.2 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	1.1 J	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**13**	**14**	**23**	**20**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**14**	**15**	**20**	**14**
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.1 J	2.2 J	4.6	4.2 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.1 J	5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	0.95 J	0.99 J	2 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	3.8	4	2.9	2.2 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	**38**	**40**	**56**	**38**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-48	MW-48	MW-48
		Sample Date:	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N
Parameter	NYSDEC AWQSGVs	Units			
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.2 J	0.92 J	2.8
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-48	MW-48	MW-48
		Sample Date:	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N
Parameter	NYSDEC AWQSGVs	Units			
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	4	2.6	1.9 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	3.1	2.4 J	2.1 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	4.7	4.3	3
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	4.1	3.1	1.8 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

ATTACHMENTS

1. Site-Wide Inspection and Maintenance
2. Recovery Well Operating Logs
3. Monitoring Well Gauging Logs
4. 2017 Purge Logs

ATTACHMENT 1

Site-Wide Inspection and Maintenance

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **Monday, April 24, 2017**

Site Observations: Performed by (MS) on (4/24/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (4/24/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (4/24/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (4/24/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (4/24/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **4/24/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **Wednesday, May 24, 2017**

Site Observations: Performed by (MS) on (5/24/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (5/24/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (5/24/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (5/24/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (5/24/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **5/24/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Thursday, June 22, 2017**

Site Observations: Performed by (MS) on (6/22/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (6/22/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (6/22/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (6/22/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (6/22/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **6/22/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ATTACHMENT 2

Recovery Well Operating Logs

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - April 24, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	**Value**	**Unit**			**Comments**
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.48	--	
Recovery Well RW-2	N	--	6.77	--	
Recovery Well RW-3	N	--	7.51	--	
Recovery Well RW-4	N	--	7.82	--	
Recovery Well RW-5	N	--	7.59	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - May 25, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	**Value**	**Unit**			**Comments**
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.05	--	
Recovery Well RW-2	N	--	6.39	--	
Recovery Well RW-3	N	--	6.82	--	
Recovery Well RW-4	N	--	7.24	--	
Recovery Well RW-5	N	--	7.01	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - June 22, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.29	--	
Recovery Well RW-2	N	--	6.79	--	
Recovery Well RW-3	N	--	6.92	--	
Recovery Well RW-4	N	--	7.70	--	
Recovery Well RW-5	N	--	6.98	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3	Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

ATTACHMENT 3

Monitoring Well Gauging Logs

Groundwater Gauging Former Paragon Paint Varnish Corp - April 24, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
4/24/2017	MW-2R	--	7.28	4	--	0.20	1.60
4/24/2017	MW-3*	6.81	7.94	2	1.13	0.25	3.40
4/24/2017	MW-4	--	9.72	2	--	--	0.63
4/24/2017	MW-7*	2.35	2.48	1	0.13	trace removal	0.40
4/24/2017	MW-7R	--	2.37	1.96	--	--	
4/24/2017	MW-10	--	5.36	2	--	--	
4/24/2017	MW-11	--	5.72	2	--	--	
4/24/2017	MW-14	--	9.57	2	--	--	
4/24/2017	MW-15	--	9.48	2	--	--	
4/24/2017	MW-17	--	6.21	4	--	--	
4/24/2017	MW-18	--	6.76	4	--	--	
4/24/2017	MW-19	--	2.37	2	--	0.2	0.50
4/24/2017	MW-20	--	9.85	2	--	--	
4/24/2017	MW-21	--	6.01	4	--	--	
4/24/2017	MW-22	--	9.78	2	--	--	0.58
4/24/2017	MW-33	--	6.79	2	--	--	
4/24/2017	MW-34	--	6.69	4	--	--	
4/24/2017	MW-36	--	6.69	4	--	--	
4/24/2017	MW-37	--	2.28	2	--	--	
4/24/2017	MW-38	--	2.32	2	--	--	
4/24/2017	MW-40	--	6.81	2	--	--	
4/24/2017	MW-41	--	6.3	2	--	--	
4/24/2017	MW-42	--	7.33	2	--	0.025	0.08
4/24/2017	MW-43	--	5.78	2	--	--	
4/24/2017	MW-44	--	7.05	2	--	--	
4/24/2017	MW-45	--	6.58	2	--	--	0.53
4/24/2017	MW-46	--	5.6	2	--	--	
4/24/2017	MW-47	--	5.94	2	--	--	
4/24/2017	MW-48	--	9.55	2	--	--	
						Total	**7.72**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - May 18, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
5/18/2017	MW-2R	--	6.53	4	--		1.60
5/18/2017	MW-3*	6.7	7.69	2	0.99	0.25	3.65
5/18/2017	MW-4	--	9.38	2	--		0.63
5/18/2017	MW-7*	1.79	1.8	1	0.01	0.025	0.43
5/18/2017	MW-7R	--	1.91	1.96	--	--	
5/18/2017	MW-10	--	7.66	2	--	--	
5/18/2017	MW-11	--	6.03	2	--	--	
5/18/2017	MW-14	--	9.01	2	--	--	
5/18/2017	MW-15	--	8.98	2	--	--	
5/18/2017	MW-17*	5.68	5.69	4	0.01	--	
5/18/2017	MW-18	--	6.54	4	--	--	
5/18/2017	MW-19*	1.93	1.94	2	0.01	--	0.50
5/18/2017	MW-20	--	9.48	2	--	--	
5/18/2017	MW-21	--	5.8	4	--	--	
5/18/2017	MW-22	--	9.44	2	--	--	0.58
5/18/2017	MW-33	--	5.95	2	--	--	
5/18/2017	MW-34	--	6.29	4	--	--	
5/18/2017	MW-36	--	5.91	4	--	--	
5/18/2017	MW-37	--	1.95	2	--	--	
5/18/2017	MW-38	--	1.98	2	--	--	
5/18/2017	MW-40	--	6.36	2	--	--	
5/18/2017	MW-41	--	6.02	2	--	--	
5/18/2017	MW-42	--	NM	2	--	0.05	0.13
5/18/2017	MW-43	--	4.99	2	--	--	
5/18/2017	MW-44	--	6.2	2	--	--	
5/18/2017	MW-45	--	5.71	2	--	--	0.53
5/18/2017	MW-46	--	4.7	2	--	--	
5/18/2017	MW-47	--	5.08	2	--	--	
5/18/2017	MW-48	--	9.19	2	--	--	
						Total	**8.05**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

Groundwater Gauging Former Paragon Paint Varnish Corp - May 25, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
5/25/2017	MW-2R	--	6.72	4	--	--	1.60
5/25/2017	MW-3*	6.77	7.98	2	1.21	--	3.65
5/25/2017	MW-4	--	9.5	2	--	--	0.63
5/25/2017	MW-7	2.02	2.03	1	0.01	trace removal	0.43
5/25/2017	MW-7R	--	1.84	2	--	--	
5/25/2017	MW-10	--	4.7	2	--	--	
5/25/2017	MW-11	--	5.16	2	--	--	
5/25/2017	MW-14	--	9.21	2	--	--	
5/25/2017	MW-15	--	9.17	2	--	--	
5/25/2017	MW-17	--	5.74	4	--	--	
5/25/2017	MW-18	--	6.6	4	--	--	
5/25/2017	MW-19	--	1.79	2	--	--	0.50
5/25/2017	MW-20	--	9.61	2	--	--	
5/25/2017	MW-21	--	5.74	4	--	--	
5/25/2017	MW-22	--	9.54	2	--	--	0.58
5/25/2017	MW-33	--	6.18	2	--	--	
5/25/2017	MW-34	--	6.67	4	--	--	
5/25/2017	MW-36	--	5.82	4	--	--	
5/25/2017	MW-37	--	1.84	2	--	--	
5/25/2017	MW-38	--	1.98	2	--	--	
5/25/2017	MW-40	--	6.5	2	--	--	
5/25/2017	MW-41	--	6.17	2	--	--	
5/25/2017	MW-42*	--	7.14	2	--	--	0.13
5/25/2017	MW-43	--	5.19	2	--	--	
5/25/2017	MW-44	--	6.46	2	--	--	
5/25/2017	MW-45	--	5.99	2	--	--	0.53
5/25/2017	MW-46	--	5.01	2	--	--	
5/25/2017	MW-47	--	5.35	2	--	--	
5/25/2017	MW-48	--	9.32	2	--	--	
						Total	**8.05**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

* -An oil absorbent sock was installed within the well at the height of the groundwater table instead of bailing due to trace amounts of product.

Groundwater Gauging Former Paragon Paint Varnish Corp - June 8, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
6/8/2017	MW-2R	--	7.05	4	--	--	1.60
6/8/2017	MW-3*	7.04	8.41	2	1.37	0.44	4.09
6/8/2017	MW-4	--	9.77	2	--	--	0.63
6/8/2017	MW-7	1.01	1.02	1	0.01	trace removal	0.43
6/8/2017	MW-7R	--	2.27	2	--	--	
6/8/2017	MW-10	--	5.82	2	--	--	
6/8/2017	MW-11	--	5.79	2	--	--	
6/8/2017	MW-14	--	9.56	2	--	--	
6/8/2017	MW-15	--	9.5	2	--	--	
6/8/2017	MW-17	--	6.08	4	--	--	
6/8/2017	MW-18	--	6.96	4	--	--	
6/8/2017	MW-19	--	2.17	2	--	--	0.50
6/8/2017	MW-20	--	9.89	2	--	--	
6/8/2017	MW-21	--	6.26	4	--	--	
6/8/2017	MW-22	--	9.8	2	--	--	0.58
6/8/2017	MW-33	--	6.79	2	--	--	
6/8/2017	MW-34	--	6.84	4	--	--	
6/8/2017	MW-36	--	6.53	4	--	--	
6/8/2017	MW-37	--	2.04	2	--	--	
6/8/2017	MW-38	--	2.26	2	--	--	
6/8/2017	MW-40	--	7.09	2	--	--	
6/8/2017	MW-41	--	6.52	2	--	--	
6/8/2017	MW-42	--	7.4	2	--	--	0.13
6/8/2017	MW-43	--	5.57	2	--	--	
6/8/2017	MW-44	--	6.85	2	--	--	
6/8/2017	MW-45	--	6.4	2	--	--	0.53
6/8/2017	MW-46	--	5.39	2	--	--	
6/8/2017	MW-47	--	5.7	2	--	--	
6/8/2017	MW-48	--	9.89	2	--	--	
						Total	**8.49**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

* -An oil absorbent sock was installed within the well at the height of the groundwater table instead of bailing due to trace amounts of product.

Groundwater Gauging Former Paragon Paint Varnish Corp - June 22, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged* (g)	Cumulative (g)
6/22/2017	MW-2R	--	6.95	4	--	--	1.60
6/22/2017	MW-3*	7.08	8.86	2	1.78	0.2	5.71
6/22/2017	MW-4	--	9.79	2	--	--	0.63
6/22/2017	MW-7*	2.32	2.33	1	0.01	trace removal	0.43
6/22/2017	MW-7R	--	2.14	2	--	--	
6/22/2017	MW-10	--	6.4	2	--	--	
6/22/2017	MW-11	--	5.85	2	--	--	
6/22/2017	MW-14	--	9.33	2	--	--	
6/22/2017	MW-15	--	9.36	2	--	--	
6/22/2017	MW-17	--	6.18	4	--	--	
6/22/2017	MW-18	--	7.06	4	--	--	
6/22/2017	MW-19	--	2.24	2	--	--	0.50
6/22/2017	MW-20	--	9.88	2	--	--	
6/22/2017	MW-21	--	6.03	4	--	--	
6/22/2017	MW-22	--	9.81	2	--	--	0.58
6/22/2017	MW-33	--	6.19	2	--	--	
6/22/2017	MW-34	--	7.07	4	--	--	
6/22/2017	MW-36	--	6.19	4	--	--	
6/22/2017	MW-37	--	2.30	2	--	--	
6/22/2017	MW-38	--	2.41	2	--	--	
6/22/2017	MW-40	--	7.16	2	--	--	
6/22/2017	MW-41	--	6.78	2	--	--	
6/22/2017	MW-42	--	7.54	2	--	--	0.13
6/22/2017	MW-43	--	5.19	2	--	--	
6/22/2017	MW-44	--	6.43	2	--	--	
6/22/2017	MW-45	--	5.84	2	--	--	0.53
6/22/2017	MW-46	--	4.96	2	--	--	
6/22/2017	MW-47	--	5.32	2	--	--	
6/22/2017	MW-48	--	9.53	2	--	--	
						Total	**10.11**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable

* -An oil absorbent sock was installed within the well at the height of the groundwater table instead of bailing due to trace amounts of product.

ATTACHMENT 4

2017 Purge Logs

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 80° F, Sunny
Date: 6/22/2017
Well ID: MW-2R
Intake depth: Approx. 11'
DTW: 6.89
Vol Purged: 0.8
DTB: 14.20
Sampler: AF
Purge Start: 11:19
Purge End Time: 11:49
Purge Water Description: Clear
Sample Time 11:50

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:22	7.04	100	18.13	1.120	0.83	6.95	-12	27.6
11:25	7.08	100	18.47	2.000	0.09	6.93	-23	24.7
11:28	7.10	100	18.57	2.000	0.00	6.93	-43	23.5
11:31	7.10	100	18.62	2.000	0.00	6.93	-49	23.1
11:34	7.11	100	18.68	1.990	0.00	6.93	-53	22.6
11:37	7.11	100	18.72	1.990	0.00	6.93	-59	21.4
11:40	7.12	100	18.73	1.990	0.00	6.93	-62	20.7
11:43	7.12	100	18.76	1.990	0.00	6.93	-62	20.1
11:46	7.12	100	18.79	1.990	0.00	6.93	-63	19.7
11:49	7.12	100	18.81	1.990	0.00	6.93	-63	19.2

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 78° F, Mostly Sunny
Date: 6/22/2017
Well ID: MW-4
Intake depth: Approx. 15 ft
DTW: 9.89
Vol Purged: 2.5
DTB: 17.70
Sampler: RH
Purge Start: 10:35
Purge End Time: 11:05
Purge Water Description: Clear, odor
Sample Time: 11:10

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:40	9.89	200	17.06	0.197	0.90	5.60	-10	15
10:45	9.89	200	17.00	0.197	0.98	5.50	-10	5.5
10:50	9.89	200	16.84	0.197	0.33	5.50	-12	5.6
10:55	9.89	200	16.66	0.198	0.18	5.48	-12	5.2
10:58	9.89	200	16.55	0.198	0.06	5.48	-12	5.8
11:01	9.89	200	16.59	0.197	0.00	5.49	-12	3.9
11:04	9.89	200	16.59	0.196	0.00	5.48	-13	3.7

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 83° F, Sunny
Date: 6/22/2017
Well ID: MW-7
Intake depth: Approx. 6'
DTW: 2.18
Vol Purged: 0.2
DTB: 6.25
Sampler: RH
Purge Start: 12:55
Purge End Time: 12:59
Purge Water Description: turbid
Sample time: 12:55
Parameters not accurate; not enough purge water to get reading from Horiba

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:58	5.63	100	18.24	1.30	6.68	4.72	241	248

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 73° F, Sunny
Date: 6/22/2017
Well ID: MW-10
Intake depth: Approx. 8'
DTW: 5.23
Vol Purged: .6 gal
DTB: 10.77
Sampler: AF
Purge Start: 8:47
Purge End Time: 9:11
Purge Water Description: Clear
Sample time 9:15
Duplicate Sample(DUP-062217-2 Time:0920)

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:50	5.23	100	20.09	21.2	4.40	7.08	86	31.8
8:53	5.23	100	20.35	21.4	4.04	6.93	87	20.4
8:56	5.23	100	20.42	21.4	4.01	6.93	89	13.2
8:59	5.23	100	20.49	21.4	3.97	6.94	90	7.1
9:02	5.23	100	20.53	21.5	3.94	6.94	91	5.9
9:05	5.23	100	20.55	21.5	3.91	6.94	92	5.2
9:08	5.23	100	20.57	21.5	3.88	6.94	92	4.3
9:11	5.23	100	20.59	21.5	3.89	6.94	92	4.2

SITE NAME:	Former Paragon Site	**Project Number:**	2051.0001Y002

Weather:	73°F, Sunny	Date:	6/22/2017
Well ID:	MW-11	Intake depth:	Approx. 20'
DTW:	5.64	Vol Purged:	0.8 gal
DTB:	23.95		
Sampler:	AF		
Purge Start:	8:00	Purge End Time:	8:30
Purge Water Description:	Clear		

Sample time: 8:35
MW-11-MS (Time: 8:40), MW-11-MSD (Time: 8:45)

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:03	6.81	100	17.48	3.56	1.89	7.09	101	147
8:06	6.96	100	17.47	3.47	1.03	7.18	64	97.3
8:09	6.99	100	17.49	3.48	0.46	7.27	31	89.2
8:12	7.00	100	17.51	3.47	0.11	7.36	26	77.1
8:15	7.02	100	17.51	3.47	0.00	7.42	19	53.9
8:18	7.03	100	17.51	3.46	0.00	7.44	-5	52.4
8:21	7.04	100	17.50	3.46	0.00	7.45	-7	46.3
8:24	7.04	100	17.47	3.45	0.00	7.45	-7	41.2
8:27	7.05	100	17.43	3.45	0.00	7.46	-8	40.7
8:30	7.03	100	17.44	3.45	0.00	7.46	-8	39.8

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather:	78°F, Mostly Sunny	Date:	6/22/2017
Well ID:	MW-19	Intake depth:	Approx. 5.4'
DTW:	2.24	Vol Purged:	1.5 gal
DTB:	5.95		
Sampler:	RH		
Purge Start:	12:05	Purge End Time:	12:21
Purge Water Description:	clear		
	Sample time: 12:30		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:10	2.55	200	16.05	0.991	0.00	6.96	-34	20.7
12:15	3.33	200	16.27	0.979	0.00	6.93	-44	49.6
12:18	4.00	200	16.31	0.981	0.00	6.93	-45	57.5
12:21	5.46	200	16.29	0.994	0.00	6.94	-48	49.7

SITE NAME:	Former Paragon Site	**Project Number:**	2051.0001Y002

Weather:	76°F, Sunny	Date:	6/22/2017
Well ID:	MW-21	Intake depth:	Approx. 12'
DTW:	6.06	Vol Purged:	0.9 gal
DTB:	15.3		
Sampler:	AF		
Purge Start:	9:33	Purge End Time:	10:00
Purge Water Description:	Clear		
	Sample time: 10:00		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:36	6.17	125	21.10	2.97	2.76	7.14	109	52.7
9:39	6.19	125	20.22	2.62	1.31	7.02	96	33.4
9:42	6.21	125	20.14	2.59	0.44	6.83	83	19.6
9:45	6.23	125	19.96	2.59	0.11	6.81	74	13.8
9:48	6.24	125	19.91	2.58	0.00	6.80	71	13.1
9:51	6.24	125	19.83	2.58	0.00	6.80	68	12.6
9:54	6.24	125	19.80	2.58	0.00	6.79	67	12.4
9:57	6.25	125	19.79	2.58	0.00	6.79	66	12.0
10:00	6.25	125	19.77	2.58	0.00	6.79	66	11.9

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 79°F, Sunny
Date: 6/22/2017
Well ID: MW-33
Intake depth: Approx. 10'
DTW: 6.19
Vol Purged: 1 gal
DTB: 13.23
Sampler: AF
Purge Start: 10:41
Purge End Time: 11:08
Purge Water Description: Clear
Sample time: 11:10

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:44	6.32	125	18.51	0.491	0.93	7.30	-37	35.5
10:47	6.40	125	18.53	0.491	0.12	7.18	-13	26.4
10:50	6.45	125	18.59	0.503	0.00	7.16	-2	24.8
10:53	6.47	125	18.64	0.507	0.00	7.16	3	21.7
10:56	6.49	125	18.68	0.509	0.00	7.15	5	20.9
10:59	6.50	125	18.71	0.510	0.00	7.15	5	18.2
11:02	6.51	125	18.74	0.510	0.00	7.15	6	17.3
11:05	6.52	125	18.74	0.510	0.00	7.15	6	17.0
11:08	6.53	125	18.76	0.510	0.00	7.15	6	16.8

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather:	79°F, Sunny	Date:	6/22/2017
Well ID:	MW-34	Intake depth:	Approx. 11'
DTW:	7.06	Vol Purged:	0.75 gal
DTB:	13.76		
Sampler:	AF		
Purge Start:	10:07	Purge End Time:	10:34
Purge Water Description:	Clear		
	Sample time: 10:35		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:10	7.32	150	20.04	2.78	1.46	6.70	-8	14.4
10:13	7.40	150	20.01	2.78	0.79	6.77	-26	12.3
10:16	7.41	100	19.82	2.77	0.15	6.78	-45	11.6
10:19	7.43	100	19.80	2.75	0.00	6.78	-48	10.4
10:22	7.44	100	19.77	2.75	0.00	6.79	-50	9.1
10:25	7.45	100	19.76	2.74	0.00	6.79	-52	8.6
10:28	7.46	100	19.74	2.74	0.00	6.79	-52	7.1
10:31	7.47	100	19.73	2.74	0.00	6.79	-52	6.8
10:34	7.47	100	19.70	2.74	0.00	6.79	-52	6.5

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 84°F, Sunny Date: 6/22/2017
Well ID: MW-38 Intake depth: past screen
DTW: 2.41 Vol Purged: 2 gal
DTB: 5.25
Sampler: MS
Purge Start: 12:00 Purge End Time: 12:30
Purge Water Description: clear

Sample time 12:30
YSI 11:50 temp: 16.31, cond: 4800, DO: 0.33, pH: 6.19, ORP: 176.1

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
12:00	2.41	100	17.66	2.87	0.47	6.42	8	226.0
12:03	2.41	100	17.63	2.59	0.00	6.43	1	111.0
12:06	2.41	100	17.65	2.48	0.00	6.46	-9	82.4
12:09	2.41	100	17.65	2.37	0.00	6.49	-22	65.5
12:12	2.41	100	17.65	2.33	0.00	6.52	-31	49.5
12:15	2.41	100	17.62	2.33	0.00	6.53	-44	41.0
12:18	2.41	100	17.60	2.35	0.00	6.54	-49	40.9
12:21	2.41	100	17.58	2.36	0.00	6.54	-52	39.4
12:24	2.41	100	17.53	2.40	0.00	6.54	-56	40.2
12:27	2.41	100	17.49	2.43	0.00	6.55	-58	39.8
12:30	2.41	100	17.48	2.44	0.00	6.55	-59	39.6

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 89°9F, Sunny Date: 6/22/2017
Well ID: MW-40 Intake depth: past screen
DTW: 7.16 Vol Purged: Approx. 2 gal
DTB: 19
Sampler: MS
Purge Start: 11:15 Purge End Time: 11:45
Purge Water Description: clear
Sample time: 11:45
YSI 11:06 temp: 14.18, cond: 54.21, DO: 0.13, pH: 6.99, ORP: -44.3

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:15	7.16	100	15.02	10.1	2.61	6.70	-68	67.2
11:18	7.16	100	15.06	10.4	1.90	6.70	-72	49.1
11:21	7.16	100	15.11	10.5	1.44	6.70	-73	46.8
11:24	7.16	100	15.13	10.6	0.98	6.70	-73	42.1
11:27	7.16	100	15.05	10.8	0.73	6.71	-75	40.2
11:30	7.16	100	15.04	10.9	0.64	6.72	-76	37.0
11:33	7.16	100	15.00	11.0	0.60	6.72	-76	36.5
11:36	7.16	100	14.96	11.1	0.25	6.72	-77	36.1
11:39	7.16	100	14.93	11.1	0.33	6.73	-78	35.8
11:42	7.16	100	14.92	11.2	0.41	6.73	-78	35.6
11:45	7.16	100	14.92	11.2	0.40	6.73	-78	35.5

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 84°F, Sunny Date: 6/22/2017

Well ID: MW-41 Intake depth: past screen

DTW: 6.78 Vol Purged: Approx. 2 gal

DTB: 17.3

Sampler: MS

Purge Start: 10:35 Purge End Time: 11:05

Purge Water Description: light orange/brown to clear; no odor

Sample time: 11:05

YSI 10:30 temp: 13.31, cond: 5047, DO: 2.59, pH: 8.23, ORP: 183.9

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
10:35	6.78	100	15.41	2.41	4.13	6.96	18	800
10:38	6.78	100	15.23	2.60	3.75	6.86	12	660
10:41	6.78	100	15.17	3.01	2.87	6.60	-11	455
10:44	6.78	100	15.15	3.61	1.77	6.46	-31	384
10:47	6.78	100	15.14	4.03	1.15	6.42	-54	322
10:50	6.78	100	15.12	4.37	0.80	6.40	-61	330
10:53	6.78	100	15.09	4.75	0.41	6.56	-67	190
10:56	6.78	100	15.10	5.11	0.00	6.57	-79	163
10:59	6.78	100	15.09	5.14	0.00	6.58	-81	151
11:02	6.78	100	15.10	5.15	0.00	6.59	-82	154
11:05	6.78	100	15.09	5.15	0.00	6.60	-81	157

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 84°F, Sunny Date: 6/22/2017

Well ID: MW-42 Intake depth: past screen

DTW: 7.54 Vol Purged: Approx. 2 gal

DTB: 11.08

Sampler: MS

Purge Start: 9:50 Purge End Time: 10:15

Purge Water Description: clear

Sample time 10:15

YSI 9:40 temp: 13.53, cond: 647 µS/cm, DO: 4.0, pH:9.75, ORP= -84.1

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:50	7.54	100	14.66	0.915	0.00	7.94	-153	198.0
9:53	7.54	100	14.32	0.944	0.00	7.53	-156	69.8
9:56	7.54	100	14.29	0.941	0.00	7.44	-154	47.1
9:59	7.54	100	14.20	0.937	0.00	7.35	-152	31.1
10:02	7.54	100	14.15	0.933	0.00	7.23	-151	19.0
10:05	7.54	100	14.11	0.933	0.00	7.15	-146	14.5
10:08	7.54	100	14.07	0.933	0.00	7.11	-140	13.7
10:12	7.54	100	14.03	0.933	0.00	7.08	-138	13.0
10:15	7.54	100	14.02	0.933	0.00	7.07	-136	12.1

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 74°F, Mostly Sunny
Date: 6/22/2017
Well ID: MW-43
Intake depth: Approx. 18
DTW: 5.07
Vol Purged: 1.5 gal
DTB: 20.00
Sampler: RH
Purge Start: 9:08
Purge End Time: 9:40
Purge Water Description: Clear, no odor
Sample time: 9:40

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:10	5.19	200	16.54	0.632	9.24	8.32	224	7.4
9:15	5.19	200	16.71	0.635	8.60	8.39	212	7.5
9:20	5.19	200	16.80	0.636	7.72	8.38	207	7.5
9:25	5.19	200	16.88	0.635	7.69	8.37	200	7.5
9:30	5.19	200	16.82	0.642	7.19	8.06	191	7.6
9:33	5.19	200	16.86	0.648	6.32	8.51	184	7.2
9:36	5.19	200	16.96	0.650	6.31	8.60	181	7.1
9:39	5.19	200	16.96	0.646	6.09	8.55	179	6.6

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather:	84°F, Sunny	Date:	6/22/2017
Well ID:	MW-44	Intake depth:	Approx. 17'
DTW:	6.43	Vol Purged:	Approx. 2 gal.
DTB:	19.10		
Sampler:	MS		
Purge Start:	9:00	Purge End Time:	9:30
Purge Water Description:	clear		

Sample time: 9:30
YSI 8:55 temp: 14.34, cond: 11.79, DO: 0.24, pH: 11.86, ORP: 59.7

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
9:00	6.43	100	16.71	1.70	0.00	11.55	-16	16.5
9:03	6.43	100	16.74	1.70	0.00	11.53	-20	14.1
9:06	6.43	100	16.75	1.70	0.00	11.52	-25	15.0
9:09	6.43	100	16.76	1.70	0.00	11.52	-29	15.9
9:12	6.43	100	16.67	1.70	0.00	11.50	-33	16.1
9:15	6.43	100	16.67	1.69	0.00	11.50	-37	18.2
9:18	6.43	100	16.63	1.69	0.00	11.51	-41	21.4
9:21	6.43	100	16.59	1.69	0.00	11.51	-44	23.1
9:24	6.43	100	16.60	1.69	0.00	11.51	-50	25.1
9:27	6.43	100	16.61	1.69	0.00	11.51	-51	26.1
9:30	6.43	100	16.59	1.69	0.00	11.51	-52	20.9

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 70°F, Mostly Sunny
Date: 6/22/2017
Well ID: MW-45
Intake depth: approx. 12'
DTW: 6.02
Vol Purged: 3 gal
DTB: 18.30
Sampler: RH
Purge Start: 7:13
Purge End Time: 7:40
Purge Water Description: clear, no odor
Sample time: 7:40
DUP062217 collected at MW-45 @ 0745

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
7:15	6.02	200	18.23	--	0.00	11.78	240	23.4
7:20	6.02	200	17.82	1.10	0.00	12.42	167	17.0
7:25	6.02	200	17.74	1.12	0.00	12.52	132	17.4
7:30	6.02	200	17.71	1.19	0.00	12.49	118	15.4
7:33	6.02	200	17.66	1.16	0.00	12.43	105	20.2
7:36	6.02	200	17.68	1.17	0.00	12.35	101	19.6
7:39	6.02	200	17.70	1.18	0.00	12.32	100	17.8

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather:	75°F, Mostly Sunny	Date:	6/22/2017
Well ID:	MW-46	Intake depth:	9 ft. bls
DTW:	4.94	Vol Purged:	3 gal
DTB:	19.00		
Sampler:	RH		
Purge Start:	8:10	Purge End Time:	8:40
Purge Water Description:	clear, no odor		

Sample time 8:40
MS/MSD collected @ MW-46; MS - 8:42; MSD - 8:44

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:15	4.94	200	15.78	0.750	0.00	7.55	151	13.4
8:20	4.96	200	16.00	0.769	0.00	7.59	126	12.3
8:25	4.96	200	16.09	0.768	0.00	7.60	119	10.6
8:30	4.95	200	16.41	0.759	0.00	7.60	93	10.0
8:33	4.95	200	16.62	0.761	0.00	7.60	88	12.2
8:36	4.95	200	16.72	0.754	0.00	7.60	85	14.8
8:39	4.95	200	16.77	0.752	0.00	7.59	85	14.0

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather: 84°F, Sunny
Date: 6/22/2017
Well ID: MW-47
Intake depth: Approx. 18'
DTW: 5.32
Vol Purged: Approx. 1 gal
DTB: 20.22
Sampler: MS
Purge Start: 8:15
Purge End Time: 8:50
Purge Water Description: clear
Sample time 8:50
YSI 8:00 temp: 15.14, cond: 1231, DO: 0.53, pH: 11.55, ORP: 83.6

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
8:15	5.32	100	17.17	1.75	0.30	11.41	11	19.9
8:18	5.32	100	17.34	1.74	0.31	11.41	-2	24.7
8:21	5.32	100	17.53	1.73	0.29	11.42	-21	28.5
8:24	5.32	100	17.56	1.74	0.05	11.43	-29	26.6
8:27	5.32	100	17.63	1.74	0.07	11.43	-36	27.1
8:30	5.32	100	17.70	1.74	0.00	11.44	-44	26.0
8:33	5.32	100	17.71	1.74	0.00	11.44	-46	27.7
8:36	5.32	100	17.72	1.74	0.00	11.44	-49	26.7
8:39	5.32	100	17.73	1.73	0.00	11.44	-50	27.3
8:41	5.32	100	17.74	1.74	0.00	11.44	-52	27.0
8:44	5.32	100	17.75	1.74	0.00	11.44	-53	27.5
8:47	5.32	100	17.76	1.73	0.00	11.44	-54	26.8
8:50	5.32	100	17.77	1.74	0.00	11.44	-55	27.0

SITE NAME: Former Paragon Site **Project Number:** 2051.0001Y002

Weather:	78°F, Mostly Sunny	Date:	6/22/2017
Well ID:	MW-48	Intake depth:	Approx. 13'
DTW:	9.8	Vol Purged:	2.5 gal
DTB:	18.14		
Sampler:	RH		
Purge Start:	11:15	Purge End Time:	11:45
Purge Water Description:	clear, slight odor		
	Sample time: 11:40		

Time	DTW (ft bls) (+/- 0.3 ft)	Flow Rate (ml/Min)	Temp (Degree C) (+/- 3%)	Conductivity (mS/cm) (+/- 3%)	DO (mg/L) (+/- 10%)	pH (+/- 0.1 SU)	ORP (mV) (+/- 10)	Turbidity (NTU) (+/- 10%)
11:20	9.82	200	16.30	0.178	0.00	5.35	5	60.2
11:25	9.82	200	16.15	0.178	0.00	5.21	5	45.1
11:30	9.82	200	16.01	0.172	0.00	5.18	16	44.5
11:35	9.82	200	15.94	0.173	0.00	5.17	21	28.2
11:38	9.82	200	15.93	0.174	0.00	5.17	26	24.2
11:41	9.82	200	15.92	0.174	0.21	5.18	26	23.9
11:44	9.82	200	16.00	0.175	0.24	5.17	29	15.9

PLATE

1. VOCs and LNAPL Detected in Groundwater
   March 2017 to June 2017

MW-11	03/30/2017	03/30/2017 DUP	06/22/2017
Acetone	2.2 J	1.9 J	1.7 J
Benzene	1	1	0.55
T-Butylbenzene	4.4	4.5	4

MW-46	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	NS	2 J
Acetone	NS	4.2 J

MW-45	03/30/2017	06/22/2017	06/22/2017 DUP
1,3,5-Trimethylbenzene (Mesitylene)	**230**	**150**	**180**
Acetone	32	45	31
Benzene	0.78 J	ND	ND
Ethylbenzene	**39**	**22**	**22**
Isopropylbenzene (Cumene)	**51**	**38**	**41**
m,p-Xylene	**47**	**25**	**24**
N-Propylbenzene	**88**	**59**	**63**
O-Xylene (1,2-Dimethylbenzene)	**7.4**	**5.4 J**	**6.4 J**
Sec-Butylbenzene	**16**	**12**	**12**
T-Butylbenzene	4.8 J	3.9 J	4 J
Xylenes	**54**	**30 J**	**30 J**

MW-43	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	**78**	**7.1**
Acetone	28	7
Benzene	0.5 J	ND
Ethylbenzene	**6.8**	0.82 J
Isopropylbenzene (Cumene)	**13**	1.9 J
m,p-Xylene	**15**	1.7 J
N-Propylbenzene	**22**	2.9
O-Xylene (1,2-Dimethylbenzene)	**7.2**	0.87 J
Sec-Butylbenzene	**5.8**	0.83 J
T-Butylbenzene	2.4 J	ND
Xylenes	**22**	2.6 J

MW-47	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	**78**	**67**
Acetone	39	27
Benzene	0.66	0.42 J
Ethylbenzene	**15**	**9.4**
Isopropylbenzene (Cumene)	**16**	**13**
m,p-Xylene	**36**	**24**
Methyl Ethyl Ketone (2-Butanone)	ND	4.2 J
N-Propylbenzene	**23**	**20**
O-Xylene (1,2-Dimethylbenzene)	**20**	**14**
Sec-Butylbenzene	4.6	4.2 J
Styrene	1.1 J	ND
T-Butylbenzene	2 J	1.7 J
Toluene	2.9	2.2 J
Xylenes	**56**	**38**

MW-44	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	**81**	**42**
Acetone	**53**	**61**
Benzene	0.63	0.19 J
Ethylbenzene	**9.7**	3.2
Isopropylbenzene (Cumene)	**13**	**5.8**
m,p-Xylene	**30**	**9.5**
N-Propylbenzene	**19**	**9.6**
O-Xylene (1,2-Dimethylbenzene)	**22**	**8.8**
Sec-Butylbenzene	**6.2**	3.9
Styrene	1.1 J	ND
T-Butylbenzene	2.4 J	1.7 J
Tetrachloroethylene (PCE)	0.23 J	ND
Toluene	3.6	0.99 J
Xylenes	**52**	**18**

MW-2R	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	NS	**76**
Acetone	NS	6.2 J
Carbon Disulfide	NS	23
Ethylbenzene	NS	**5.4 J**
Isopropylbenzene (Cumene)	NS	**17**
m,p-Xylene	NS	**6.7**
Methyl Ethyl Ketone (2-Butanone)	NS	7.6 J
N-Propylbenzene	NS	**29**
O-Xylene (1,2-Dimethylbenzene)	NS	**5.2 J**
Sec-Butylbenzene	NS	**8.5**
T-Butylbenzene	NS	5 J
Xylenes	NS	**12 J**

MW-7	03/30/2017	06/22/2017
Carbon Disulfide	NS	8.6 J
Isopropylbenzene (Cumene)	NS	**19**
N-Propylbenzene	NS	**21**
Sec-Butylbenzene	NS	**23**
T-Butylbenzene	NS	**16**
Tetrachloroethylene (PCE)	NS	1.6 J

MW-33	03/30/2017	06/22/2017
Acetone	5.7 J	ND
Ethylbenzene	2.3 J	ND
Isopropylbenzene (Cumene)	4.2 J	0.87 J
Methyl Ethyl Ketone (2-Butanone)	9.9 J	ND
N-Propylbenzene	**8.2**	1.5 J
Sec-Butylbenzene	4.6 J	1.4 J
T-Butylbenzene	2.3 J	0.89 J

MW-19	03/30/2017	06/22/2017
Acetone	NS	8.8 J
Ethylbenzene	NS	3.4 J
Isopropylbenzene (Cumene)	NS	**23**
Methyl Ethyl Ketone (2-Butanone)	NS	5.4 J
N-Propylbenzene	NS	**36**
Sec-Butylbenzene	NS	**14**
T-Butylbenzene	NS	**8.6**

MW-38	03/30/2017	06/22/2017
Acetone	ND	**53**
Benzene	ND	0.43 J
Carbon Disulfide	ND	2.8 J
Chloroethane	ND	1.2 J
Isopropylbenzene (Cumene)	**36**	**24**
Methyl Ethyl Ketone (2-Butanone)	ND	16
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ND	1.7 J
N-Propylbenzene	**55**	**31**
Sec-Butylbenzene	**16**	**8.2**
T-Butylbenzene	**6.8**	4.2
Trichloroethylene (TCE)	ND	0.22 J

MW-34	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	0.94 J	0.86 J
Acetone	2.4 J	2.2 J
Benzene	0.5	0.23 J
Carbon Disulfide	ND	1.4 J
Isopropylbenzene (Cumene)	**18**	**23**
Methyl Ethyl Ketone (2-Butanone)	3 J	ND
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.2 J	ND
N-Propylbenzene	**25**	**32**
Sec-Butylbenzene	**13**	**14**
T-Butylbenzene	**7.2**	**6.6**

MW-37	03/30/2017	06/22/2017
Isopropylbenzene (Cumene)	**34**	NS
N-Propylbenzene	**68**	NS
Sec-Butylbenzene	**30**	NS
T-Butylbenzene	**8.8 J**	NS

MW-40	03/30/2017	06/22/2017
1,2-Dichloroethane	ND	**1.2**
1,2-Dichloropropane	ND	0.27 J
Acetone	2.3 J	**260**
Benzene	**9.3**	**5.8**
Carbon Disulfide	ND	4.6 J
Chloroethane	ND	4.2
Isopropylbenzene (Cumene)	**47**	**40**
m,p-Xylene	1 J	1.1 J
Methyl Ethyl Ketone (2-Butanone)	ND	39
Methylene Chloride	ND	1.5 J
N-Propylbenzene	**38**	**64**
O-Xylene (1,2-Dimethylbenzene)	0.72 J	0.79 J
Sec-Butylbenzene	**20**	**19**
T-Butylbenzene	**5.3**	4.2
Toluene	ND	0.72 J
Xylenes	1.7 J	1.9 J

MW-41	03/30/2017	06/22/2017
1,2-Dichloroethane	ND	**0.74**
1,2-Dichloropropane	ND	0.52 J
Acetone	ND	**96**
Benzene	0.62	0.43 J
Chloroethane	ND	2.8
Isopropylbenzene (Cumene)	2.5	1.1 J
Methylene Chloride	ND	1.2 J
N-Propylbenzene	3.1	1.3 J
Sec-Butylbenzene	3.9	1.7 J
T-Butylbenzene	2.4 J	1.3 J

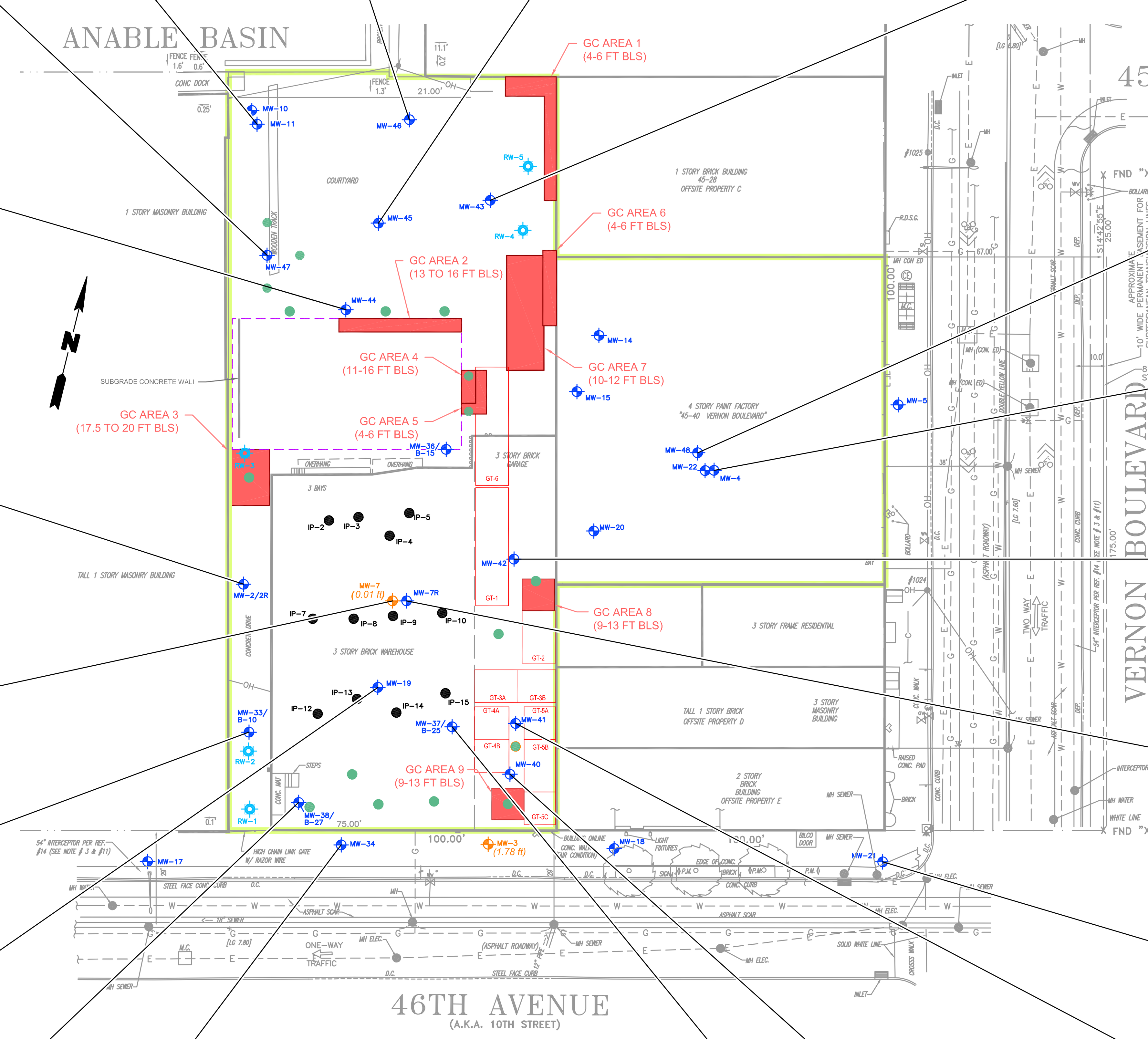
MW-48	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	0.92 J	2.8
Isopropylbenzene (Cumene)	2.6	1.9 J
N-Propylbenzene	2.4 J	2.1 J
Sec-Butylbenzene	4.3	3
T-Butylbenzene	3.1	1.8 J

MW-4	03/30/2017	06/22/2017
1,3,5-Trimethylbenzene (Mesitylene)	**14**	**14**
Ethylbenzene	1.6 J	1.7 J
Isopropylbenzene (Cumene)	**5.4**	**6.5**
m,p-Xylene	1.6 J	1.9 J
N-Propylbenzene	**5.8**	**7.6**
Sec-Butylbenzene	**6.6**	**6.7**
T-Butylbenzene	**7.3**	**5.7**
Xylenes	1.6 J	1.9 J

MW-42	03/30/2017	06/22/2017
Isopropylbenzene (Cumene)	0.73 J	ND
Sec-Butylbenzene	1.4 J	1.1 J
T-Butylbenzene	1.7 J	1.2 J

MW-7R	03/30/2017	06/22/2017
Isopropylbenzene (Cumene)	**14 J**	NS
N-Propylbenzene	**25**	NS
Sec-Butylbenzene	**12 J**	NS
T-Butylbenzene	**7 J**	NS

MW-21	03/30/2017	06/22/2017
Benzene	**1.4**	ND
Tetrachloroethylene (PCE)	ND	0.35 J



LEGEND

- LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
- LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
- LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
- LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
- LOCATION OF FIRST ROUND ISCO INJECTION POINT
- (0.38 ft) LNAPL THICKNESS
- GC AREA 1 (4-6 FT BLS) DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING
- ft FEET
- LNAPL LIGHT NON-AQUEOUS PHASE LIQUID
- ISCO IN-SITU CHEMICAL OXIDATION
- CONCRETE VAULT
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. — SAMPLE DATE

ANALYTES — CONCENTRATIONS (IN µg/L)

MW-11	Mar-17
Analyte	
Acetone	2.2 J
Benzene	1
T-Butylbenzene	4.4

PARAMETER	STANDARDS*
VOCs	
1,2-Dichloroethane	0.6
1,2-Dichloropropane	1
1,3,5-Trimethylbenzene (Mesitylene)	5
Acetone	50
Benzene	1
Carbon Disulfide	60
Chloroethane	5
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
Methyl Ethyl Ketone (2-Butanone)	50
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	(3)
Methylene Chloride	5
N-Propylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
Styrene	5
T-Butylbenzene	5
Tetrachloroethylene (PCE)	5
Toluene	5
Trichloroethylene (TCE)	5
Xylenes	5

CONCENTRATIONS IN µg/L

- µg/L – MICROGRAMS PER LITER
- * – NYSDEC AWQSGVs
- NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- AWQSGVs – AMBIENT WATER-QUALITY STANDARDS AND GUIDANCE VALUES
- B – FOUND IN LABORATORY BLANK
- D – DILUTION
- DUP – DUPLICATE SAMPLE
- E – EXCEEDS CALIBRATION LIMIT
- J – ESTIMATED VALUE
- VOCs – VOLATILE ORGANIC COMPOUND
- ND – NO DETECTION
- NS – NOT SAMPLED
- **BOLD** – INDICATES THAT PARAMETER WAS DETECTED ABOVE THE NYSDEC AWQSGVS

30' 0 30'

NO.	DATE	REVISION DESCRIPTION	INT.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF STATE LAW.

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Remedial

REMEDIAL ENGINEERING, P.C.

209 Shafter Street
Islandia, New York 11749 (631) 232-2600

PROJECT NAME:

QUARTERLY MONITORING REPORT Q2 OF 2017
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:

VERNON 4540 REALTY LLC

TITLE:

VOCs AND LNAPL DETECTED IN GROUNDWATER MARCH 2017 TO JUNE 2017

DRAWING NO.

1

DRAWING 1 OF 1

V:\CAD\PROJECTS\2051\0001Y\247\2051.0001Y247.01.DWG

From: Christian Hoelzli
Sent: Wednesday, October 18, 2017 5:21 PM
To: 'Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)'
Cc: 'O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov)'; 'Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov)'; 'Brent Carrier (CRE Development) (bcarrier@credevelopment.com)'; 'mbogin@sprlaw.com'; Omar Ramotar; Richard Maxwell; Joe Duminuco; Charlie McGuckin; 'atill@simonbaron.com'; 'Robert Hendrickson'
Subject: Progress Report September 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (September 26, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Routine Operation, Maintenance, and Reporting Activities:

On September 26, 2017, Roux Associates completed the quarterly gauging and sampling of the 21 monitoring wells included in the SMP monitoring network. If the presence of free-product was observed, the monitoring well was not sampled. The remaining monitoring wells within the network were sampled and analyzed for VOCs. In addition the five (5) recovery wells (RW-1 through RW-5) onsite and an additional nine (9) monitoring wells both onsite and offsite were gauged to determine the presence of LNAPL. The gauging of these additional monitoring wells has been performed monthly for the six (6) month period following Certificate of Completion issuance. A summary of the gauging data collected during the reporting period is provided in the attached table.

Trace free-product was present in on-site monitoring wells MW-7, MW-19, MW-34, MW-40 and MW-45; with free-product continuing to be present in off-site monitoring well MW-3. Absorbent socks were installed in these monitoring wells, with approximately 0.488 gallons of free-product absorbed in total from these monitoring wells based on the saturation of the sock absorbency. An additional 1.0 gallon of product was manually bailed from monitoring well MW-3, with the recovered product and saturated absorbent socks being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

MW-14 and MW-15 went dry within minutes of purging and thus were unable to be sampled.

Due to the lack of free-product in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling / Sample Results

During this reporting period, 15 groundwater samples were collected from the following monitoring wells:

- MW-2R
- MW-4
- MW-7R
- MW-10
- MW-11
- MW-21
- MW-33
- MW-38
- MW-41
- MW-42
- MW-43
- MW-44

- MW-46
- MW-47
- MW-48

The results of this quarterly sampling round will be presented and discussed in a Quarterly Status Report. This report will be submitted under separate cover in the upcoming reporting period (October 2017).

Planned Actions:

The following activities are scheduled for the next reporting period (October 1 through October 31, 2017):

- Preparation and submittal of quarterly status report;
- Continued monthly gauging of monitoring wells within the SMP monitoring network; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

Work Plan Modifications

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Christian Hoelzli | Staff Engineer | Roux Associates, Inc.
209 Shafter Street, Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2477 | Mobile: 516.589.4604
Email: choelzli@rouxinc.com | Website: www.rouxinc.com

Summary of Water Level Elevations and LNAPL Thickness; September 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

Well ID	MPE (ft)	March 30, 2017				April 24, 2017				May 18, 2017				May 25, 2017				June 8, 2017				June 22, 2017			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-2R	9.23	4.31	4.32	4.92	0.01	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--	--	7.05	2.18	--	--	6.95	2.28	--
MW-3	8.40	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78
MW-4	11.57	--	9.7	1.87	--	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--	--	9.77	1.80	--	--	9.79	1.78	--
MW-7	4.48	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01
MW-7R	4.48	--	2.75	1.73	--	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--	--	2.27	2.21	--	--	2.14	2.34	--
MW-10	7.82	--	5.91	1.91	--	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--	--	5.82	2.00	--	--	6.40	1.42	--
MW-11	7.82	--	6.69	1.13	--	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--	--	5.79	2.03	--	--	5.85	1.97	--
MW-14	11.63	--	6.37	5.26	--	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--	--	9.56	2.07	--	--	9.33	2.30	--
MW-15	11.51	--	6.38	5.13	--	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--	--	9.50	2.01	--	--	9.36	2.15	--
MW-17	8.78	--	6.64	2.14	--	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--	--	6.08	2.70	--	--	6.18	2.60	--
MW-18	8.40	--	6.77	1.63	--	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--	--	6.96	1.44	--	--	7.06	1.34	--
MW-19	4.41	2.82	2.9	1.57	0.08	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--	--	2.17	2.24	--	--	2.24	2.17	--
MW-20	11.69	--	9.81	1.88	--	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--	--	9.89	1.80	--	--	9.88	1.81	--
MW-21	8.17	--	5.89	2.28	--	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--	--	6.26	1.91	--	--	6.03	2.14	--
MW-22	11.63	--	9.74	1.89	--	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--	--	9.80	1.83	--	--	9.81	1.82	--
MW-33	9.49	--	7.00	2.49	--	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--	--	6.79	2.70	--	--	6.19	3.30	--
MW-34	8.30	--	7.03	1.27	--	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--	--	6.84	1.46	--	--	7.07	1.23	--
MW-36	9.11	--	6.47	2.64	--	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--	--	6.53	2.58	--	--	6.19	2.92	--
MW-37	4.45	--	2.64	1.81	--	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--	--	2.04	2.41	--	--	2.30	2.15	--
MW-38	4.44	--	2.83	1.61	--	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--	--	2.26	2.18	--	--	2.41	2.03	--
MW-40	8.49	--	6.98	1.51	--	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--	--	7.09	1.40	--	--	7.16	1.33	--
MW-41	8.51	--	6.75	1.76	--	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--	--	6.52	1.99	--	--	6.78	1.73	--
MW-42	9.37	--	7.60	1.77	--	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--	--	7.40	1.97	--	--	7.54	1.83	--
MW-43	7.81	--	5.71	2.1	--	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--	--	5.57	2.24	--	--	5.19	2.62	--
MW-44	9.15	--	6.95	2.2	--	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--	--	6.85	2.3	--	--	6.43	2.72	--
MW-45	8.69	--	6.49	2.2	--	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--	--	6.40	2.29	--	--	5.84	2.85	--
MW-46	7.69	--	5.52	2.17	--	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--	--	5.39	2.30	--	--	4.96	2.73	--
MW-47	8.03	--	5.84	2.19	--	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--	--	5.70	2.33	--	--	5.32	2.71	--
MW-48	11.43	--	9.47	1.96	--	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--	--	9.89	1.54	--	--	9.53	1.90	--
Recovery Wells																									
RW-1	8.26	--	6.66	1.6	--	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--	--	6.36	1.90	--	--	6.29	1.97	--
RW-2	9.81	--	7.02	2.79	--	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--	--	6.66	3.15	--	--	6.79	3.02	--
RW-3	9.83	--	7.48	2.35	--	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--	--	7.30	2.53	--	--	6.92	2.91	--
RW-4	10.2	--	7.69	2.51	--	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--	--	7.62	2.58	--	--	7.70	2.50	--
RW-5	10.27	--	7.5	2.77	--	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--	--	7.58	2.69	--	--	6.98	3.29	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

Summary of Water Level Elevations and LNAPL Thickness; September 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

Well ID	MPE (ft)	July 27, 2017				August 29, 2017				September 26, 2017			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells													
MW-2R	9.23	6.92	6.94	2.31	0.02	--	6.69	2.54	--	--	7.78	1.45	--
MW-3	8.40	6.78	8.39	1.22	1.61	6.70	7.88	1.41	1.18	6.81	8.13	1.26	1.32
MW-4	11.57	--	9.76	1.81	--	--	9.39	2.18	--	--	9.98	1.59	--
MW-7	4.48	2.75	2.76	1.73	0.01	1.09	1.10	3.39	0.01	2.59	2.86	1.82	0.27
MW-7R	4.48	--	NM	NC	--	--	2.19	2.29	--	--	2.35	2.13	--
MW-10	7.82	--	NM	NC	--	--	5.79	2.03	--	--	8.36	-0.54	--
MW-11	7.82	--	NM	NC	--	--	5.71	2.11	--	--	6.68	1.14	--
MW-14	11.63	--	NM	NC	--	--	9.48	2.15	--	--	9.88	1.75	--
MW-15	11.51	--	NM	NC	--	--	9.46	2.05	--	--	9.74	1.77	--
MW-17	8.78	--	5.90	2.88	--	--	6.04	2.74	--	--	6.62	2.16	--
MW-18	8.40	--	NM	NC	--	--	6.87	1.53	--	--	6.85	1.55	--
MW-19	4.41	--	2.33	2.08	--	--	2.09	2.32	--	--	2.52	1.89	--
MW-20	11.69	--	NM	NC	--	--	9.82	1.87	--	--	10.06	1.63	--
MW-21	8.17	--	NM	NC	--	--	6.19	1.98	--	--	5.99	2.18	--
MW-22	11.63	--	NM	NC	--	--	9.79	1.84	--	--	10.01	1.62	--
MW-33	9.49	--	NM	NC	--	--	6.79	2.70	--	--	7.19	2.30	--
MW-34	8.30	--	NM	NC	--	--	6.83	1.47	--	7.04	7.15	1.23	0.11
MW-36	9.11	--	NM	NC	--	--	6.43	2.68	--	--	7.02	2.09	--
MW-37	4.45	--	NM	NC	--	--	1.99	2.46	--	--	2.71	1.74	--
MW-38	4.44	--	NM	NC	--	--	2.31	2.13	--	--	2.73	1.71	--
MW-40	8.49	--	NM	NC	--	--	6.98	1.51	--	7.02	7.04	1.47	0.02
MW-41	8.51	--	NM	NC	--	--	6.41	2.10	--	--	6.92	1.59	--
MW-42	9.37	--	NM	NC	--	--	7.29	2.08	--	--	7.57	1.80	--
MW-43	7.81	--	NM	NC	--	--	5.56	2.25	--	--	6.10	1.71	--
MW-44	9.15	--	NM	NC	--	--	6.80	2.35	--	--	7.38	1.77	--
MW-45	8.69	--	NM	NC	--	--	6.37	2.32	--	--	6.92	1.77	--
MW-46	7.69	--	NM	NC	--	--	5.33	2.36	--	--	5.99	1.70	--
MW-47	8.03	--	NM	NC	--	--	5.62	2.41	--	--	6.31	1.72	--
MW-48	11.43	--	NM	NC	--	--	9.69	1.74	--	--	9.77	1.66	--
Recovery Wells													
RW-1	8.26	--	6.24	2.02	--	--	6.07	2.19	--	--	6.87	1.39	--
RW-2	9.81	--	6.52	3.29	--	--	6.38	3.43	--	--	7.16	2.65	--
RW-3	9.83	--	7.01	2.82	--	--	6.80	3.03	--	--	7.99	1.84	--
RW-4	10.2	--	7.31	2.89	--	--	7.30	2.90	--	--	8.19	2.01	--
RW-5	10.27	--	7.1	3.17	--	--	7.10	3.17	--	--	7.96	2.31	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

From: Christian Hoelzli
Sent: Friday, November 10, 2017 11:37 AM
To: 'Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)'
Cc: 'O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov)'; 'Perretta, Anthony C (HEALTH) (anthony.perretta@health.ny.gov)'; 'Brent Carrier (CRE Development) (bcarrier@credevelopment.com)'; 'mbogin@sprlaw.com'; Omar Ramotar; Joe Duminuco; 'atill@simonbaron.com'; Robert Hendrickson
Subject: Progress Report October 2017 - Former Paragon Paint (NYSDEC Site No. C241108)
Attachments: Water Level Elevations and LNAPL thickness (October 31, 2017).pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No. C241108).

Routine Operation, Maintenance, and Reporting Activities:

On October 31, 2017, the wells within the SMP sampling network were gauged. A summary of the gauging data collected during the reporting period is provided in the table attached.

Trace free-product was present in on-site monitoring well MW-7, with free-product continuing to be present in off-site monitoring well MW-3. Absorbent socks were installed in these monitoring wells, with approximately 0.422 gallons of free-product absorbed in total based on the saturation of the socks. An additional 0.125 gallons of product was manually bailed from MW-3, with the recovered product and saturated absorbent socks being temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery wells.

Sampling/Sample Results:

No samples were collected during this reporting period.

Planned Actions:

The following activities are scheduled for the next reporting period (November 1 through November 30)

- Submittal of quarterly status report;
- Continued monthly gauging of monitoring wells within the SMP monitoring network; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

As you are aware, per the previously submitted quarterly status report, additional ISCO is not planned due to its limited effectiveness at the Site. That said, Roux Associates is still waiting for a response to what was specifically conveyed in that report.

Work Plan Modifications:

No modifications made to the Work Plan during this reporting period.

Please contact myself or Omar Ramotar with any questions or concerns.

Thank you,

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Summary of Water Level Elevations and LNAPL Thickness; October 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		March 30, 2017				April 24, 2017				May 18, 2017				May 25, 2017				June 8, 2017				June 22, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-2R	9.23	4.31	4.32	4.92	0.01	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--	--	7.05	2.18	--	--	6.95	2.28	--
MW-3	8.40	6.79	7.81	1.36	1.02	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78
MW-4	11.57	--	9.7	1.87	--	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--	--	9.77	1.80	--	--	9.79	1.78	--
MW-7	4.48	2.72	3.10	1.67	0.38	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01
MW-7R	4.48	--	2.75	1.73	--	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--	--	2.27	2.21	--	--	2.14	2.34	--
MW-10	7.82	--	5.91	1.91	--	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--	--	5.82	2.00	--	--	6.40	1.42	--
MW-11	7.82	--	6.69	1.13	--	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--	--	5.79	2.03	--	--	5.85	1.97	--
MW-14	11.63	--	6.37	5.26	--	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--	--	9.56	2.07	--	--	9.33	2.30	--
MW-15	11.51	--	6.38	5.13	--	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--	--	9.50	2.01	--	--	9.36	2.15	--
MW-17	8.78	--	6.64	2.14	--	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--	--	6.08	2.70	--	--	6.18	2.60	--
MW-18	8.40	--	6.77	1.63	--	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--	--	6.96	1.44	--	--	7.06	1.34	--
MW-19	4.41	2.82	2.9	1.57	0.08	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--	--	2.17	2.24	--	--	2.24	2.17	--
MW-20	11.69	--	9.81	1.88	--	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--	--	9.89	1.80	--	--	9.88	1.81	--
MW-21	8.17	--	5.89	2.28	--	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--	--	6.26	1.91	--	--	6.03	2.14	--
MW-22	11.63	--	9.74	1.89	--	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--	--	9.80	1.83	--	--	9.81	1.82	--
MW-33	9.49	--	7.00	2.49	--	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--	--	6.79	2.70	--	--	6.19	3.30	--
MW-34	8.30	--	7.03	1.27	--	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--	--	6.84	1.46	--	--	7.07	1.23	--
MW-36	9.11	--	6.47	2.64	--	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--	--	6.53	2.58	--	--	6.19	2.92	--
MW-37	4.45	--	2.64	1.81	--	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--	--	2.04	2.41	--	--	2.30	2.15	--
MW-38	4.44	--	2.83	1.61	--	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--	--	2.26	2.18	--	--	2.41	2.03	--
MW-40	8.49	--	6.98	1.51	--	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--	--	7.09	1.40	--	--	7.16	1.33	--
MW-41	8.51	--	6.75	1.76	--	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--	--	6.52	1.99	--	--	6.78	1.73	--
MW-42	9.37	--	7.60	1.77	--	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--	--	7.40	1.97	--	--	7.54	1.83	--
MW-43	7.81	--	5.71	2.1	--	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--	--	5.57	2.24	--	--	5.19	2.62	--
MW-44	9.15	--	6.95	2.2	--	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--	--	6.85	2.3	--	--	6.43	2.72	--
MW-45	8.69	--	6.49	2.2	--	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--	--	6.40	2.29	--	--	5.84	2.85	--
MW-46	7.69	--	5.52	2.17	--	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--	--	5.39	2.30	--	--	4.96	2.73	--
MW-47	8.03	--	5.84	2.19	--	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--	--	5.70	2.33	--	--	5.32	2.71	--
MW-48	11.43	--	9.47	1.96	--	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--	--	9.89	1.54	--	--	9.53	1.90	--
Recovery Wells																									
RW-1	8.26	--	6.66	1.6	--	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--	--	6.36	1.90	--	--	6.29	1.97	--
RW-2	9.81	--	7.02	2.79	--	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--	--	6.66	3.15	--	--	6.79	3.02	--
RW-3	9.83	--	7.48	2.35	--	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--	--	7.30	2.53	--	--	6.92	2.91	--
RW-4	10.2	--	7.69	2.51	--	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--	--	7.62	2.58	--	--	7.70	2.50	--
RW-5	10.27	--	7.5	2.77	--	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--	--	7.58	2.69	--	--	6.98	3.29	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

Summary of Water Level Elevations and LNAPL Thickness; October 2017
Former Paragon Paint and Varnish Corp., Long Island City, New York

		July 27, 2017				August 29, 2017				September 26, 2017				October 31, 2017			
Well ID	**MPE (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**
Monitoring Wells																	
MW-2R	9.23	6.92	6.94	2.31	0.02	--	6.69	2.54	--	--	7.78	1.45	--	--	6.78	2.45	--
MW-3	8.40	6.78	8.39	1.22	1.61	6.70	7.88	1.41	1.18	6.81	8.13	1.26	1.32	6.58	7.10	1.69	0.52
MW-4	11.57	--	9.76	1.81	--	--	9.39	2.18	--	--	9.98	1.59	--	--	9.25	2.32	--
MW-7	4.48	2.75	2.76	1.73	0.01	1.09	1.10	3.39	0.01	2.59	2.86	1.82	0.27	1.67	1.68	2.81	0.01
MW-7R	4.48	--	NM	NC	--	--	2.19	2.29	--	--	2.35	2.13	--	--	2.11	2.37	--
MW-10	7.82	--	NM	NC	--	--	5.79	2.03	--	--	8.36	-0.54	--	--	5.89	1.93	--
MW-11	7.82	--	NM	NC	--	--	5.71	2.11	--	--	6.68	1.14	--	--	5.85	1.97	--
MW-14	11.63	--	NM	NC	--	--	9.48	2.15	--	--	9.88	1.75	--	--	9.36	2.27	--
MW-15	11.51	--	NM	NC	--	--	9.46	2.05	--	--	9.74	1.77	--	--	9.30	2.21	--
MW-17	8.78	--	5.90	2.88	--	--	6.04	2.74	--	--	6.62	2.16	--	--	6.15	2.63	--
MW-18	8.40	--	NM	NC	--	--	6.87	1.53	--	--	6.85	1.55	--	--	6.91	1.49	--
MW-19	4.41	--	2.33	2.08	--	--	2.09	2.32	--	--	2.52	1.89	--	--	2.18	2.23	--
MW-20	11.69	--	NM	NC	--	--	9.82	1.87	--	--	10.06	1.63	--	--	9.80	1.89	--
MW-21	8.17	--	NM	NC	--	--	6.19	1.98	--	--	5.99	2.18	--	--	6.39	1.78	--
MW-22	11.63	--	NM	NC	--	--	9.79	1.84	--	--	10.01	1.62	--	--	9.83	1.80	--
MW-33	9.49	--	NM	NC	--	--	6.79	2.70	--	--	7.19	2.30	--	--	6.80	2.69	--
MW-34	8.30	--	NM	NC	--	--	6.83	1.47	--	7.04	7.15	1.23	0.11	--	6.84	1.46	--
MW-36	9.11	--	NM	NC	--	--	6.43	2.68	--	--	7.02	2.09	--	--	6.56	2.55	--
MW-37	4.45	--	NM	NC	--	--	1.99	2.46	--	--	2.71	1.74	--	--	2.02	2.43	--
MW-38	4.44	--	NM	NC	--	--	2.31	2.13	--	--	2.73	1.71	--	--	2.38	2.06	--
MW-40	8.49	--	NM	NC	--	--	6.98	1.51	--	7.02	7.04	1.47	0.02	--	7.09	1.40	--
MW-41	8.51	--	NM	NC	--	--	6.41	2.10	--	--	6.92	1.59	--	--	6.51	2.00	--
MW-42	9.37	--	NM	NC	--	--	7.29	2.08	--	--	7.57	1.80	--	--	7.37	2.00	--
MW-43	7.81	--	NM	NC	--	--	5.56	2.25	--	--	6.10	1.71	--	--	5.59	2.22	--
MW-44	9.15	--	NM	NC	--	--	6.80	2.35	--	--	7.38	1.77	--	--	6.85	2.30	--
MW-45	8.69	--	NM	NC	--	--	6.37	2.32	--	--	6.92	1.77	--	--	6.41	2.28	--
MW-46	7.69	--	NM	NC	--	--	5.33	2.36	--	--	5.99	1.70	--	--	5.38	2.31	--
MW-47	8.03	--	NM	NC	--	--	5.62	2.41	--	--	6.31	1.72	--	--	5.73	2.30	--
MW-48	11.43	--	NM	NC	--	--	9.69	1.74	--	--	9.77	1.66	--	--	9.79	1.64	--
Recovery Wells																	
RW-1	8.26	--	6.24	2.02	--	--	6.07	2.19	--	--	6.87	1.39	--	--	6.15	2.11	--
RW-2	9.81	--	6.52	3.29	--	--	6.38	3.43	--	--	7.16	2.65	--	--	6.42	3.39	--
RW-3	9.83	--	7.01	2.82	--	--	6.80	3.03	--	--	7.99	1.84	--	--	6.98	2.85	--
RW-4	10.2	--	7.31	2.89	--	--	7.30	2.90	--	--	8.19	2.01	--	--	7.47	2.73	--
RW-5	10.27	--	7.1	3.17	--	--	7.10	3.17	--	--	7.96	2.31	--	--	7.30	2.97	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

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December 1, 2017

Ms. Sondra Martinkat
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
Region Two
47-40 21st Street
Long Island City, New York 11101

Re: Quarterly Inspection and Monitoring Report
July to September 2017
Paragon Paint and Varnish Corp., Long Island, New York, Site No. C241108

Dear Ms. Martinkat:

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering), on behalf of CSC 4540 Property Co. LLC, have generated this quarterly inspection and monitoring report to summarize operation, maintenance and monitoring activities being performed at the Paragon Paint and Varnish Corp. located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, Queens, New York (Site). The Site is currently under site management pursuant to Site Management Plan (SMP) approved by the New York State Department of Environmental Conservation (NYSDEC) in November 2016 under the NYSDEC Brownfield Cleanup Program (BCP), Site No. C241108. During this reporting period (July to September 2017), the composite cover system and institutional controls (ICs) were not modified. In addition, the following activities, as described herein, were specifically performed:

- Monthly operation and maintenance (O&M) of the Light Non-Aqueous Phase Liquid (LNAPL) recovery system (as necessary);
- Monthly gauging of SMP monitoring network to assess presence of LNAPL;
- Monthly LNAPL recovery using manual bailing techniques, where applicable, within SMP monitoring network;
- Quarterly monitoring (gauging and sampling) of Site monitoring wells; and
- ISCO treatment evaluations and recommendations were proposed in the previous Quarterly Inspection and Monitoring Report, dated August 23, 2017.

<u>Site-Wide Inspection and O&M of the LNAPL Recovery System</u>

Based on the lack of recoverable amounts of product identified during the previous reporting period, the operation and monthly maintenance of the LNAPL recovery system has been temporarily paused starting March 30, 2017 as documented in a prior monthly progress report to the NYSDEC.

Inspections of the Site and the system itself, while not operating, are included in Attachment 1. Monthly monitoring of the recovery wells (RW-1 through RW-5) was continued to confirm the lack of LNAPL. Gauging data generated during the reporting period for each recovery well is presented in tabular form in Attachment 2. If the presence of recoverable LNAPL returns at these recovery wells, operation of the LNAPL recovery system will resume.

Gauging and Manual LNAPL Recovery

To continue the ongoing assessment of measurable LNAPL in on-site and off-site monitoring and recovery wells, the SMP monitoring well network is gauged on a monthly basis. Additional monitoring wells outside this network were gauged periodically to determine the presence of LNAPL.

Consistent with the requirements of the SMP, LNAPL monitoring and manual recovery efforts will continue to be performed on a monthly basis at all recovery wells (RW-1 through RW-5) and monitoring wells (MW-3, MW-7, and MW-19) where LNAPL continued to be present throughout the entirety of the reporting period. As necessary, monitoring wells can be added or removed, when applicable, to this LNAPL assessment network.

If the presence of LNAPL in the monitoring wells was observed to be greater than trace amounts (i.e., >0.01'), the monitoring well was manually bailed or oil absorbent socks were installed. During the reporting period, a total of 3.41 gallons of LNAPL was recovered by bailing or by using oil absorbent socks or pads. Note, oil absorbent socks were replaced or installed at monitoring wells MW-2R, MW-3, MW-19, MW-34, MW-40, and MW-45 to facilitate removal of trace product at those locations.

All gauging and manual LNAPL recovery data generated during the reporting period is provided in tabular form in Attachment 3 with a more focused and condensed summary of monitoring wells with the presence of LNAPL provided below:

Monitoring Well ID	LNAPL Thickness Measurements			LNAPL Recovered	
	July 2017 (1 event)	August 2017 (1 event)	September 2017 (1 event)	Absorbent Sock/ Pad ***	Manual Bailing
MW-2R*	0.02 feet	0.0 feet	0.0 feet	0 gallons	0.1 gallons
MW-3* (Off-Site)	1.61 feet	1.18 feet	1.32 feet	0.26 gallons	2.75 gallons
MW-7**	0.01 feet (trace)	0.01 feet (trace)	0.27 feet	0.10 gallons	0.20 gallons
MW-34* (off-Site)	Not Measured	0.0 feet	0.11 feet	0 gallons	0 gallons
MW-40*	Not Measured	0.0 feet	0.02 feet	0 gallons	0 gallons

* - Absorbent sock was added, removed or changed out of the monitoring well during each gauging event.
** - Absorbent pad was utilized to remove trace product at monitoring well during July 2017 gauging event.
*** - LNAPL recovered was calculated based on percent-saturation of absorbent sock/ pad following removal.

Based on a review of the gauging and manual LNAPL recovery data generated during the reporting period, the following key observations and trends are provided below:

- The presence of LNAPL was noted at one point during the monitoring period at five (5) monitoring wells: MW-2R, MW-3, MW-7, MW-34, and MW-40.

- Based on the September 2017 gauging event, the presence of LNAPL is as follows:
  - Trace amounts of LNAPL is present at two (2) on-site locations (MW-7 [0.27 feet] and MW-40 [0.02 feet]).

  - LNAPL is present at two (2) off-site locations (MW-3 [1.32 feet] and MW-34 [0.11 feet]).

- LNAPL recovery noted at monitoring wells MW-2R and MW-42 was due to removal of oil absorbent sock installed during the previous reporting period. No LNAPL has been detected following removal of the oil absorbent socks.

- Manual bailing and installation of oil absorbent socks/ pads are effectively removing residual LNAPL at the on-site monitoring wells.

Based on the summary provided herein, manual bailing of LNAPL and the installation of oil absorbent socks at various monitoring wells highlighted herein continues to be effective. These LNAPL recovery techniques will continue to be utilized during the next quarter.

Groundwater Monitoring

Groundwater is monitored by a combination of gauging and sampling of groundwater monitoring wells within the SMP monitoring network. As discussed earlier, groundwater monitoring wells are gauged monthly to check for the presence of LNAPL and confirm thickness of LNAPL, if present. Site monitoring wells are then sampled on a quarterly basis to determine the presence of volatile organic compounds (VOCs), in particular the four Site-specific COCs: benzene, ethylbenzene, isopropylbenzene and total xylenes. The monitoring wells were sampled for Target Compound List (TCL) of VOCs using USEPA SW846 Method 8260.

Water/LNAPL level data was collected during the September 2017 gauging event (Attachment 3). If the presence of LNAPL was noted in a groundwater monitoring well, the product thickness was noted and the monitoring well was manually bailed to the extent practical. The respective LNAPL measurements collected from the September 2017 gauging round is highlighted on Figure 1.

On September 26, 2017, the required quarterly groundwater gauging and sampling round was performed. The current NYSDEC-approved monitoring well network consists of the following:

- Three off-site monitoring wells along the southern perimeter of the site (MW-3, MW-21, and MW-34); and

- 18 on-site monitoring wells (MW-2R, MW-4, MW-7, MW-10, MW-11, MW-15, MW-19, MW-33, MW-38, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-47, and MW-48).

For each event, if the presence of product was noted at a monitoring well to be sampled within the respective monitoring network, the monitoring well was not sampled. Instead of being sampled, LNAPL was manually recovered to the extent practical as noted above. For this monitoring round, four (4) of the twenty-one (21) monitoring wells within the NYSDEC-approved monitoring network were not sampled due to the continued presence of LNAPL (offsite wells MW-3 and MW-34, and onsite wells MW-7 and MW-40). Two (2) monitoring wells were not sampled due to the presence of LNAPL sheen during purging activities (MW-19 and MW-45). Another monitoring well was not sampled because it would continuously go “dry” during purging activities (MW-15) and would not yield enough water to sample. Because this occurred during the prior monitoring event, an attempt was made to sample nearby well MW-14; however, MW-14 was not sampled as it also could not yield enough water to sample. Moving forward, MW-15 will removed from the planned monitoring network.

Groundwater samples were collected using low-flow groundwater sampling procedures. The pump intake was set within the saturated portion of the well screen during purging and sampling activities. Prior to collecting groundwater samples, each monitoring well was purged at a flow rate of approximately 0.20 liters per minute (L/min). Flow rates were adjusted to maintain minimal drawdown in the well during purging activities. A portable water-quality meter, equipped with an in-line flow-through cell, was used to monitor water quality indicator parameters (pH, conductivity, DO, ORP, temperature, and turbidity). Groundwater quality measurements were collected every three to five minutes until the field parameters stabilized (Attachment 4).

Purging was considered complete when the field parameters had stabilized, after which groundwater samples were collected and submitted for TCL VOC analysis.

<u>Groundwater Monitoring Results</u>

The analytical results of the September 2017 quarterly groundwater monitoring event are summarized in Table 1 and presented in Figure 1. A review of the groundwater data generated during this reporting period indicated the following:

- **All groundwater exceedances were less than an order of magnitude above their respective AWQSGV.**

- The specific COC exceedances of AWQSGVs are noted below:
  - There were no benzene exceedances. Ethylbenzene results exceeded their respective AWQSGV of 5 μg/L at three (3) monitoring well locations (an estimated 5.9 μg/L at MW-43, 6 μg/L at MW-44, and 5.2 μg/L at MW-47).

  - Isopropylbenzene results exceeded their respective AWQSGV of 5 μg/L at 7 monitoring well locations. Exceedances ranged from 6.2 μg/L (MW-4) to 25 μg/L (MW-38).

  - Xylene results exceeded their respective AWQSGV of 5 μg/L at three (3) monitoring well locations (28 μg/L at MW-43, 28 μg/L at MW-44 and 22 μg/L at MW-47).

<u>Modifications or Amendments to the SMP</u>

No modifications or amendments to the SMP were implemented this reporting period.

Actions Planned for the Next Quarterly Reporting Period

The following actions are planned for the next reporting period:

- Continued monthly operation and maintenance of LNAPL recovery system (as necessary);
- Continued monthly gauging and manual LNAPL recovery of monitoring wells within the SMP monitoring network (as necessary);
- Continued use of alternative (i.e., oil absorbing socks), practical methods to supplement recovery of LNAPL at Site monitoring wells where manual recovery efforts become ineffective; and
- Continued discussion with the NYSDEC concerning Roux's recommendations regarding the elimination of further ISCO treatment at the Site, as proposed in the previous quarterly report.

Sincerely,

REMEDIAL ENGINEERING, P.C.

Omar Ramotar, P.E.
Principal Engineer

Christian Hoelzli
Staff Engineer

Attachments

cc: Jane O'Connell, NYSDEC
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Joseph Duminuco, Roux Associates, Inc.
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TABLE

1. Summary of Volatile Organic Compounds in Groundwater

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-2R	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-5
Sample Date:			06/22/2017	09/26/2017	03/30/2017	06/22/2017	09/26/2017	09/26/2017	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	3.8 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	5 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**76**	**39**	**14**	**14**	**8.2**	**6.8**	2.5 U
1,3-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	620 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	6.2 J	7.6	5 U	5 U	4.1 J	3.9 J	5 U
Benzene	**1**	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	23	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-2R	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-5
		Sample Date:	06/22/2017	09/26/2017	03/30/2017	06/22/2017	09/26/2017	09/26/2017	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	**5.4 J**	2.5 U	1.6 J	1.7 J	0.89 J	0.73 J	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**17**	**11**	**5.4**	**6.5**	**6.9**	**6.2**	2.5 U
m,p-Xylene	**5**	UG/L	**6.7**	1.1 J	1.6 J	1.9 J	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	7.6 J	3.3 J	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**29**	**18**	**5.8**	**7.6**	**5.8**	4.9	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**5.2 J**	0.73 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**8.5**	4.9	**6.6**	**6.7**	**11**	**10**	2.5 U
Styrene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	5 J	3	**7.3**	**5.7**	**8.6**	**8.4**	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	**12 J**	1.8 J	1.6 J	1.9 J	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-7	MW-7R	MW-7R	MW-7R	MW-10	MW-10	MW-10
		Sample Date:	06/22/2017	09/08/2016	03/30/2017	09/26/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	7.5 U	1.5 U	15 U	6 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	10 U	2 U	20 U	8 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	5 U	1 U	10 U	4 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	1200 U	250 U	2500 U	1000 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	25 U	5 U	50 U	20 U	5 U	5 U	5 U
Acetone	**50**	UG/L	25 U	14	50 U	19 J	5 U	5 U	5 U
Benzene	**1**	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	10 U	2 U	20 U	8 U	2 U	2 U	2 U
Bromomethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	8.6 J	5 U	50 U	20 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-7	MW-7R	MW-7R	MW-7R	MW-10	MW-10	MW-10
		Sample Date:	06/22/2017	09/08/2016	03/30/2017	09/26/2017	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	25 U	5 U	50 U	20 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**19**	**11**	**14 J**	**19**	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	25 U	5.5	50 U	20 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	25 U	5 U	50 U	20 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**21**	**19**	**25**	**34**	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**23**	**12**	**12 J**	**15**	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**16**	**6**	**7 J**	**9.1 J**	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1.6 J	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	12 U	0.99 J	25 U	10 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	5 U	1 U	10 U	4 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-11
		Sample Date:	06/22/2017	09/26/2017	09/08/2016	12/01/2016	03/30/2017	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	4.5 J	5 U	5 U	2.2 J	1.9 J	1.7 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.64	0.68	1	1	0.55
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-11
		Sample Date:	06/22/2017	09/26/2017	09/08/2016	12/01/2016	03/30/2017	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	4.7	4.1	4.4	4.5	4
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-11	MW-19	MW-19	MW-21	MW-21	MW-21	MW-21
Sample Date:			09/26/2017	09/08/2016	06/22/2017	09/08/2016	09/08/2016	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	5 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	**7**	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	620 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	12 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	4.1 J	5.6	8.8 J	5 U	5 U	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.46 J	1.2 U	0.5 U	0.5 U	0.5 U	**1.4**
Bromochloromethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	5 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	12 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-11	MW-19	MW-19	MW-21	MW-21	MW-21	MW-21
		Sample Date:	09/26/2017	09/08/2016	06/22/2017	09/08/2016	09/08/2016	12/01/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	12 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	3.4 J	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	**25**	**23**	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5	5.4 J	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	12 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	**33**	**36**	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	**23**	**14**	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**5.1**	**13**	**8.6**	2.5 U	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.46 J	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-21	MW-33	MW-33	MW-33	MW-33	MW-34
		Sample Date:	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	3	5 U	2.5 U	2.5 U	1.3 J
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	3.8 J	23	5.7 J	5 U	5.6	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.23 J	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-21	MW-21	MW-33	MW-33	MW-33	MW-33	MW-34
		Sample Date:	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	0.76 J	2.3 J	2.5 U	1.3 J	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	1.3 J	4.2 J	0.87 J	4.2	**30**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	1.1 J	5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	3.2 J	9.9 J	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.2 J	**8.2**	1.5 J	**8.2**	**39**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	1.5 J	5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.6	4.6 J	1.4 J	**5.2**	**16**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	1.8 J	2.3 J	0.89 J	2.3 J	**7**
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.35 J	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	**1.2**	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.2	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.6 J	5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38
		Sample Date:	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	7.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	0.74 J	12 U	12 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	10 U	10 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	5 U	5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	0.98 J	0.94 J	0.86 J	2.5 U	3.6 J	12 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	1200 U	1200 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	25 U	25 U	5 U
Acetone	**50**	UG/L	5 U	2.4 J	2.2 J	3.4 J	39	25 U	3.5 J
Benzene	**1**	UG/L	0.26 J	0.5	0.23 J	0.19 J	2.5 U	2.5 U	0.27 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	10 U	10 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	1.4 J	5 U	25 U	25 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-34	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38
		Sample Date:	12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	25 U	25 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**22**	**18**	**23**	**14**	**28**	**34**	**15**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	3 J	5 U	7.4	25 U	25 U	6.8
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	1.2 J	5 U	5 U	25 U	25 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
N-Propylbenzene	**5**	UG/L	**33**	**25**	**32**	**20**	**50**	**68**	**16**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**15**	**13**	**14**	**5.1**	**21**	**30**	5
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
T-Butylbenzene	**5**	UG/L	**6.9**	**7.2**	**6.6**	2.8	**7.1 J**	**8.8 J**	2.5
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	1.2 J	12 U	12 U	1 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	5 U	5 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U

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Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-38	MW-38	MW-38	MW-38	MW-40	MW-40	MW-40
		Sample Date:	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	0.27 J
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	1.6 J	5 U	**53**	12	2 J	2.3 J	**260**
Benzene	**1**	UG/L	0.28 J	0.5 U	0.43 J	0.62	**8.6**	**9.3**	**5.8**
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	2.8 J	5 U	5 U	5 U	4.6 J
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	1.2 J	2.5 U	2.5 U	2.5 U	4.2
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-38	MW-38	MW-38	MW-38	MW-40	MW-40	MW-40
		Sample Date:	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**26**	**36**	**24**	**25**	**44**	**47**	**40**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1 J	1 J	1.1 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	16	5 U	5 U	5 U	39
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	1.7 J	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.5 J
N-Propylbenzene	**5**	UG/L	**34**	**55**	**31**	**34**	**69**	**38**	**64**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	0.78 J	0.72 J	0.79 J
Sec-Butylbenzene	**5**	UG/L	**11**	**16**	**8.2**	**14**	**16**	**20**	**19**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	4.3	**6.8**	4.2	**5.4**	3.5	**5.3**	4.2
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	0.97 J	2.5 U	2.5 U	0.74 J	1.7 J	2.5 U	0.72 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.8 J	1.7 J	1.9 J

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Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-41	MW-41	MW-41	MW-41	MW-41	MW-42	MW-42
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017	09/08/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	**0.74**	0.48 J	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	0.52 J	0.29 J	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U	5 U	**96**	10	5 U	5 U
Benzene	**1**	UG/L	0.26 J	0.5 U	0.62	0.43 J	0.62	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.8	0.76 J	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-41	MW-41	MW-41	MW-41	MW-41	MW-42	MW-42
		Sample Date:	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017	09/08/2016	03/30/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	1.3 J	0.73 J	2.5	1.1 J	1.4 J	4.7	0.73 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	1.2 J	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	1.7 J	0.8 J	3.1	1.3 J	1.5 J	3.5	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.3 J	1.1 J	3.9	1.7 J	2.2 J	2.9	1.4 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.2 J	0.78 J	2.4 J	1.3 J	2.1 J	1.2 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-42	MW-42	MW-43	MW-43	MW-43	MW-43	MW-44
		Sample Date:	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	**12**	**78**	**7.1**	**49**	**41**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	500 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Acetone	**50**	UG/L	5 U	2.5 J	7.4	28	7	**57**	**98**
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.69	1
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	4 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	10 U	5 U	1.3 J	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-42	MW-42	MW-43	MW-43	MW-43	MW-43	MW-44
		Sample Date:	06/22/2017	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**6.8**	0.82 J	**5.9**	**9.9**
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	1.4 J	**13**	1.9 J	**12**	**6.8**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	1.3 J	**15**	1.7 J	**18**	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	10 U	5 U	9	12
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	1.9 J	**22**	2.9	**18**	**8.5**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	0.8 J	**7.2**	0.87 J	**10**	**17**
Sec-Butylbenzene	**5**	UG/L	1.1 J	2.5 U	2.5 U	**5.8**	0.83 J	4	1.8 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.2 J	1.2 J	2.5 U	2.4 J	2.5 U	2.1 J	1.2 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	1.3 J	3.8
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.1 J	**22**	2.6 J	**28**	**41**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
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- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-44	MW-44	MW-44	MW-45	MW-45	MW-45	MW-46
		Sample Date:	03/30/2017	06/22/2017	09/26/2017	03/30/2017	06/22/2017	06/22/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	3.8 U	7.5 U	7.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	5 U	10 U	10 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	2.5 U	5 U	5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**81**	**42**	**57**	**230**	**150**	**180**	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	620 U	1200 U	1200 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	12 U	25 U	25 U	5 U
Acetone	**50**	UG/L	**53**	**61**	11	32	45	31	4.2 J
Benzene	**1**	UG/L	0.63	0.19 J	0.37 J	0.78 J	2.5 U	2.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	5 U	10 U	10 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	12 U	25 U	25 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-44	MW-44	MW-44	MW-45	MW-45	MW-45	MW-46
		Sample Date:	03/30/2017	06/22/2017	09/26/2017	03/30/2017	06/22/2017	06/22/2017	12/01/2016
		Normal or Field Duplicate:	N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	12 U	25 U	25 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Ethylbenzene	**5**	UG/L	**9.7**	3.2	**6**	**39**	**22**	**22**	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**13**	**5.8**	**9.3**	**51**	**38**	**41**	2.5 U
m,p-Xylene	**5**	UG/L	**30**	**9.5**	**15**	**47**	**25**	**24**	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	2.6 J	12 U	25 U	25 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	12 U	25 U	25 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
N-Propylbenzene	**5**	UG/L	**19**	**9.6**	**15**	**88**	**59**	**63**	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**22**	**8.8**	**13**	**7.4**	**5.4 J**	**6.4 J**	2.5 U
Sec-Butylbenzene	**5**	UG/L	**6.2**	3.9	4.2	**16**	**12**	**12**	2.5 U
Styrene	5	UG/L	1.1 J	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.4 J	1.7 J	1.9 J	4.8 J	3.9 J	4 J	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.23 J	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Toluene	5	UG/L	3.6	0.99 J	1.6 J	6.2 U	12 U	12 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	2.5 U	5 U	5 U	1 U
Xylenes	**5**	UG/L	**52**	**18**	**28**	**54**	**30 J**	**30 J**	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
		Sample Date:	03/30/2017	06/22/2017	09/26/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2 J	0.88 J	**40**	**41**	**78**	**67**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	1.1 J	5 U	10 U
Acetone	**50**	UG/L	5 U	4.2 J	2.7 J	**110**	**110**	39	27
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.98	**1.1**	0.66	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.2 J	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
		Sample Date:	03/30/2017	06/22/2017	09/26/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
		Normal or Field Duplicate:	N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**11**	**11**	**15**	**9.4**
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**9.2**	**9.9**	**16**	**13**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**24**	**25**	**36**	**24**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	14	16	5 U	4.2 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	1.1 J	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**13**	**14**	**23**	**20**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**14**	**15**	**20**	**14**
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.1 J	2.2 J	4.6	4.2 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.1 J	5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	0.95 J	0.99 J	2 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	3.8	4	2.9	2.2 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	**38**	**40**	**56**	**38**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-47	MW-48	MW-48	MW-48	MW-48
		Sample Date:	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017
		Normal or Field Duplicate:	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units					
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**49**	2.2 J	0.92 J	2.8	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	13	5 U	5 U	5 U	3.9 J
Benzene	**1**	UG/L	0.31 J	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-47	MW-48	MW-48	MW-48	MW-48
		Sample Date:	09/26/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017
		Normal or Field Duplicate:	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units					
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	**5.2**	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**9.1**	4	2.6	1.9 J	1.5 J
m,p-Xylene	**5**	UG/L	**13**	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	**15**	3.1	2.4 J	2.1 J	0.81 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**8.6**	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	3.5	4.7	4.3	3	2.3 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.5 J	4.1	3.1	1.8 J	1.5 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	1.7 J	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	**22**	2.5 U	2.5 U	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
 - - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

ATTACHMENTS

1. Site-Wide Inspection and Maintenance
2. Recovery Well Operating Logs
3. Monitoring Well Gauging Logs
4. 2017 Purge Logs

ATTACHMENT 1

Site-Wide Inspection and Maintenance

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Thursday, July 27, 2017**

Site Observations: Performed by (MS) on (7/27/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (7/27/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (7/27/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (7/27/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (7/27/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **7/27/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Tuesday, August 29, 2017**

Site Observations: Performed by (MS) on (8/29/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (8/29/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (8/29/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (8/29/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (8/29/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **8/29/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **Tuesday, September 26, 2017**

Site Observations: Performed by (MS) on (9/26/2017)

Yes	No	
[ ]	[X]	Have any Site improvements been made since last inspection?
[ ]	[X]	Has there been any maintenance activity impacting engineering controls?
[X]	[ ]	Are monitoring wells intact?
		-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (9/26/2017)

Yes	No	
[ ]	[X]	Underlying demarcation barrier exposed?
[X]	[ ]	Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (9/26/2017)

Yes	No	
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
		-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (9/26/2017)

Yes	No	
[X]	[ ]	Were all buildings inspected?
[ ]	[X]	Significant cracks observed?
[ ]	[X]	Other damage observed? If yes, refer to Page 2 for additional clarification.
[ ]	[X]	Any new slab penetrations observed? If yes, include description on page 2.
		-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (9/26/2017)

Yes	No	
[X]	[ ]	Were all five (5) Recovery wells intact?
[ ]	**[X]**	Were all five (5) AC Sipper reels operating properly? **See pg. 2**
[ ]	[X]	Were there any signs of corrosion on the 55 gallon drum?
[X]	[ ]	Were the fill alarm and spill alarms operating properly?
[X]	[ ]	Was the secondary containment pallet intact?
[X]	[ ]	Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.

SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**

Location: **5-49 46th Avenue, Long Island City, Queens, New York**

Inspector: **Michael Sarni**

Date: **9/26/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ATTACHMENT 2

Recovery Well Operating Logs

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - July 27, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.24	--	
Recovery Well RW-2	N	--	6.52	--	
Recovery Well RW-3	N	--	7.01	--	
Recovery Well RW-4	N	--	7.31	--	
Recovery Well RW-5	N	--	7.10	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - August 29, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	**Value**	**Unit**			**Comments**
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.07	--	
Recovery Well RW-2	N	--	6.38	--	
Recovery Well RW-3	N	--	6.80	--	
Recovery Well RW-4	N	--	7.30	--	
Recovery Well RW-5	N	--	7.10	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - September 26, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.87	--	
Recovery Well RW-2	N	--	7.16	--	
Recovery Well RW-3	N	--	7.99	--	
Recovery Well RW-4	N	--	8.19	--	
Recovery Well RW-5	N	--	7.96	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how?

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By:

Michael Sarni

ATTACHMENT 3

Monitoring Well Gauging Logs

Groundwater Gauging Former Paragon Paint Varnish Corp - July 27, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
7/27/2017	MW-2R*	6.92	6.94	4	0.02	0.10	1.70
7/27/2017	MW-3*	6.78	8.39	2	1.61	1.63	7.34
7/27/2017	MW-4	--	9.76	2	--	--	0.63
7/27/2017	MW-7	2.75	2.76	1	0.01	0.10	0.53
7/27/2017	MW-7R	NG	NG	2	NM		
7/27/2017	MW-10	NG	NG	2	NM		
7/27/2017	MW-11	NG	NG	2	NM		
7/27/2017	MW-14	NG	NG	2	NM		
7/27/2017	MW-15	NG	NG	2	NM		
7/27/2017	MW-17	--	5.90	4	--	--	
7/27/2017	MW-18	NG	NG	4	NM		
7/27/2017	MW-19	--	2.33	2	--	--	0.50
7/27/2017	MW-20	NG	NG	2	NM		
7/27/2017	MW-21	NG	NG	4	NM		
7/27/2017	MW-22	NG	NG	2	NM		0.58
7/27/2017	MW-33	NG	NG	2	NM		
7/27/2017	MW-34	NG	NG	4	NM		
7/27/2017	MW-36	NG	NG	4	NM		
7/27/2017	MW-37	NG	NG	2	NM		
7/27/2017	MW-38	NG	NG	2	NM		
7/27/2017	MW-40	NG	NG	2	NM		
7/27/2017	MW-41	NG	NG	2	NM		
7/27/2017	MW-42	NG	NG	2	NM		0.13
7/27/2017	MW-43	NG	NG	2	NM		
7/27/2017	MW-44	NG	NG	2	NM		
7/27/2017	MW-45	NG	NG	2	NM		0.53
7/27/2017	MW-46	NG	NG	2	NM		
7/27/2017	MW-47	NG	NG	2	NM		
7/27/2017	MW-48	NG	NG	2	NM		
						Total	**11.94**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable
NG - Not gauged

Groundwater Gauging Former Paragon Paint Varnish Corp - August 29, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
8/29/2017	MW-2R	--	6.69	4	--	--	1.70
8/29/2017	MW-3*	6.70	7.88	2	1.18	0.38	7.72
8/29/2017	MW-4	--	9.39	2	--	--	0.63
8/29/2017	MW-7	1.09	1.10	1	0.01	0.10	0.63
8/29/2017	MW-7R	--	2.19	2	--	--	
8/29/2017	MW-10	--	5.77	2	--	--	
8/29/2017	MW-11	--	5.71	2	--	--	
8/29/2017	MW-14	--	9.48	2	--	--	
8/29/2017	MW-15	--	9.46	2	--	--	
8/29/2017	MW-17	--	6.09	4	--	--	
8/29/2017	MW-18	--	6.87	4	--	--	
8/29/2017	MW-19	--	2.09	2	--	--	0.50
8/29/2017	MW-20	--	9.82	2	--	--	
8/29/2017	MW-21	--	6.19	4	--	--	
8/29/2017	MW-22	--	9.79	2	--	--	0.58
8/29/2017	MW-33	--	6.79	2	--	--	
8/29/2017	MW-34	--	6.83	4	--	--	
8/29/2017	MW-36	--	6.43	4	--	--	
8/29/2017	MW-37	--	1.99	2	--	--	
8/29/2017	MW-38	--	2.31	2	--	--	
8/29/2017	MW-40	--	6.98	2	--	--	
8/29/2017	MW-41	--	6.41	2	--	--	
8/29/2017	MW-42	--	7.29	2	--	--	0.13
8/29/2017	MW-43	--	5.56	2	--	--	
8/29/2017	MW-44	--	6.80	2	--	--	
8/29/2017	MW-45	--	6.37	2	--	--	0.53
8/29/2017	MW-46	--	5.33	2	--	--	
8/29/2017	MW-47	--	5.62	2	--	--	
8/29/2017	MW-48	--	9.69	2	--	--	
						Total	**12.42**

Notes:

ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable
NG - Not gauged

Groundwater Gauging Former Paragon Paint Varnish Corp - September 26, 2017
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108

Date	Monitoring Well ID	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	Product Thickness (ft)	Purged (g)	Cumulative (g)
9/26/2017	MW-2R	--	7.98	4	--	--	1.70
9/26/2017	MW-3*	6.81	8.13	2	1.32	1.00	8.72
9/26/2017	MW-4	--	9.98	2	--	--	0.63
9/26/2017	MW-7	2.59	2.86	1	0.27	0.10	0.73
9/26/2017	MW-7R	--	2.35	2	--	--	
9/26/2017	MW-10	--	8.36	2	--	--	
9/26/2017	MW-11	--	6.68	2	--	--	
9/26/2017	MW-14	--	9.88	2	--	--	
9/26/2017	MW-15	--	9.74	2	--	--	
9/26/2017	MW-17	--	6.62	4	--	--	
9/26/2017	MW-18	--	6.85	4	--	--	
9/26/2017	MW-19*	--	2.52	2	--	--	0.50
9/26/2017	MW-20	--	10.06	2	--	--	
9/26/2017	MW-21	--	5.99	4	--	--	
9/26/2017	MW-22	--	10.01	2	--	--	0.58
9/26/2017	MW-33	--	7.19	2	--	--	
9/26/2017	MW-34*	7.04	7.15	4	0.11	--	
9/26/2017	MW-36	--	7.02	4	--	--	
9/26/2017	MW-37	--	2.71	2	--	--	
9/26/2017	MW-38	--	2.73	2	--	--	
9/26/2017	MW-40*	7.02	7.04	2	0.02	--	
9/26/2017	MW-41	--	6.92	2	--	--	
9/26/2017	MW-42	--	7.57	2	--	--	0.13
9/26/2017	MW-43	--	6.1	2	--	--	
9/26/2017	MW-44	--	7.38	2	--	--	
9/26/2017	MW-45*	--	6.92	2	--	--	0.53
9/26/2017	MW-46	--	5.99	2	--	--	
9/26/2017	MW-47	--	6.31	2	--	--	
9/26/2017	MW-48	--	9.77	2	--	--	
						Total	**13.52**

Notes:
ft - Feet
g - Gallons
ND - Not detected
NM - Not measured
NA - Not applicable
NG - Not gauged

ATTACHMENT 4

2017 Purge Logs

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-2R Weather: Sunny, Humid 58° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Rebecca Lowy Well Diameter / Type: 4 inch PVC

Depth to Bottom (ft): 14.20 Water Column (ft): 6.42

Depth to Water(ft): 7.78 Volume of Water in Well (gal) 4.19

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 12:13 Purge Rate: 250 mL/min

End Purging: 12:34 Volume of Water Removed (gal): 1.50

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Cloudy, mild product odor, no sheen

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 12:40

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
12:13	--	7.78	8.32	2.110	3.6	1.96	21.43	-165
12:16	--	7.95	7.76	2.120	4.5	1.00	20.82	-162
12:19	--	8.08	7.39	2.130	3.7	0.73	20.7	-167
12:22	--	8.29	7.12	2.120	3.5	0.63	20.77	-177
12:25	--	8.38	6.92	2.130	5.7	0.56	20.78	-178
12:28	--	8.52	6.79	2.130	4.0	0.52	20.79	-183
12:31	--	8.61	6.69	2.130	4.5	0.48	20.89	-187
12:34	--	8.69	6.62	2.090	5.2	0.46	20.73	-188
	--							
	--							
	--							

End of Parameter Measurements

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-4 Weather: Cloudy 75° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Alfredo Fernandez Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 17.70 Water Column (ft): 7.72

Depth to Water(ft): 9.98 Volume of Water in Well (gal) 1.26

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 10:28 Purge Rate: 150 mL/min

End Purging: 10:58 Volume of Water Removed (gal): 1.25

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 11:00

Duplicate Sample: DUP-092617, 11:05 Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
10:31	--	10.82	7.11	0.244	8.9	2.63	17.67	-139
10:34	--	10.86	6.98	0.232	8.0	1.77	17.54	-140
10:37	--	10.91	6.75	0.215	7.4	1.04	17.46	-140
10:40	--	10.93	6.70	0.215	7.1	1.00	17.34	-140
10:43	--	10.95	6.66	0.215	6.7	0.97	17.22	-140
10:46	--	10.96	6.63	0.213	6.2	0.96	17.15	-140
10:49	--	10.96	6.61	0.212	6.1	0.94	17.11	-140
10:52	--	10.96	6.61	0.212	5.4	0.93	17.08	-140
10:55	--	10.97	6.61	0.212	5.2	0.91	17.06	-140
10:58	--	10.98	6.61	0.211	5.0	0.91	17.04	-140
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC

Project Number: 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-7R

Weather: Cloudy 80° F

Date: 9/26/2017

Purge Water Disposal: 55-gallon drum

Sampled By: Alfredo Fernandez

Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 6.00

Water Column (ft): 3.65

Depth to Water(ft): 2.35

Volume of Water in Well (gal) 0.60

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 13:43

Purge Rate: 100

End Purging: 13:52

Volume of Water Removed (gal): 0.10

Method of Purge: Peristaltic Pump

Method of Sampling: Low-Flow

Physical Appearance/ Comments: Well dry after 9 minutes of purge. Wait for Recharge and collected Sample. Very silty and Dark Gray

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 14:00

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP**	**DTW**	**pH**	**Conductivity**	**Turbidity**	**Dissolved O_2**	**Temperature**	**ORP**
	ft	ft	SU	**mS/cm** - S/m	NTU	mg/L	**C°**	mV
13:46	--	3.76	6.48	2.080	334.0	2.30	19.62	-22
13:49	--	4.32	6.24	2.190	402.0	0.66	18.77	-91
13:52	--	5.98	6.24	2.210	713.0	0.57	18.61	-97
	--							
	--							
	--							
	--							
	--							
	--							
	--							
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-10 Weather: Cloudy 72° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Christian Hoelzli Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 10.70 Water Column (ft): 2.34

Depth to Water(ft): 8.36 Volume of Water in Well (gal) 0.38

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 09:28 Purge Rate: 175

End Purging: 10:00 Volume of Water Removed (gal): 2.00

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Light grey at start, turns clear after 10 minutes

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 10:00

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	DTP ft	DTW ft	pH SU	Conductivity **mS/cm** - S/m	Turbidity NTU	Dissolved O_2 mg/L	Temperature C°	ORP mV
09:34	--	8.35	6.42	34.600	0.0	1.33	21.72	3
09:37	--	8.31	6.41	34.600	0.0	1.13	21.60	5
00:94	--	8.35	6.41	34.600	0.0	1.44	21.54	-24
09:43	--	8.33	6.44	34.600	0.0	1.35	21.45	-71
09:46	--	8.34	6.48	34.600	0.0	1.18	21.38	-115
09:49	--	8.20	6.50	34.500	0.0	1.27	21.48	-139
09:52	--	8.15	6.51	34.600	0.0	1.52	21.51	-145
09:55	--	8.12	6.51	34.500	0.0	1.53	21.52	-152
	--							
	--							
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-11 Weather: Cloudy 72° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Christian Hoelzli Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 23.90 Water Column (ft): 17.22

Depth to Water(ft): 6.68 Volume of Water in Well (gal) 2.81

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 8:07 Purge Rate: 175 mL/min

End Purging: 9:00 Volume of Water Removed (gal): 2.50

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 09:00

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C^o**	**ORP** mV
08:13	--	8.37	7.30	2.930	--	7.41	21.30	-71
08:28	--	8.50	7.02	2.860	0.0	4.16	21.08	-53
08:34	--	9.10	7.37	2.860	0.0	5.03	20.57	-84
08:37	--	9.24	7.25	3.870	0.0	2.21	19.95	-116
08:40	--	9.18	7.13	5.630	0.0	1.13	19.72	-136
08:43	--	9.07	7.04	8.100	0.0	0.95	19.56	-148
08:46	--	9.02	7.01	8.700	0.0	0.16	19.31	-158
08:49	--	8.99	7.01	8.830	0.0	1.08	19.21	-161
08:52	--	8.99	7.01	8.880	0.0	1.05	19.08	-166
08:55	--	9.00	7.01	8.880	0.0	1.09	19.00	-169
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-21 Weather: Sunny 80° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Christian Hoelzli Well Diameter / Type: 4 inch PVC

Depth to Bottom (ft): 15.03 Water Column (ft): 9.04

Depth to Water(ft): 5.99 Volume of Water in Well (gal) 5.90

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 12:20 Purge Rate: 150 mL/min

End Purging: 13:00 Volume of Water Removed (gal): 2.00

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 13:00

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
12:25	--	6.31	6.94	1.180	5.9	4.87	25.75	113
12:28	--	6.51	6.98	1.140	5.1	4.32	25.66	106
12:31	--	6.56	6.98	1.120	4.7	4.17	25.68	109
12:34	--	6.64	6.98	1.060	4.4	4.40	25.80	120
12:37	--	6.73	6.98	1.040	4.2	4.61	25.86	125
12:40	--	6.82	6.97	1.040	4.1	3.48	25.84	97
12:43	--	6.97	6.97	1.060	4.0	2.28	25.85	46
12:46	--	7.06	6.97	1.080	3.8	2.55	25.95	26
12:49	--	7.15	6.97	1.110	3.8	2.32	25.97	17
12:52	--	7.24	6.97	1.140	3.7	2.05	26.00	6
12:55	--	7.30	6.96	1.150	3.4	2.03	26.04	8
12:58	--	7.37	6.96	1.200	3.5	1.89	26.01	3
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		
Well No:	MW-33	Weather:	Sunny 85° F
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Rebecca Lowy	Well Diameter / Type:	4 inch PVC
Depth to Bottom (ft):	13.25	Water Column (ft):	6.06
Depth to Water(ft):	7.19	Volume of Water in Well (gal)	3.96
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	13:30	Purge Rate:	250 mL/min
End Purging:	13:42	Volume of Water Removed (gal):	2.00
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Clear, slight product odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 14:00

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
13:30	--	7.20	7.15	1.060	5.8	1.92	24.88	-42
13:33	--	8.20	6.53	1.090	4.3	0.42	20.38	-133
13:36	--	8.50	6.44	1.090	5.2	0.38	20.82	-145
13:39	--	8.82	6.39	1.090	6.7	0.35	21.24	-151
13:42	--	9.08	6.35	1.090	6.3	0.33	21.60	-153
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		

Well No:	MW-38	Weather:	Cloudy 80° F
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Alfredo Fernandez	Well Diameter / Type:	2 inch PVC
Depth to Bottom (ft):	4.98	Water Column (ft):	2.25
Depth to Water(ft):	2.73	Volume of Water in Well (gal)	0.37
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	13:43	Purge Rate:	100 mL/min
End Purging:	13:52	Volume of Water Removed (gal):	0.75
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Dark gray at start, turns clear after 5 minutes

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 1340

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
13:15	--	2.99	6.45	1.910	395.0	3.41	21.10	-12
13:18	--	3.02	6.24	1.860	63.6	1.36	21.03	-33
13:21	--	3.06	6.20	1.860	22.3	0.91	21	-58
13:24	--	3.09	6.17	1.850	17.5	0.82	20.96	-64
13:27	--	3.13	6.15	1.850	12.9	0.73	20.94	-77
13:30	--	3.17	6.14	1.850	11.3	0.66	20.91	-85
13:33	--	3.21	6.14	1.850	9.4	0.63	20.87	-93
13:36	--	3.25	6.14	1.840	8.9	0.61	20.85	-95
13:39	--	3.28	6.14	1.840	8.8	0.60	20.84	-96
	--							
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-41 Weather: Cloudy 71° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Alfredo Fernandez Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 10.38 Water Column (ft): 3.46

Depth to Water(ft): 6.92 Volume of Water in Well (gal) 0.56

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 09:01 Purge Rate: 150 mL/min

End Purging: 09:28 Volume of Water Removed (gal): 1.10

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 09:30

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
09:04	--	6.98	6.47	2.080	28.3	5.85	18.98	143
09:07	--	6.99	6.54	2.060	28.1	4.20	18.82	106
09:10	--	6.99	6.55	2.430	26.2	3.36	18.76	62
09:13	--	7.00	6.57	3.060	23.7	1.57	18.64	2.1
09:16	--	7.01	6.59	3.190	20.4	1.51	18.59	3
09:19	--	7.01	6.60	3.230	18.2	1.50	18.55	-5
09:22	--	7.02	6.61	3.260	16.1	1.44	18.47	-9
09:25	--	7.02	6.61	3.280	15.8	1.42	18.44	-10
09:28	--	7.02	6.62	3.300	15.7	1.42	18.40	-11
	--							
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-42 Weather: Cloudy 71° F

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Alfredo Fernandez Well Diameter / Type: 2 inch PVC

Depth to Bottom (ft): 11.19 Water Column (ft): 3.62

Depth to Water(ft): 7.57 Volume of Water in Well (gal) 0.59

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 09:34 Purge Rate: 175 mL/min

End Purging: 10:04 Volume of Water Removed (gal): 1.50

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 10:05

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C^o**	**ORP** mV
09:37	--	7.62	6.82	0.953	13.4	3.04	18.17	-111
09:40	--	7.64	6.82	0.888	4.3	2.13	18.01	-139
09:43	--	7.67	6.82	0.879	3.1	1.47	17.98	-144
09:46	--	7.68	6.83	0.887	1.9	1.36	17.95	-147
09:49	--	7.68	6.84	0.887	1.2	1.33	17.93	-151
09:52	--	7.69	6.84	0.887	1.1	1.29	17.92	-155
09:55	--	7.69	6.86	0.887	0.9	1.26	17.89	-159
09:58	--	7.69	6.86	0.887	0.8	1.22	17.87	-162
10:01	--	7.70	6.86	0.887	0.9	1.20	17.85	-163
10:04	--	7.70	6.86	0.887	0.9	1.19	17.84	-164
	--							
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		
Well No:	MW-43	Weather:	Humid 80° F
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Rebecca Lowy	Well Diameter / Type:	4 inch PVC
Depth to Bottom (ft):	19.93	Water Column (ft):	13.83
Depth to Water(ft):	6.10	Volume of Water in Well (gal)	9.03
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	11:10	Purge Rate:	300 mL/min
End Purging:	11:28	Volume of Water Removed (gal):	2.50
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 11:40

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
11:10	--	6.10	9.48	1.780	1.9	1.86	20.88	-82
11:13	--	6.28	10.49	1.690	1.6	0.80	19.26	-129
11:16	--	6.34	10.61	1.610	2.0	0.59	18.95	-145
11:19	--	6.34	10.61	1.600	2.0	0.54	18.95	-147
11:22	--	6.38	10.59	1.600	2.4	0.48	19.01	-149
11:25	--	6.38	10.59	1.620	2.5	0.45	19.00	-150
11:28	--	6.34	10.59	1.620	2.7	0.44	18.94	-150
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		
Well No:	MW-44	Weather:	Foggy, Humid
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Rebecca Lowy	Well Diameter / Type:	4 inch PVC
Depth to Bottom (ft):	19.10	Water Column (ft):	11.66
Depth to Water(ft):	7.44	Volume of Water in Well (gal)	7.61
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	08:51	Purge Rate:	250 mL/min
End Purging:	09:09	Volume of Water Removed (gal):	2.00
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 09:20

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
08:51	--	7.44	10.73	1.740	4.1	2.86	19.67	-53
08:54	--	7.44	10.91	1.760	3.6	1.34	19.15	-68
08:57	--	7.43	10.98	1.760	3.6	0.90	19.26	-85
09:00	--	7.44	10.99	1.760	3.4	0.78	19.27	-96
09:03	--	7.45	11.00	1.760	2.8	0.70	19.29	-106
09:06	--	7.45	11.00	1.760	2.8	0.63	19.32	-114
09:09	--	7.40	11.00	1.760	2.1	0.59	19.35	-121
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		
Well No:	MW-46	Weather:	Foggy, Humid 72° F
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Rebecca Lowy	Well Diameter / Type:	4 inch PVC
Depth to Bottom (ft):	18.90	Water Column (ft):	12.91
Depth to Water(ft):	5.99	Volume of Water in Well (gal)	8.43
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	09:43	Purge Rate:	300 mL/min
End Purging:	10:04	Volume of Water Removed (gal):	2.50
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 10:10

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C^o**	**ORP** mV
09:43	--	5.99	9.03	8.040	10.4	2.11	21.22	40
09:46	--	6.15	8.47	8.530	7.0	0.97	20.99	-151
09:49	--	6.20	8.12	8.800	6.6	0.71	20.96	-192
09:52	--	6.28	7.93	9.090	5.2	0.60	20.96	-209
09:55	--	6.32	7.84	9.130	4.8	0.56	20.93	-217
09:58	--	6.40	7.78	8.990	5.8	0.54	20.93	-221
10:01	--	6.48	7.63	9.200	4.3	0.56	20.23	-205
10:04	--	6.35	7.58	9.580	5.2	0.54	21.48	-207

Well Sampling Purge Log

Client: Vernon 4540 Realty LLC **Project Number:** 2051.0002Y000

Site Location: 5-49 46th Avenue, Long Island City, Queens, New York

Well No: MW-47 Weather: Sunny, Clear

Date: 9/26/2017 Purge Water Disposal: 55-gallon drum

Sampled By: Rebecca Lowy Well Diameter / Type: 4 inch PVC

Depth to Bottom (ft): 20.50 Water Column (ft): 14.15

Depth to Water(ft): 6.35 Volume of Water in Well (gal) 9.24

Depth to Product (ft): --

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging: 07:57 Purge Rate: 350 mL/min

End Purging: 08:15 Volume of Water Removed (gal): 2.50

Method of Purge: Peristaltic Pump Method of Sampling: Low-Flow

Physical Appearance/ Comments: Clear, no odor

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 08:20

Duplicate Sample: Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
07:57	--	6.35	9.88	1.680	1.6	1.86	20.70	-54
08:00	--	6.35	10.71	1.710	1.3	1.17	20.39	-78
08:03	--	6.35	10.83	1.710	1.2	0.98	20.3	-91
08:06	--	6.35	10.87	1.680	1.3	0.88	20.23	-106
08:09	--	6.35	10.90	1.650	1.1	0.79	20.17	-116
08:12	--	6.35	10.89	1.650	1.1	0.72	20.09	-122
08:15	--	6.35	10.89	1.630	1.0	0.70	20.07	-130
End of Parameter Measurements								

Well Sampling Purge Log

Client:	Vernon 4540 Realty LLC	**Project Number:**	2051.0002Y000
Site Location:	5-49 46th Avenue, Long Island City, Queens, New York		

Well No:	MW-48	Weather:	Cloudy 71° F
Date:	9/26/2017	Purge Water Disposal:	55-gallon drum
Sampled By:	Alfredo Fernandez	Well Diameter / Type:	2 inch PVC
Depth to Bottom (ft):	18.17	Water Column (ft):	8.40
Depth to Water(ft):	9.77	Volume of Water in Well (gal)	1.37
Depth to Product (ft):	--		

well diameter:	1 in	2 in	4 in	6 in	8 in
gallons per foot:	0.041	0.163	0.653	1.469	2.611

Start Purging:	11:07	Purge Rate:	125 mL/min
End Purging:	11:35	Volume of Water Removed (gal):	1.00
Method of Purge:	Peristaltic Pump	Method of Sampling:	Low-Flow

Physical Appearance/ Comments: Light grey at start, turns clear after 10 minutes

Samples Collected: (analyses / no. bottles) TCL VOCs+ (8260):3 (40mL) VOAs (HCL)

Sample Time: 11:35

Duplicate Sample:

Laboratory : Alpha Analytical

Field Measurements:

Time	**DTP** ft	**DTW** ft	**pH** SU	**Conductivity** **mS/cm** - S/m	**Turbidity** NTU	**Dissolved O_2** mg/L	**Temperature** **C°**	**ORP** mV
11:10	--	10.69	6.47	0.172	87.4	3.11	17.45	-27
11:13	--	10.73	6.38	0.171	71.6	2.20	17.30	-27
11:14	--	10.73	6.36	0.171	56.9	2.03	17.24	-33
11:17	--	10.74	6.35	0.171	47.7	1.85	17.21	-39
11:20	--	10.75	6.35	0.171	42.3	1.66	17.20	-43
11:23	--	10.76	6.34	0.171	38.2	1.29	17.20	-48
11:26	--	10.76	6.34	0.171	31.5	1.10	17.18	-49
11:29	--	10.76	6.33	0.171	22.9	1.08	17.16	-51
11:32	--	10.76	6.32	0.171	20.7	1.02	17.16	-51
11:35	--	10.76	6.32	0.171	20.4	1.02	17.15	-52
	--							
End of Parameter Measurements								

PLATE

1. VOCs and LNAPL Detected in Groundwater
   March 2017 to June 2017

MW-11	09/08/2016	12/01/2016	03/30/2017	03/30/2017	06/22/2017	09/26/2017
COCs				DUP		
Benzene	0.64	0.68	1	1	0.55	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-10	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-46	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	NS	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	NS	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	NS	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	NS	2.5 U	2.5 U	2.5 U	2.5 U

MW-45	09/08/2016	12/01/2016	03/30/2017	06/22/2017	06/22/2017	09/26/2017
COCs					DUP	
Benzene	NS	NS	0.78 J	2.5 U	2.5 U	NS
Ethylbenzene	NS	NS	**39**	**22**	**22**	NS
Isopropylbenzene (Cumene)	NS	NS	**51**	**38**	**41**	NS
m,p-Xylene	NS	NS	**47**	**25**	**24**	NS
O-Xylene (1,2-Dimethylbenzene)	NS	NS	**7.4**	**5.4 J**	**6.4 J**	NS
Xylenes	NS	NS	**54**	**30 J**	**30 J**	NS

MW-47	09/08/2016	12/01/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs			DUP			
Benzene	NS	0.98	**1.1**	0.66	0.42 J	0.31 J
Ethylbenzene	NS	**11**	**11**	**15**	**9.4**	**5.2**
Isopropylbenzene (Cumene)	NS	**9.2**	**9.9**	**16**	**13**	**9.1**
m,p-Xylene	NS	**24**	**25**	**36**	**24**	**13**
O-Xylene (1,2-Dimethylbenzene)	NS	**14**	**15**	**20**	**14**	**8.6**
Xylenes	NS	**38**	**40**	**56**	**38**	**22**

MW-43	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	0.5 U	0.5 J	0.5 U	0.69
Ethylbenzene	NS	2.5 U	**6.8**	0.82 J	**5.9**
Isopropylbenzene (Cumene)	NS	1.4 J	**13**	1.9 J	**12**
m,p-Xylene	NS	1.3 J	**15**	1.7 J	**18**
O-Xylene (1,2-Dimethylbenzene)	NS	0.8 J	**7.2**	0.87 J	**10**
Xylenes	NS	2.1 J	**22**	2.6 J	**28**

MW-44	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	1	0.63	0.19 J	0.37 J
Ethylbenzene	NS	**9.9**	**9.7**	3.2	**6**
Isopropylbenzene (Cumene)	NS	**6.8**	**13**	**5.8**	**9.3**
m,p-Xylene	NS	**24**	**30**	**9.5**	**15**
O-Xylene (1,2-Dimethylbenzene)	NS	**17**	**22**	**8.8**	**13**
Xylenes	NS	**41**	**52**	**18**	**28**

MW-48	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	NS	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	NS	4	2.6	1.9 J	1.5 J
m,p-Xylene	NS	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	NS	2.5 U	2.5 U	2.5 U	2.5 U

MW-7	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	NS	NS	2.5 U	NS
Ethylbenzene	NS	NS	NS	12 U	NS
Isopropylbenzene (Cumene)	NS	NS	NS	**19**	NS
m,p-Xylene	NS	NS	NS	12 U	NS
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	12 U	NS
Xylenes	NS	NS	NS	12 U	NS

MW-5	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.5 U	NS	NS	NS	NS
Ethylbenzene	2.5 U	NS	NS	NS	NS
Isopropylbenzene (Cumene)	2.5 U	NS	NS	NS	NS
m,p-Xylene	2.5 U	NS	NS	NS	NS
O-Xylene (1,2-Dimethylbenzene)	2.5 U	NS	NS	NS	NS
Xylenes	2.5 U	NS	NS	NS	NS

MW-4	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017	09/26/2017
COCs						DUP
Benzene	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	NS	NS	1.6 J	1.7 J	0.89 J	0.73 J
Isopropylbenzene (Cumene)	NS	NS	**5.4**	**6.5**	**6.9**	**6.2**
m,p-Xylene	NS	NS	1.6 J	1.9 J	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	NS	NS	1.6 J	1.9 J	2.5 U	2.5 U

MW-2R	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	NS	NS	1.2 U	0.5 U
Ethylbenzene	NS	NS	NS	**5.4 J**	2.5 U
Isopropylbenzene (Cumene)	NS	NS	NS	**17**	**11**
m,p-Xylene	NS	NS	NS	**6.7**	1.1 J
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	**5.2 J**	0.73 J
Xylenes	NS	NS	NS	**12 J**	1.8 J

MW-42	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.5 U	NS	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	NS	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	4.7	NS	0.73 J	2.5 U	2.5 U
m,p-Xylene	2.5 U	NS	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	NS	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	NS	2.5 U	2.5 U	2.5 U

MW-19	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.46 J	NS	NS	1.2 U	NS
Ethylbenzene	2.5 U	NS	NS	3.4 J	NS
Isopropylbenzene (Cumene)	**25**	NS	NS	**23**	NS
m,p-Xylene	2.5 U	NS	NS	6.2 U	NS
O-Xylene (1,2-Dimethylbenzene)	2.5 U	NS	NS	6.2 U	NS
Xylenes	2.5 U	NS	NS	6.2 U	NS

MW-7R	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.5 U	NS	5 U	NS	2 U
Ethylbenzene	2.5 U	NS	25 U	NS	10 U
Isopropylbenzene (Cumene)	**11**	NS	**14 J**	NS	**19**
m,p-Xylene	2.5 U	NS	25 U	NS	10 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	NS	25 U	NS	10 U
Xylenes	2.5 U	NS	25 U	NS	10 U

MW-33	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	0.5 U	1 U	0.5 U	0.23 J
Ethylbenzene	NS	0.76 J	2.3 J	2.5 U	1.3 J
Isopropylbenzene (Cumene)	NS	1.3 J	4.2 J	0.87 J	4.2
m,p-Xylene	NS	1.1 J	5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	1.5 J	5 U	2.5 U	2.5 U
Xylenes	NS	2.6 J	5 U	2.5 U	2.5 U

MW-21	09/08/2016	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs		DUP				
Benzene	0.5 U	0.5 U	0.5 U	**1.4**	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

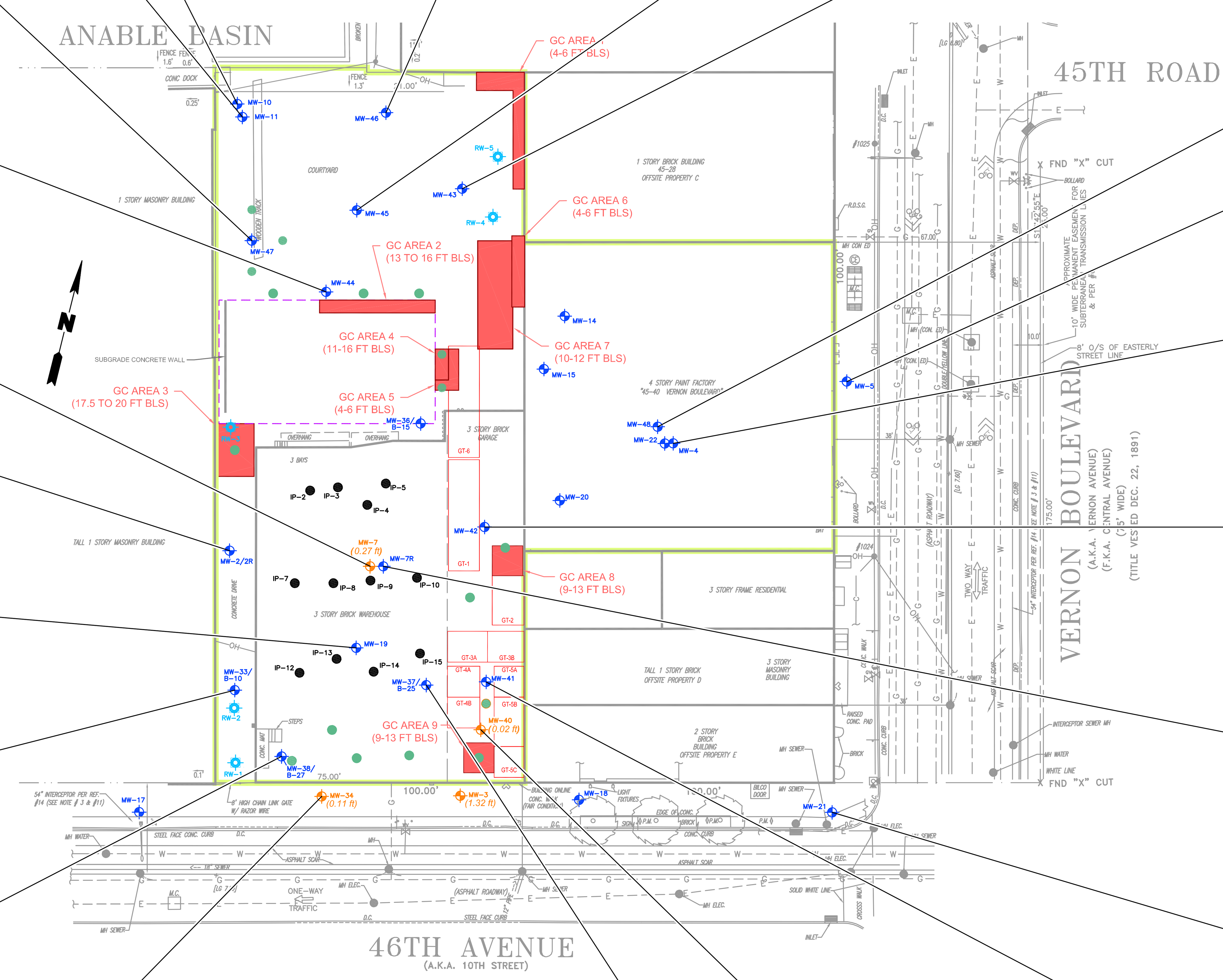
MW-38	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.27 J	0.28 J	0.5 U	0.43 J	0.62
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**15**	**26**	**36**	**24**	**25**
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-34	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.42 J	0.26 J	0.5	0.23 J	NS
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	NS
Isopropylbenzene (Cumene)	**30**	**22**	**18**	**23**	NS
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	NS
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	NS
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	NS

MW-37	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.19 J	2.5 U	2.5 U	NS	NS
Ethylbenzene	2.5 U	12 U	12 U	NS	NS
Isopropylbenzene (Cumene)	**14**	**28**	**34**	NS	NS
m,p-Xylene	2.5 U	12 U	12 U	NS	NS
O-Xylene (1,2-Dimethylbenzene)	2.5 U	12 U	12 U	NS	NS
Xylenes	2.5 U	12 U	12 U	NS	NS

MW-40	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	NS	**8.6**	**9.3**	**5.8**	NS
Ethylbenzene	NS	2.5 U	2.5 U	2.5 U	NS
Isopropylbenzene (Cumene)	NS	**44**	**47**	**40**	NS
m,p-Xylene	NS	1 J	1 J	1.1 J	NS
O-Xylene (1,2-Dimethylbenzene)	NS	0.78 J	0.72 J	0.79 J	NS
Xylenes	NS	1.8 J	1.7 J	1.9 J	NS

MW-41	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
COCs					
Benzene	0.26 J	0.5 U	0.62	0.43 J	0.62
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	1.3 J	0.73 J	2.5	1.1 J	1.4 J
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U



LEGEND

- LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
- LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
- LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
- LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
- LOCATION OF FIRST ROUND ISCO INJECTION POINT
- (0.38 ft) LNAPL THICKNESS
- GC AREA 1 (4-6 FT BLS) DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING
- ft FEET
- LNAPL LIGHT NON-AQUEOUS PHASE LIQUID
- ISCO IN-SITU CHEMICAL OXIDATION
- CONCRETE VAULT
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- CONCRETE SLAB

TYPICAL DATA BOX INFORMATION

SAMPLE ID. — SAMPLE DATE — ANALYTES — CONCENTRATIONS (IN µg/L)

MW-11	09/08/2016
COCs	
Benzene	0.64
Ethylbenzene	2.5 U
Isopropylbenzene (Cumene)	2.5 U
m,p-Xylene	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U
Xylenes	2.5 U

PARAMETER	STANDARDS*
Benzene	1
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
O-Xylene (1,2-Dimethylbenzene)	5
Xylenes	5

CONCENTRATIONS IN µg/L

µg/L – MICROGRAMS PER LITER
* – NYSDEC AWQSGVs
NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AWQSGVs – AMBIENT WATER-QUALITY STANDARDS AND GUIDANCE VALUES
– – NO NYSDEC AWQSGV AVAILABLE
DUP – DUPLICATE SAMPLE
J – ESTIMATED VALUE
NS – NOT SAMPLED
U – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED
BOLD – INDICATES THAT PARAMETER WAS DETECTED ABOVE THE NYSDEC AWQSGVS

NOTES

1. AN OBSERVABLE SHEEN WAS RECORDED DURING PURGE AT MONITORING WELLS MW-19 AND MW-45, AND WERE NOT SAMPLED.
2. MONITORING WELLS MW-14 AND MW-15 WENT DRY DURING PURGE AND WERE NOT SAMPLED.

30' 0 30'

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NO.	DATE	REVISION DESCRIPTION	INT.

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Remedial

REMEDIAL ENGINEERING, P.C.
209 Shafter Street
Islandia, New York 11749 (631) 232-2600

PROJECT NAME:
QUARTERLY MONITORING REPORT Q3 OF 2017
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:
VERNON 4540 REALTY LLC

TITLE:
VOCs AND LNAPL DETECTED IN GROUNDWATER SEPTEMBER 2016 TO SEPTEMBER 2017

DRAWING NO.
1

DRAWING
1 OF 1

Christian Hoelzli

From: Christian Hoelzli
Sent: Wednesday, March 7, 2018 1:07 PM
To: 'Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)'
Cc: 'O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov)'; 'Andrew Till'; Robert Hendrickson; Larry Schnapf; arustgi@quadrumglobal.com; jwhite@quadrumglobal.com; Omar Ramotar; Joe Duminuco
Subject: Paragon Paint and Varnish 4Q Quarterly Progress Report (NYSDEC Site No. C241108)
Attachments: Paragon Paint C241108 Dec 2017 Quarterly.pdf

Ms. Martinkat,

In accordance with the Brownfield Cleanup Agreement, Roux Associates has prepared this email to serve as a quarterly update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Routine Operation, Maintenance, and Reporting Activities:

On December 21, 2017, Roux Associates completed the quarterly gauging and sampling of the 21 monitoring wells included in the SMP monitoring network. If the presence of free-product was observed, the monitoring well was not sampled. The remaining monitoring wells within the network were sampled and analyzed for VOCs. In addition the five (5) recovery wells (RW-1 through RW-5) and an additional nine (9) monitoring wells both onsite and offsite were gauged to determine the presence of LNAPL. A summary of the gauging data collected during the reporting period is provided in Table 2 attached.

Trace free-product was present in on-site monitoring wells MW-19, MW-34, MW-40, and MW-45; with free-product present in monitoring wells MW-2R, MW-3, and MW-7. Absorbent socks were installed in these monitoring wells, with approximately 0.486 gallons of free-product absorbed in total from these monitoring wells based on the saturation of the sock absorbency. An additional 1.4 gallons of product was manually bailed from the latter mentioned monitoring wells. The recovered product and saturated absorbent socks are temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

MW-15 went dry within minutes of purging and thus were unable to be sampled.

Due to the lack of free-product in the recovery wells (RW-1 to RW-5), Roux Associates has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling / Sample Results

During this reporting period, 15 groundwater samples were collected from the following monitoring wells:

- MW-4
- MW-10
- MW-11
- MW-19
- MW-21
- MW-33
- MW-38
- MW-40
- MW-41
- MW-42
- MW-43
- MW-44
- MW-46
- MW-47
- MW-48

Groundwater Monitoring Results

The analytical results of the December 2017 quarterly groundwater monitoring event are summarized in Table 1 and the well locations are presented in Figure 1. A review of the groundwater data generated during this reporting period indicated the following:

- The specific COC exceedances of AWQSGVs are noted below:
  - Benzene results exceeded their respective ASQSGV of 1 µg/L at two (2) monitoring well locations (8.4 µg/L at MW-40 and 1.2 µg/L at MW-41).
  - Ethylbenzene results exceeded their respective AWQSGV of 5 µg/L at three (3) monitoring well locations (an estimated 5.3 µg/L at MW-19, 5.4 µg/L at MW-43, and 7.6 µg/L at MW-47).
  - Isopropylbenzene results exceeded their respective AWQSGV of 5 µg/L at 7 monitoring well locations. Exceedances ranged from an estimated 6.0 µg/L (MW-33) to 63 µg/L (MW-19).
  - Xylene results exceeded their respective AWQSGV of 5 µg/L at three (3) monitoring well locations (18 µg/L at MW-43, 23 µg/L at MW-44 and 31 µg/L at MW-47).

Planned Actions:

The following activities are scheduled for the next reporting period (January 1 through March 31, 2018):

- Preparation and submittal of quarterly status report;
- Continued quarterly gauging of monitoring wells within the SMP monitoring network; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

Work Plan Modifications

No modifications made to the Work Plan during this reporting period.

Please contact myself or Omar Ramotar with any questions or concerns.

Thank you,

Christian Hoelzli | Staff Engineer | Roux Environmental Engineering and Geology, D.P.C.
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Table 1. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-4	MW-4	MW-10	MW-10	MW-10	MW-11	MW-11	MW-19	MW-19	MW-21	MW-21	MW-33	MW-33	MW-38	MW-38	MW-40	MW-40	MW-41	MW-41
Sample Date:			09/26/2017	12/21/2017	09/26/2017	12/21/2017	12/21/2017	09/26/2017	12/21/2017	06/22/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017	06/22/2017	12/21/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			FD	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units																			
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.8 U	7.5 U	1.5 U	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	10 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	**1.2**	0.34 J	0.48 J	0.51
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	5 U	1 U	1 U	1 U	2.5 U	1 U	1 U	0.27 J	0.38 J	0.29 J	0.23 J
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**6.8**	4.8	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	**14**	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U	620 U	1200 U	250 U	250 U	250 U	620 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	25 U	5 U	5 U	5 U	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	3.9 J	5 U	4.5 J	5 U	5 U	4.1 J	5 U	8.8 J	21 J	3.8 J	5 U	5.6	12 U	12	14	**260**	3.1 J	10	19
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.23 J	1.2 U	0.62	0.36 J	**5.8**	**8.4**	0.62	**1.2**
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	10 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	25 U	5 U	5 U	5 U	12 U	5 U	5 U	4.6 J	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	4.2	2.5 U	0.76 J	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	25 U	5 U	5 U	5 U	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	0.73 J	0.74 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.4 J	**5.3 J**	2.5 U	2.5 U	1.3 J	1.9 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**6.2**	4.7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**23**	**63**	2.5 U	2.5 U	4.2	**6 J**	**25**	**10**	**40**	**32**	1.4 J	1.4 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	1.1 J	0.8 J	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 J	25 U	5 U	5 U	5 U	12 U	5 U	18	39	5 U	5 U	4.4 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	25 U	5 U	5 U	5 U	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	1.5 J	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	4.9	3.7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**36**	**120**	2.5 U	2.5 U	**8.2**	**12**	**34**	**12**	**64**	**6.8**	1.5 J	1 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	0.79 J	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**10**	**8.6**	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**14**	**41**	2.5 U	2.5 U	**5.2**	**7.5**	**14**	**10**	**19**	**15**	2.2 J	2.2 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**8.4**	**7.6**	2.5 U	2.5 U	2.5 U	**5.1**	3.9	**8.6**	**14**	2.5 U	2.5 U	2.3 J	2.8 J	**5.4**	**5.6**	4.2	4.5	2.1 J	1.8 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	0.74 J	2.5 U	0.72 J	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	**1.2**	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	1.2	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	1.2 U	2.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	5 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	12 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	1.9 J	0.8 J	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 1. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-42	MW-42	MW-43	MW-43	MW-44	MW-44	MW-46	MW-46	MW-47	MW-47	MW-48	MW-48
Sample Date:			09/26/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units												
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	**49**	**47**	**57**	**48**	0.88 J	2.5 U	**49**	**65**	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	2.5 J	5 U	**57**	41	11	**56**	2.7 J	4.8 J	13	47	3.9 J	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U	0.69	0.45 J	0.37 J	0.36 J	0.5 U	0.5 U	0.31 J	0.47 J	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	1.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	**5.9**	**5.4**	**6**	4.4	2.5 U	2.5 U	**5.2**	**7.6**	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	**12**	**12**	**9.3**	**7.4**	2.5 U	2.5 U	**9.1**	**11**	1.5 J	1.2 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	**18**	**12**	**15**	**13**	2.5 U	2.5 U	**13**	**19**	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	9	6.5	2.6 J	7.8	5 U	5 U	5 U	8	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	**18**	**18**	**15**	**11**	2.5 U	2.5 U	**15**	**17**	0.81 J	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	**10**	**6.4**	**13**	**10**	2.5 U	2.5 U	**8.6**	**12**	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	4	4.9	4.2	4.1	2.5 U	2.5 U	3.5	4.3	2.3 J	1.7 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.2 J	1.2 J	2.1 J	2 J	1.9 J	1.8 J	2.5 U	2.5 U	1.5 J	2 J	1.5 J	1.4 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	1.3 J	0.95 J	1.6 J	1.8 J	2.5 U	2.5 U	1.7 J	2.2 J	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	**28**	**18**	**28**	**23**	2.5 U	2.5 U	**22**	**31**	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Water Level Elevations and LNAPL Thickness; December 2017
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		April 24, 2017				May 18, 2017				May 25, 2017				June 8, 2017				June 22, 2017				July 27, 2017			
Well ID	**MPE (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**	**DTP (ft)**	**DTW (ft)**	**GWE (ft)**	**FPT (ft)**
Monitoring Wells																									
MW-2R	9.23	--	7.28	1.95	--	--	6.53	2.70	--	--	6.72	2.51	--	--	7.05	2.18	--	--	6.95	2.28	--	6.92	6.94	2.31	0.02
MW-3	8.40	6.81	7.94	1.31	1.13	6.70	7.69	1.45	0.99	6.77	7.98	1.33	1.21	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78	6.78	8.39	1.22	1.61
MW-4	11.57	--	9.72	1.85	--	--	9.38	2.19	--	--	9.5	2.07	--	--	9.77	1.80	--	--	9.79	1.78	--	--	9.76	1.81	--
MW-7	4.48	2.35	2.48	2.10	0.13	1.79	1.80	2.69	0.01	2.02	2.03	2.46	0.01	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01	2.75	2.76	1.73	0.01
MW-7R	4.48	--	2.37	2.11	--	--	1.91	2.57	--	--	1.84	2.64	--	--	2.27	2.21	--	--	2.14	2.34	--	--	NM	NC	--
MW-10	7.82	--	5.36	2.46	--	--	7.66	0.16	--	--	4.70	3.12	--	--	5.82	2.00	--	--	6.40	1.42	--	--	NM	NC	--
MW-11	7.82	--	5.72	2.10	--	--	6.03	1.79	--	--	5.16	2.66	--	--	5.79	2.03	--	--	5.85	1.97	--	--	NM	NC	--
MW-14	11.63	--	9.57	2.06	--	--	9.01	2.62	--	--	9.21	2.42	--	--	9.56	2.07	--	--	9.33	2.30	--	--	NM	NC	--
MW-15	11.51	--	9.48	2.03	--	--	8.98	2.53	--	--	9.17	2.34	--	--	9.50	2.01	--	--	9.36	2.15	--	--	NM	NC	--
MW-17	8.78	--	6.21	2.57	--	5.68	5.69	3.10	0.01	--	5.74	3.04	--	--	6.08	2.70	--	--	6.18	2.60	--	--	5.90	2.88	--
MW-18	8.40	--	6.76	1.64	--	--	6.54	1.86	--	--	6.60	1.80	--	--	6.96	1.44	--	--	7.06	1.34	--	--	NM	NC	--
MW-19	4.41	--	2.37	2.04	--	1.93	1.94	2.48	0.01	--	1.79	2.62	--	--	2.17	2.24	--	--	2.24	2.17	--	--	2.33	2.08	--
MW-20	11.69	--	9.85	1.84	--	--	9.48	2.21	--	--	9.61	2.08	--	--	9.89	1.80	--	--	9.88	1.81	--	--	NM	NC	--
MW-21	8.17	--	6.01	2.16	--	--	5.80	2.37	--	--	5.74	2.43	--	--	6.26	1.91	--	--	6.03	2.14	--	--	NM	NC	--
MW-22	11.63	--	9.78	1.85	--	--	9.44	2.19	--	--	9.54	2.09	--	--	9.80	1.83	--	--	9.81	1.82	--	--	NM	NC	--
MW-33	9.49	--	6.79	2.7	--	--	5.95	3.54	--	--	6.18	3.31	--	--	6.79	2.70	--	--	6.19	3.30	--	--	NM	NC	--
MW-34	8.30	--	6.69	1.61	--	--	6.29	2.01	--	--	6.67	1.63	--	--	6.84	1.46	--	--	7.07	1.23	--	--	NM	NC	--
MW-36	9.11	--	6.69	2.42	--	--	5.91	3.20	--	--	5.82	3.29	--	--	6.53	2.58	--	--	6.19	2.92	--	--	NM	NC	--
MW-37	4.45	--	2.28	2.17	--	--	1.95	2.50	--	--	1.84	2.61	--	--	2.04	2.41	--	--	2.30	2.15	--	--	NM	NC	--
MW-38	4.44	--	2.32	2.12	--	--	1.98	2.46	--	--	1.98	2.46	--	--	2.26	2.18	--	--	2.41	2.03	--	--	NM	NC	--
MW-40	8.49	--	6.81	1.68	--	--	6.36	2.13	--	--	6.50	1.99	--	--	7.09	1.40	--	--	7.16	1.33	--	--	NM	NC	--
MW-41	8.51	--	6.30	2.21	--	--	6.02	2.49	--	--	6.17	2.34	--	--	6.52	1.99	--	--	6.78	1.73	--	--	NM	NC	--
MW-42	9.37	--	7.33	2.04	--	--	NM	NM	--	--	7.14	2.23	--	--	7.40	1.97	--	--	7.54	1.83	--	--	NM	NC	--
MW-43	7.81	--	5.78	2.03	--	--	4.99	2.82	--	--	5.19	2.62	--	--	5.57	2.24	--	--	5.19	2.62	--	--	NM	NC	--
MW-44	9.15	--	7.05	2.10	--	--	6.20	2.95	--	--	6.46	2.69	--	--	6.85	2.3	--	--	6.43	2.72	--	--	NM	NC	--
MW-45	8.69	--	6.58	2.11	--	--	5.71	2.98	--	--	5.99	2.70	--	--	6.40	2.29	--	--	5.84	2.85	--	--	NM	NC	--
MW-46	7.69	--	5.60	2.09	--	--	4.70	2.99	--	--	5.01	2.68	--	--	5.39	2.30	--	--	4.96	2.73	--	--	NM	NC	--
MW-47	8.03	--	5.94	2.09	--	--	5.08	2.95	--	--	5.35	2.68	--	--	5.70	2.33	--	--	5.32	2.71	--	--	NM	NC	--
MW-48	11.43	--	9.55	1.88	--	--	9.19	2.24	--	--	9.32	2.11	--	--	9.89	1.54	--	--	9.53	1.90	--	--	NM	NC	--
Recovery Wells																									
RW-1	8.26	--	6.48	1.78	--	--	5.97	2.29	--	--	6.05	2.21	--	--	6.36	1.90	--	--	6.29	1.97	--	--	6.24	2.02	--
RW-2	9.81	--	6.77	3.04	--	--	6.25	3.56	--	--	6.39	3.42	--	--	6.66	3.15	--	--	6.79	3.02	--	--	6.52	3.29	--
RW-3	9.83	--	7.51	2.32	--	--	6.64	3.19	--	--	6.82	3.01	--	--	7.30	2.53	--	--	6.92	2.91	--	--	7.01	2.82	--
RW-4	10.2	--	7.82	2.38	--	--	6.95	3.25	--	--	7.24	2.96	--	--	7.62	2.58	--	--	7.70	2.50	--	--	7.31	2.89	--
RW-5	10.27	--	7.59	2.68	--	--	6.76	3.51	--	--	7.01	3.26	--	--	7.58	2.69	--	--	6.98	3.29	--	--	7.1	3.17	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

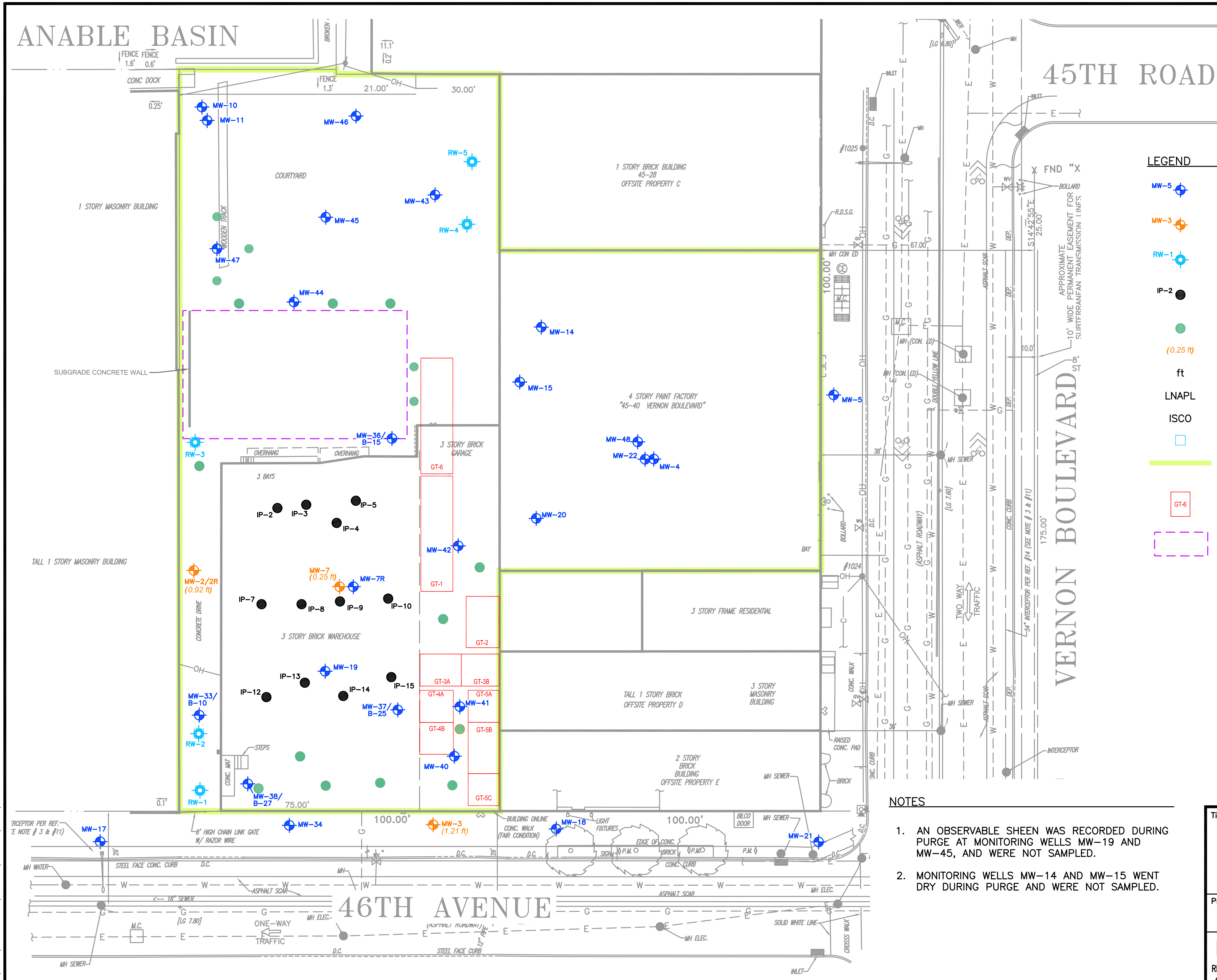
1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

Table 2. Summary of Water Level Elevations and LNAPL Thickness; December 2017
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		August 29, 2017				September 26, 2017				October 31, 2017				November 14, 2017				December 21, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																					
MW-2R	9.23	--	6.69	2.54	--	--	7.78	1.45	--	--	6.78	2.45	--	--	6.99	2.24	--	8.14	9.06	0.86	0.92
MW-3	8.40	6.70	7.88	1.41	1.18	6.81	8.13	1.26	1.32	6.58	7.10	1.69	0.52	6.62	7.25	1.62	0.63	7.02	8.23	1.08	1.21
MW-4	11.57	--	9.39	2.18	--	--	9.98	1.59	--	--	9.25	2.32	--	--	9.40	2.17	--	--	9.99	1.58	--
MW-7	4.48	1.09	1.10	3.39	0.01	2.59	2.86	1.82	0.27	1.67	1.68	2.81	0.01	1.85	1.86	2.63	0.01	3.44	3.69	0.98	0.25
MW-7R	4.48	--	2.19	2.29	--	--	2.35	2.13	--	--	2.11	2.37	--	--	2.27	2.21	--	--	3.34	1.14	--
MW-10	7.82	--	5.79	2.03	--	--	8.36	-0.54	--	--	5.89	1.93	--	--	6.04	1.78	--	--	8.51	-0.69	--
MW-11	7.82	--	5.71	2.11	--	--	6.68	1.14	--	--	5.85	1.97	--	--	6.02	1.80	--	--	7.06	0.76	--
MW-14	11.63	--	9.48	2.15	--	--	9.88	1.75	--	--	9.36	2.27	--	--	9.53	2.10	--	--	9.80	1.83	--
MW-15	11.51	--	9.46	2.05	--	--	9.74	1.77	--	--	9.30	2.21	--	--	9.48	2.03	--	--	9.72	1.79	--
MW-17	8.78	--	6.04	2.74	--	--	6.62	2.16	--	--	6.15	2.63	--	--	6.29	2.49	--	--	7.22	1.56	--
MW-18	8.40	--	6.87	1.53	--	--	6.85	1.55	--	--	6.91	1.49	--	--	7.10	1.30	--	--	7.07	1.33	--
MW-19	4.41	--	2.09	2.32	--	--	2.52	1.89	--	--	2.18	2.23	--	2.26	2.37	2.12	0.11	--	3.46	0.95	--
MW-20	11.69	--	9.82	1.87	--	--	10.06	1.63	--	--	9.80	1.89	--	--	9.99	1.70	--	--	10.18	1.51	--
MW-21	8.17	--	6.19	1.98	--	--	5.99	2.18	--	--	6.39	1.78	--	--	6.62	1.55	--	--	6.39	1.78	--
MW-22	11.63	--	9.79	1.84	--	--	10.01	1.62	--	--	9.83	1.80	--	--	10.03	1.60	--	--	10.04	1.59	--
MW-33	9.49	--	6.79	2.70	--	--	7.19	2.30	--	--	6.80	2.69	--	--	7.01	2.48	--	--	7.79	1.70	--
MW-34	8.30	--	6.83	1.47	--	7.04	7.15	1.23	0.11	--	6.84	1.46	--	--	7.05	1.25	--	--	7.80	0.50	--
MW-36	9.11	--	6.43	2.68	--	--	7.02	2.09	--	--	6.56	2.55	--	--	6.76	2.35	--	--	7.68	1.43	--
MW-37	4.45	--	1.99	2.46	--	--	2.71	1.74	--	--	2.02	2.43	--	--	2.27	2.18	--	--	3.19	1.26	--
MW-38	4.44	--	2.31	2.13	--	--	2.73	1.71	--	--	2.38	2.06	--	--	2.59	1.85	--	--	3.32	1.12	--
MW-40	8.49	--	6.98	1.51	--	7.02	7.04	1.47	0.02	--	7.09	1.40	--	--	7.30	1.19	--	--	7.43	1.06	--
MW-41	8.51	--	6.41	2.10	--	--	6.92	1.59	--	--	6.51	2.00	--	--	6.77	1.74	--	--	7.23	1.28	--
MW-42	9.37	--	7.29	2.08	--	--	7.57	1.80	--	--	7.37	2.00	--	--	7.59	1.78	--	--	7.94	1.43	--
MW-43	7.81	--	5.56	2.25	--	--	6.10	1.71	--	--	5.59	2.22	--	--	5.72	2.09	--	--	6.64	1.17	--
MW-44	9.15	--	6.80	2.35	--	--	7.38	1.77	--	--	6.85	2.30	--	--	7.07	2.08	--	--	7.98	1.17	--
MW-45	8.69	--	6.37	2.32	--	--	6.92	1.77	--	--	6.41	2.28	--	--	6.66	2.03	--	--	7.56	1.13	--
MW-46	7.69	--	5.33	2.36	--	--	5.99	1.70	--	--	5.38	2.31	--	--	5.71	1.98	--	--	7.10	0.59	--
MW-47	8.03	--	5.62	2.41	--	--	6.31	1.72	--	--	5.73	2.30	--	--	5.99	2.04	--	--	6.98	1.05	--
MW-48	11.43	--	9.69	1.74	--	--	9.77	1.66	--	--	9.79	1.64	--	--	9.96	1.47	--	--	9.77	1.66	--
Recovery Wells																					
RW-1	8.26	--	6.07	2.19	--	--	6.87	1.39	--	--	6.15	2.11	--	--	6.35	1.91	--	--	7.22	1.04	--
RW-2	9.81	--	6.38	3.43	--	--	7.16	2.65	--	--	6.42	3.39	--	--	6.60	3.21	--	--	7.78	2.03	--
RW-3	9.83	--	6.80	3.03	--	--	7.99	1.84	--	--	6.98	2.85	--	--	7.12	2.71	--	--	8.51	1.32	--
RW-4	10.2	--	7.30	2.90	--	--	8.19	2.01	--	--	7.47	2.73	--	--	7.50	2.70	--	--	8.70	1.50	--
RW-5	10.27	--	7.10	3.17	--	--	7.96	2.31	--	--	7.30	2.97	--	--	7.34	2.93	--	--	8.52	1.75	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.



LEGEND

MW-5	LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
MW-3	LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
RW-1	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
IP-2	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
	LOCATION OF FIRST ROUND ISCO INJECTION POINT
(0.25 ft)	LNAPL THICKNESS
ft	FEET
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
ISCO	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	CONCRETE SLAB

NOTES

1. AN OBSERVABLE SHEEN WAS RECORDED DURING PURGE AT MONITORING WELLS MW-19 AND MW-45, AND WERE NOT SAMPLED.
2. MONITORING WELLS MW-14 AND MW-15 WENT DRY DURING PURGE AND WERE NOT SAMPLED.

Title:

LNAPL DETECTED IN GROUNDWATER

PARAGON PAINT AND VARNISH CORPORATION

Prepared For:

VERNON 4540 REALTY LLC

Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: C.H.	Date: 27FEB18	FIGURE
	Prepared by: G.M.	Scale: AS SHOWN	1
	Project Mgr:	Project: 2051.0001Y002	
	File: 2051.0001Y252.02.DWG		

V:\CAD\PROJECTS\2051\0001Y\252\2051.0001Y252.02.DWG

Christian Hoelzli

From: Christian Hoelzli
Sent: Monday, September 10, 2018 5:37 PM
To: 'Robert Hendrickson'; Jwhite@quadrumglobal.com; Atill@simonbaron.com; Larry Schnapf
Cc: Omar Ramotar; Joe Duminuco
Subject: Paragon Paint and Varnish 2Q18 Quarterly Progress Report
Attachments: Table 1.xlsx; FIGURE 1.pdf

All,

Prior to sending to Sondra, please review the DEC quarterly update for the second quarter of 2018 (April – June) shown below. Let me know if you have any questions or comments. Thank you.

Sondra,

In accordance with the Brownfield Cleanup Agreement, Roux Environmental Engineering and Geology, D.P.C. (Roux) has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Routine Operation, Maintenance, and Reporting Activities:

On June 29, 2018, Roux completed the quarterly gauging of the 29 monitoring wells and 5 recovery wells to determine the presence of LNAPL in accordance with the revised SMP submitted on February 15, 2018. A summary of the gauging data collected during the reporting period is provided in Table 1 attached.

Trace free-product was present in on-site monitoring wells MW-34 and MW-45; with free-product present in monitoring wells MW-2R, MW-3, and MW-7. Absorbent socks were installed in MW-2R, MW-3, MW-34, and MW-45 with approximately 0.68 gallons of free-product absorbed in total based on the saturation of the sock absorbency. An additional 0.2 gallons of product was manually bailed from MW-3 and MW-7. The recovered product and saturated absorbent socks are temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product in the recovery wells (RW-1 to RW-5), Roux has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Planned Actions:

The following activities are scheduled for the next reporting period (July 1 through September 30, 2018):

- Preparation and submittal of quarterly status report;
- Continued quarterly gauging of monitoring wells within the SMP monitoring network;
- Continued monthly O&M of LNAPL recovery system (as necessary);
- Annual sampling of monitoring wells within the SMP monitoring network; and
- Sampling of four monitoring wells for the emerging contaminants PFAS and 1,4-dioxane, as approved by the NYSDEC on July 31, 2018.

Work Plan Modifications

No modifications made to the Work Plan during this reporting period.

At the time this report was prepared, sampling of the emerging contaminants was conducted on August 9, 2018. Results will be prepared in accordance with the DEC-issued guidance document and submitted in the Third Quarter quarterly update. Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Christian Hoelzli | Project Engineer
209 Shafter Street, Islandia, New York 11749
Main: 631.232.2600 | Direct: 631.630.2477 | Mobile: 516.589.4604
Email: choelzli@rouxinc.com | Website: www.rouxinc.com

ROUX

California | Illinois | Massachusetts | New Jersey | New York | Texas

Table 1. Summary of Water Level Elevations and LNAPL Thickness; August 2018
Former Paragon Paint and Varnish Corp., Long Island City, New York

		June 8, 2017				June 22, 2017				July 27, 2017				August 29, 2017				September 26, 2017				October 31, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																									
MW-2R	9.23	--	7.05	2.18	--	--	6.95	2.28	--	6.92	6.94	2.31	0.02	--	6.69	2.54	--	--	7.78	1.45	--	--	6.78	2.45	--
MW-3	8.40	7.04	8.41	1.02	1.37	7.08	8.86	0.88	1.78	6.78	8.39	1.22	1.61	6.70	7.88	1.41	1.18	6.81	8.13	1.26	1.32	6.58	7.10	1.69	0.52
MW-4	11.57	--	9.77	1.80	--	--	9.79	1.78	--	--	9.76	1.81	--	--	9.39	2.18	--	--	9.98	1.59	--	--	9.25	2.32	--
MW-7	4.48	1.01	1.02	3.47	0.01	2.32	2.33	2.16	0.01	2.75	2.76	1.73	0.01	1.09	1.10	3.39	0.01	2.59	2.86	1.82	0.27	1.67	1.68	2.81	0.01
MW-7R	4.48	--	2.27	2.21	--	--	2.14	2.34	--	--	NM	NC	--	--	2.19	2.29	--	--	2.35	2.13	--	--	2.11	2.37	--
MW-10	7.82	--	5.82	2.00	--	--	6.40	1.42	--	--	NM	NC	--	--	5.79	2.03	--	--	8.36	-0.54	--	--	5.89	1.93	--
MW-11	7.82	--	5.79	2.03	--	--	5.85	1.97	--	--	NM	NC	--	--	5.71	2.11	--	--	6.68	1.14	--	--	5.85	1.97	--
MW-14	11.63	--	9.56	2.07	--	--	9.33	2.30	--	--	NM	NC	--	--	9.48	2.15	--	--	9.88	1.75	--	--	9.36	2.27	--
MW-15	11.51	--	9.50	2.01	--	--	9.36	2.15	--	--	NM	NC	--	--	9.46	2.05	--	--	9.74	1.77	--	--	9.30	2.21	--
MW-17	8.78	--	6.08	2.70	--	--	6.18	2.60	--	--	5.90	2.88	--	--	6.04	2.74	--	--	6.62	2.16	--	--	6.15	2.63	--
MW-18	8.40	--	6.96	1.44	--	--	7.06	1.34	--	--	NM	NC	--	--	6.87	1.53	--	--	6.85	1.55	--	--	6.91	1.49	--
MW-19	4.41	--	2.17	2.24	--	--	2.24	2.17	--	--	2.33	2.08	--	--	2.09	2.32	--	--	2.52	1.89	--	--	2.18	2.23	--
MW-20	11.69	--	9.89	1.80	--	--	9.88	1.81	--	--	NM	NC	--	--	9.82	1.87	--	--	10.06	1.63	--	--	9.80	1.89	--
MW-21	8.17	--	6.26	1.91	--	--	6.03	2.14	--	--	NM	NC	--	--	6.19	1.98	--	--	5.99	2.18	--	--	6.39	1.78	--
MW-22	11.63	--	9.80	1.83	--	--	9.81	1.82	--	--	NM	NC	--	--	9.79	1.84	--	--	10.01	1.62	--	--	9.83	1.80	--
MW-33	9.49	--	6.79	2.70	--	--	6.19	3.30	--	--	NM	NC	--	--	6.79	2.70	--	--	7.19	2.30	--	--	6.80	2.69	--
MW-34	8.30	--	6.84	1.46	--	--	7.07	1.23	--	--	NM	NC	--	--	6.83	1.47	--	7.04	7.15	1.23	0.11	--	6.84	1.46	--
MW-36	9.11	--	6.53	2.58	--	--	6.19	2.92	--	--	NM	NC	--	--	6.43	2.68	--	--	7.02	2.09	--	--	6.56	2.55	--
MW-37	4.45	--	2.04	2.41	--	--	2.30	2.15	--	--	NM	NC	--	--	1.99	2.46	--	--	2.71	1.74	--	--	2.02	2.43	--
MW-38	4.44	--	2.26	2.18	--	--	2.41	2.03	--	--	NM	NC	--	--	2.31	2.13	--	--	2.73	1.71	--	--	2.38	2.06	--
MW-40	8.49	--	7.09	1.40	--	--	7.16	1.33	--	--	NM	NC	--	--	6.98	1.51	--	7.02	7.04	1.47	0.02	--	7.09	1.40	--
MW-41	8.51	--	6.52	1.99	--	--	6.78	1.73	--	--	NM	NC	--	--	6.41	2.10	--	--	6.92	1.59	--	--	6.51	2.00	--
MW-42	9.37	--	7.40	1.97	--	--	7.54	1.83	--	--	NM	NC	--	--	7.29	2.08	--	--	7.57	1.80	--	--	7.37	2.00	--
MW-43	7.81	--	5.57	2.24	--	--	5.19	2.62	--	--	NM	NC	--	--	5.56	2.25	--	--	6.10	1.71	--	--	5.59	2.22	--
MW-44	9.15	--	6.85	2.3	--	--	6.43	2.72	--	--	NM	NC	--	--	6.80	2.35	--	--	7.38	1.77	--	--	6.85	2.30	--
MW-45	8.69	--	6.40	2.29	--	--	5.84	2.85	--	--	NM	NC	--	--	6.37	2.32	--	--	6.92	1.77	--	--	6.41	2.28	--
MW-46	7.69	--	5.39	2.30	--	--	4.96	2.73	--	--	NM	NC	--	--	5.33	2.36	--	--	5.99	1.70	--	--	5.38	2.31	--
MW-47	8.03	--	5.70	2.33	--	--	5.32	2.71	--	--	NM	NC	--	--	5.62	2.41	--	--	6.31	1.72	--	--	5.73	2.30	--
MW-48	11.43	--	9.89	1.54	--	--	9.53	1.90	--	--	NM	NC	--	--	9.69	1.74	--	--	9.77	1.66	--	--	9.79	1.64	--
Recovery Wells																									
RW-1	8.26	--	6.36	1.90	--	--	6.29	1.97	--	--	6.24	2.02	--	--	6.07	2.19	--	--	6.87	1.39	--	--	6.15	2.11	--
RW-2	9.81	--	6.66	3.15	--	--	6.79	3.02	--	--	6.52	3.29	--	--	6.38	3.43	--	--	7.16	2.65	--	--	6.42	3.39	--
RW-3	9.83	--	7.30	2.53	--	--	6.92	2.91	--	--	7.01	2.82	--	--	6.80	3.03	--	--	7.99	1.84	--	--	6.98	2.85	--
RW-4	10.2	--	7.62	2.58	--	--	7.70	2.50	--	--	7.31	2.89	--	--	7.30	2.90	--	--	8.19	2.01	--	--	7.47	2.73	--
RW-5	10.27	--	7.58	2.69	--	--	6.98	3.29	--	--	7.1	3.17	--	--	7.10	3.17	--	--	7.96	2.31	--	--	7.30	2.97	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

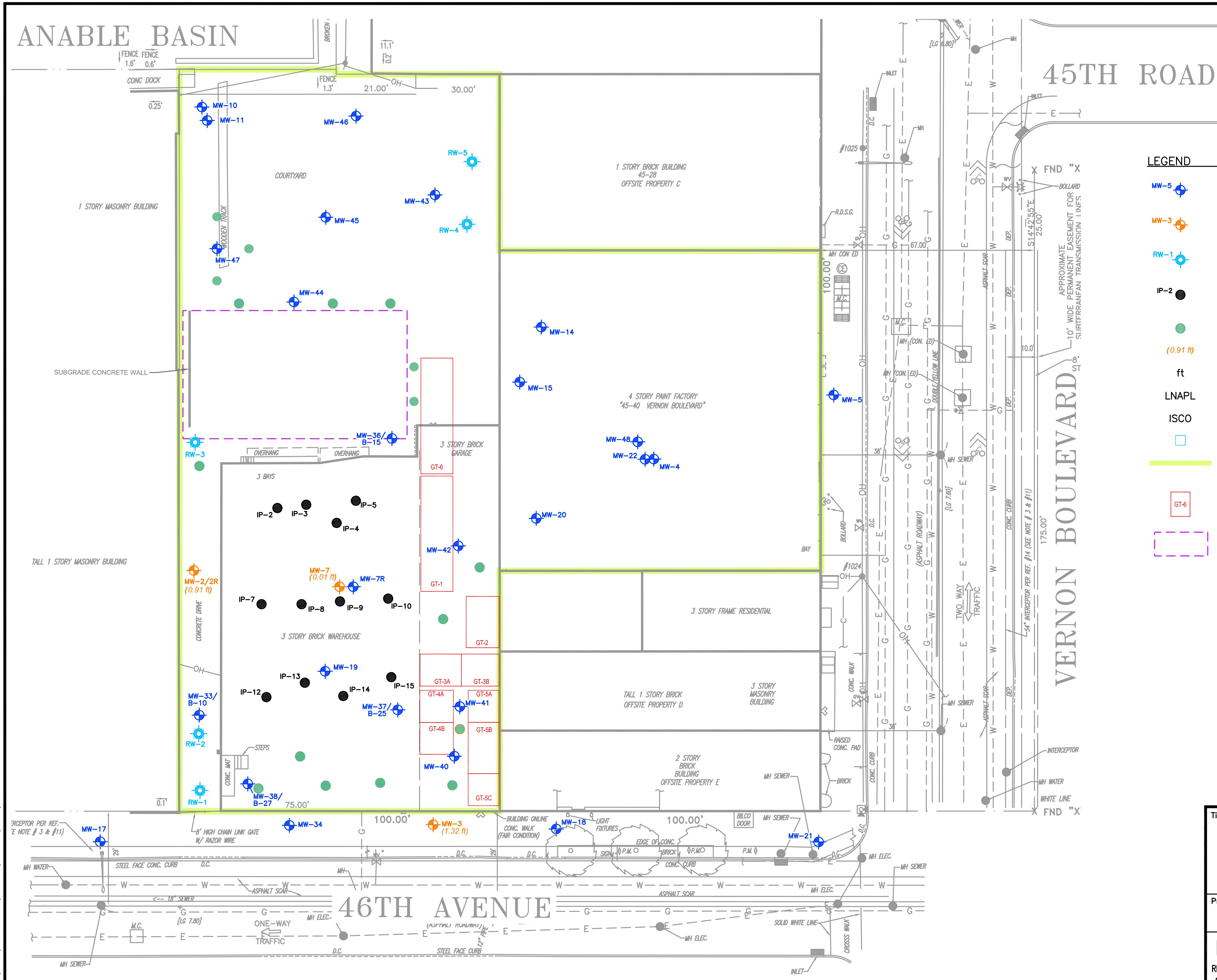
Table 1. Summary of Water Level Elevations and LNAPL Thickness; August 2018
Former Paragon Paint and Varnish Corp., Long Island City, New York

		November 14, 2017				December 21, 2017				January 4, 2018				March 20, 2018				June 29, 2018			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																					
MW-2R	9.23	--	6.99	2.24	--	8.14	9.06	0.86	0.92	8.18	8.45	0.98	0.27	7.01	8.17	1.93	1.16	6.76	7.67	2.24	0.91
MW-3	8.40	6.62	7.25	1.62	0.63	7.02	8.23	1.08	1.21	7.29	7.69	1.01	0.4	6.61	7.37	1.60	0.76	6.41	7.73	1.66	1.32
MW-4	11.57	--	9.40	2.17	--	--	9.99	1.58	--	NM	NM	NC	NC	--	9.50	2.07	--	--	9.58	1.99	--
MW-7	4.48	1.85	1.86	2.63	0.01	3.44	3.69	0.98	0.25	1.21	1.25	3.26	0.04	2.37	2.38	2.11	0.01	1.48	1.49	3.00	0.01
MW-7R	4.48	--	2.27	2.21	--	--	3.34	1.14	--	--	3.56	0.92	--	--	2.08	2.40	--	--	1.94	2.54	--
MW-10	7.82	--	6.04	1.78	--	--	8.51	-0.69	--	--	5.70	2.12	--	NM	NM	NC	NC	NM	NM	NC	NC
MW-11	7.82	--	6.02	1.80	--	--	7.06	0.76	--	--	6.27	1.55	--	NM	NM	NC	NC	NM	NM	NC	NC
MW-14	11.63	--	9.53	2.10	--	--	9.80	1.83	--	--	9.90	1.73	--	--	9.18	2.45	--	--	9.55	2.08	--
MW-15	11.51	--	9.48	2.03	--	--	9.72	1.79	--	--	9.88	1.63	--	--	9.12	2.39	--	--	9.40	2.11	--
MW-17	8.78	--	6.29	2.49	--	--	7.22	1.56	--	--	7.24	1.54	--	--	5.88	2.90	--	--	5.67	3.11	--
MW-18	8.40	--	7.10	1.30	--	--	7.07	1.33	--	--	7.06	1.34	--	--	6.57	1.83	--	--	6.98	1.42	--
MW-19	4.41	2.26	2.37	2.12	0.11	--	3.46	0.95	--	--	3.52	0.89	--	--	2.02	2.39	--	--	2.10	2.31	--
MW-20	11.69	--	9.99	1.70	--	--	10.18	1.51	--	--	10.15	1.54	--	--	9.57	2.12	--	--	9.60	2.09	--
MW-21	8.17	--	6.62	1.55	--	--	6.39	1.78	--	--	6.48	1.69	--	--	6.01	2.16	--	--	6.72	1.45	--
MW-22	11.63	--	10.03	1.60	--	--	10.04	1.59	--	NM	NM	NC	NC	--	9.43	2.20	--	--	9.61	2.02	--
MW-33	9.49	--	7.01	2.48	--	--	7.79	1.70	--	--	8.02	1.47	--	--	6.18	3.31	--	--	6.28	3.21	--
MW-34	8.30	--	7.05	1.25	--	--	7.80	0.50	--	--	7.77	0.53	--	--	6.64	1.66	--	--	6.90	1.40	--
MW-36	9.11	--	6.76	2.35	--	--	7.68	1.43	--	--	6.53	2.58	--	--	6.38	2.73	--	--	5.70	3.41	--
MW-37	4.45	--	2.27	2.18	--	--	3.19	1.26	--	--	3.29	1.16	--	--	1.62	2.83	--	--	2.12	2.33	--
MW-38	4.44	--	2.59	1.85	--	--	3.32	1.12	--	--	3.44	1.00	--	2.00	2.01	2.44	0.01	--	2.53	1.91	--
MW-40	8.49	--	7.30	1.19	--	--	7.43	1.06	--	--	7.39	1.10	--	--	6.48	2.01	--	--	6.60	1.89	--
MW-41	8.51	--	6.77	1.74	--	--	7.23	1.28	--	--	7.46	1.05	--	--	5.80	2.71	--	--	6.89	1.62	--
MW-42	9.37	--	7.59	1.78	--	--	7.94	1.43	--	--	7.97	1.40	--	--	7.11	2.26	--	--	7.26	2.11	--
MW-43	7.81	--	5.72	2.09	--	--	6.64	1.17	--	--	6.71	1.10	--	--	5.20	2.61	--	--	5.01	2.80	--
MW-44	9.15	--	7.07	2.08	--	--	7.98	1.17	--	--	8.06	1.09	--	--	6.52	2.63	--	--	6.34	2.81	--
MW-45	8.69	--	6.66	2.03	--	--	7.56	1.13	--	--	7.55	1.14	--	--	6.65	2.04	--	--	5.46	3.23	--
MW-46	7.69	--	5.71	1.98	--	--	7.10	0.59	--	--	6.80	0.89	--	--	5.05	2.64	--	--	4.93	2.76	--
MW-47	8.03	--	5.99	2.04	--	--	6.98	1.05	--	--	6.94	1.09	--	--	5.41	2.62	--	NM	NM	NC	NC
MW-48	11.43	--	9.96	1.47	--	--	9.77	1.66	--	NM	NM	NC	NC	--	9.23	2.20	--	--	9.36	2.07	--
Recovery Wells																					
RW-1	8.26	--	6.35	1.91	--	--	7.22	1.04	--	--	7.30	0.96	--	--	6.10	2.16	--	--	6.29	1.97	--
RW-2	9.81	--	6.60	3.21	--	--	7.78	2.03	--	--	7.83	1.98	--	--	6.43	3.38	--	--	6.56	3.25	--
RW-3	9.83	--	7.12	2.71	--	--	8.51	1.32	--	--	8.60	1.23	--	--	6.98	2.85	--	--	6.81	3.02	--
RW-4	10.2	--	7.50	2.70	--	--	8.70	1.50	--	--	8.82	1.38	--	--	7.28	2.92	--	--	7.10	3.10	--
RW-5	10.27	--	7.34	2.93	--	--	8.52	1.75	--	--	8.61	1.66	--	--	7.07	3.20	--	--	6.90	3.37	--

Notes:

LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016:
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.



LEGEND

MW-5	LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
MW-3	LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
RW-1	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
IP-2	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
	LOCATION OF FIRST ROUND ISCO INJECTION POINT
(0.91 ft)	LNAPL THICKNESS
ft	FEET
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
ISCO	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	CONCRETE SLAB

Title:

LNAPL DETECTED IN GROUNDWATER

PARAGON PAINT AND VARNISH CORPORATION

Prepared For:

VERNON 4540 REALTY LLC

Remedial — REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS			FIGURE
	Compiled by: C.H.	Date: 11JUL18	1
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: C.H.	Project: 2051.0001Y002	
	File: 2051.0001Y255.01.DWG		

V:\CAD\PROJECTS\2051Y\0001Y\255\2051.0001Y255.01.DWG

Christian Hoelzli

From: Christian Hoelzli
Sent: Friday, December 14, 2018 2:22 PM
To: 'Martinkat, Sondra (DEC) (sondra.martinkat@dec.ny.gov)'
Cc: 'O'Connell, Jane H (DEC) (jane.oconnell@dec.ny.gov) (jane.oconnell@dec.ny.gov)'; 'Robert Hendrickson'; 'Jared White'; Atill@simonbaron.com; 'Larry Schnapf'; Omar Ramotar; Joe Duminuco
Subject: Paragon Paint and Varnish 3Q18 Quarterly Progress Report (NYSDEC Site No. C241108)
Attachments: Table 1.pdf; Table 2.pdf; Table 3.pdf; Figure 1.pdf; Attachment 1.pdf

Sondra,

In accordance with the Brownfield Cleanup Agreement, Roux Environmental Engineering and Geology, D.P.C. (Roux) has prepared this email to serve as a periodic update for the former Paragon Paint and Varnish Corp. facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (NYSDEC Site No C241108).

Routine Operation, Maintenance, and Reporting Activities:

On August 9, 2018, Roux completed the quarterly gauging of the 29 monitoring wells and 5 recovery wells to determine the presence of LNAPL in accordance with the revised SMP submitted on February 15, 2018. A summary of the gauging data collected during the reporting period is provided in Table 1 attached.

Trace free-product was present in on-site monitoring wells with free-product present in monitoring wells MW-2R, MW-3, and MW-7. Absorbent socks were installed in MW-2R and MW-3 with approximately 0.75 gallons of free-product absorbed in total based on the saturation of the sock absorbency. An additional 2.5 gallons of product was manually bailed from MW-2R and MW-3. The recovered product and saturated absorbent socks are temporarily stored on-Site in a 55-gallon drum until it is required to be disposed. These monitoring wells will continue to be gauged and monitored, with manual bailing and absorbent sock replacement implemented as necessary.

Due to the lack of free-product in the recovery wells (RW-1 to RW-5), Roux has continued to pause the operation of the LNAPL recovery system until recoverable levels of product become present in the recovery system wells.

Sampling/Sample Results

During this reporting period, 18 groundwater samples were collected from the following monitoring wells:

- MW-4
- MW-10
- MW-11
- MW-19
- MW-21
- MW-33
- MW-34
- MW-37
- MW-38
- MW-40
- MW-41
- MW-42
- MW-43
- MW-44
- MW-45
- MW-46
- MW-47
- MW-48

The above samples were analyzed for VOCs using USEPA Method 8260.

Additionally, 4 groundwater samples were collected to analyze for 1,4-dioxane and per- and poly-fluoroalkyl substances (PFAS) using USEPA Method 8270D and USEPA Method 537, respectively, in support of a mandatory State-wide evaluation. The samples were taken from MW-33, MW-38, MW-46, and MW-48.

Groundwater Monitoring Results

The VOC analytical results of the August 2018 annual groundwater monitoring event are summarized in Table 2 and the well locations are presented in Figure 1. A review of the groundwater data generated during this reporting period indicated the following:

- The specific COC exceedances of AWQSGVs are noted below:
  - Benzene results exceeded their respective ASQSGV of 1 µg/L at one (1) monitoring well location (5.1 µg/L at MW-40).
  - Ethylbenzene results exceeded their respective AWQSGV of 5 µg/L at one (1) monitoring well location (9.1 µg/L at MW-45).
  - Isopropylbenzene results exceeded their respective AWQSGV of 5 µg/L at 7 monitoring well locations. Exceedances ranged from an estimated 5.8 µg/L (MW-4) to 52 µg/L (MW-38).
  - Xylene results exceeded their respective AWQSGV of 5 µg/L at three (3) monitoring well locations (7.9 µg/L at MW-44, 9.7 µg/L at MW-47 and 14 µg/L at MW-45).

The groundwater data for the recent August 2018 sampling event is relatively consistent to previous sampling rounds. For reference purposes, there was a total of 15 exceedances across 8 monitoring wells (MW-19, MW-33, MW-38, MW-40, MW-41, MW-43, MW-44, MW-47) during the December 2017 sampling event. The highest exceedance was 63 ug/L for isopropylbenzene.

The analytical results of the 1,4 dioxane and PFAS sampling are summarized in Table 3. The data was uploaded as EDD 20181025 47793C241108.NYSDEC and is currently available for use within the NYSDEC system. The Data Usability Summary Report (DUSR) for these samples is provided in Attachment 1. As requested, the sampling and analysis for emerging contaminants has been completed. As this requirement from the NYSDEC was initiated as an information gathering activity, continued analysis for emerging contaminants will not be performed during the next sampling event in 2019.

Planned Actions:

The following activities are scheduled for the next reporting period (October 1 through December 31, 2018):

- Preparation and submittal of quarterly status report;
- Continued quarterly gauging of monitoring wells within the SMP monitoring network; and
- Continued monthly O&M of LNAPL recovery system (as necessary).

Work Plan Modifications

No modifications made to the Work Plan during this reporting period.

Please do not hesitate to contact me or Omar Ramotar with any questions or concerns.

Thank you,

Christian Hoelzli | Project Engineer
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Table 1. Summary of Water Level Elevations and LNAPL Thickness; August 2018
Former Paragon Paint and Varnish Corp., Long Island City, New York

		August 29, 2017				September 26, 2017				October 31, 2017				November 14, 2017				December 21, 2017			
Well ID	MPE (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																					
MW-2R	9.23	--	6.69	2.54	--	--	7.78	1.45	--	--	6.78	2.45	--	--	6.99	2.24	--	8.14	9.06	0.86	0.92
MW-3	8.40	6.70	7.88	1.41	1.18	6.81	8.13	1.26	1.32	6.58	7.10	1.69	0.52	6.62	7.25	1.62	0.63	7.02	8.23	1.08	1.21
MW-4	11.57	--	9.39	2.18	--	--	9.98	1.59	--	--	9.25	2.32	--	--	9.40	2.17	--	--	9.99	1.58	--
MW-7	4.48	1.09	1.10	3.39	0.01	2.59	2.86	1.82	0.27	1.67	1.68	2.81	0.01	1.85	1.86	2.63	0.01	3.44	3.69	0.98	0.25
MW-7R	4.48	--	2.19	2.29	--	--	2.35	2.13	--	--	2.11	2.37	--	--	2.27	2.21	--	--	3.34	1.14	--
MW-10	7.82	--	5.79	2.03	--	--	8.36	-0.54	--	--	5.89	1.93	--	--	6.04	1.78	--	--	8.51	-0.69	--
MW-11	7.82	--	5.71	2.11	--	--	6.68	1.14	--	--	5.85	1.97	--	--	6.02	1.80	--	--	7.06	0.76	--
MW-14	11.63	--	9.48	2.15	--	--	9.88	1.75	--	--	9.36	2.27	--	--	9.53	2.10	--	--	9.80	1.83	--
MW-15	11.51	--	9.46	2.05	--	--	9.74	1.77	--	--	9.30	2.21	--	--	9.48	2.03	--	--	9.72	1.79	--
MW-17	8.78	--	6.04	2.74	--	--	6.62	2.16	--	--	6.15	2.63	--	--	6.29	2.49	--	--	7.22	1.56	--
MW-18	8.40	--	6.87	1.53	--	--	6.85	1.55	--	--	6.91	1.49	--	--	7.10	1.30	--	--	7.07	1.33	--
MW-19	4.41	--	2.09	2.32	--	--	2.52	1.89	--	--	2.18	2.23	--	2.26	2.37	2.12	0.11	--	3.46	0.95	--
MW-20	11.69	--	9.82	1.87	--	--	10.06	1.63	--	--	9.80	1.89	--	--	9.99	1.70	--	--	10.18	1.51	--
MW-21	8.17	--	6.19	1.98	--	--	5.99	2.18	--	--	6.39	1.78	--	--	6.62	1.55	--	--	6.39	1.78	--
MW-22	11.63	--	9.79	1.84	--	--	10.01	1.62	--	--	9.83	1.80	--	--	10.03	1.60	--	--	10.04	1.59	--
MW-33	9.49	--	6.79	2.70	--	--	7.19	2.30	--	--	6.80	2.69	--	--	7.01	2.48	--	--	7.79	1.70	--
MW-34	8.30	--	6.83	1.47	--	7.04	7.15	1.23	0.11	--	6.84	1.46	--	--	7.05	1.25	--	--	7.80	0.50	--
MW-36	9.11	--	6.43	2.68	--	--	7.02	2.09	--	--	6.56	2.55	--	--	6.76	2.35	--	--	7.68	1.43	--
MW-37	4.45	--	1.99	2.46	--	--	2.71	1.74	--	--	2.02	2.43	--	--	2.27	2.18	--	--	3.19	1.26	--
MW-38	4.44	--	2.31	2.13	--	--	2.73	1.71	--	--	2.38	2.06	--	--	2.59	1.85	--	--	3.32	1.12	--
MW-40	8.49	--	6.98	1.51	--	7.02	7.04	1.47	0.02	--	7.09	1.40	--	--	7.30	1.19	--	--	7.43	1.06	--
MW-41	8.51	--	6.41	2.10	--	--	6.92	1.59	--	--	6.51	2.00	--	--	6.77	1.74	--	--	7.23	1.28	--
MW-42	9.37	--	7.29	2.08	--	--	7.57	1.80	--	--	7.37	2.00	--	--	7.59	1.78	--	--	7.94	1.43	--
MW-43	7.81	--	5.56	2.25	--	--	6.10	1.71	--	--	5.59	2.22	--	--	5.72	2.09	--	--	6.64	1.17	--
MW-44	9.15	--	6.80	2.35	--	--	7.38	1.77	--	--	6.85	2.30	--	--	7.07	2.08	--	--	7.98	1.17	--
MW-45	8.69	--	6.37	2.32	--	--	6.92	1.77	--	--	6.41	2.28	--	--	6.66	2.03	--	--	7.56	1.13	--
MW-46	7.69	--	5.33	2.36	--	--	5.99	1.70	--	--	5.38	2.31	--	--	5.71	1.98	--	--	7.10	0.59	--
MW-47	8.03	--	5.62	2.41	--	--	6.31	1.72	--	--	5.73	2.30	--	--	5.99	2.04	--	--	6.98	1.05	--
MW-48	11.43	--	9.69	1.74	--	--	9.77	1.66	--	--	9.79	1.64	--	--	9.96	1.47	--	--	9.77	1.66	--
Recovery Wells																					
RW-1	8.26	--	6.07	2.19	--	--	6.87	1.39	--	--	6.15	2.11	--	--	6.35	1.91	--	--	7.22	1.04	--
RW-2	9.81	--	6.38	3.43	--	--	7.16	2.65	--	--	6.42	3.39	--	--	6.60	3.21	--	--	7.78	2.03	--
RW-3	9.83	--	6.80	3.03	--	--	7.99	1.84	--	--	6.98	2.85	--	--	7.12	2.71	--	--	8.51	1.32	--
RW-4	10.2	--	7.30	2.90	--	--	8.19	2.01	--	--	7.47	2.73	--	--	7.50	2.70	--	--	8.70	1.50	--
RW-5	10.27	--	7.10	3.17	--	--	7.96	2.31	--	--	7.30	2.97	--	--	7.34	2.93	--	--	8.52	1.75	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

Table 1. Summary of Water Level Elevations and LNAPL Thickness; August 2018
Former Paragon Paint and Varnish Corp., Long Island City, New York

Well ID	MPE (ft)	January 4, 2018				March 20, 2018				June 29, 2018				August 9, 2018			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
Monitoring Wells																	
MW-2R	9.23	8.18	8.45	0.98	0.27	7.01	8.17	1.93	1.16	6.76	7.67	2.24	0.91	6.90	7.81	2.10	0.91
MW-3	8.40	7.29	7.69	1.01	0.4	6.61	7.37	1.60	0.76	6.41	7.73	1.66	1.32	6.39	6.90	1.88	0.51
MW-4	11.57	NM	NM	NC	NC	--	9.50	2.07	--	--	9.58	1.99	--	--	9.47	2.10	--
MW-7	4.48	1.21	1.25	3.26	0.04	2.37	2.38	2.11	0.01	1.48	1.49	3.00	0.01	1.82	1.85	2.65	0.03
MW-7R	4.48	--	3.56	0.92	--	--	2.08	2.40	--	--	1.94	2.54	--	--	1.63	2.85	--
MW-10	7.82	--	5.70	2.12	--	NM	NM	NC	NC	NM	NM	NC	NC	--	5.30	2.52	--
MW-11	7.82	--	6.27	1.55	--	NM	NM	NC	NC	NM	NM	NC	NC	--	5.41	2.41	--
MW-14	11.63	--	9.90	1.73	--	--	9.18	2.45	--	--	9.55	2.08	--	--	9.27	2.36	--
MW-15	11.51	--	9.88	1.63	--	--	9.12	2.39	--	--	9.40	2.11	--	--	9.21	2.30	--
MW-17	8.78	--	7.24	1.54	--	--	5.88	2.90	--	--	5.67	3.11	--	--	5.92	2.86	--
MW-18	8.40	--	7.06	1.34	--	--	6.57	1.83	--	--	6.98	1.42	--	--	6.53	1.87	--
MW-19	4.41	--	3.52	0.89	--	--	2.02	2.39	--	--	2.10	2.31	--	--	1.76	2.65	--
MW-20	11.69	--	10.15	1.54	--	--	9.57	2.12	--	--	9.60	2.09	--	--	9.60	2.09	--
MW-21	8.17	--	6.48	1.69	--	--	6.01	2.16	--	--	6.72	1.45	--	--	5.94	2.23	--
MW-22	11.63	NM	NM	NC	NC	--	9.43	2.20	--	--	9.61	2.02	--	--	9.53	2.10	--
MW-33	9.49	--	8.02	1.47	--	--	6.18	3.31	--	--	6.28	3.21	--	--	6.31	3.18	--
MW-34	8.30	--	7.77	0.53	--	--	6.64	1.66	--	--	6.90	1.40	--	--	6.57	1.73	--
MW-36	9.11	--	6.53	2.58	--	--	6.38	2.73	--	--	5.70	3.41	--	--	6.18	2.93	--
MW-37	4.45	--	3.29	1.16	--	--	1.62	2.83	--	--	2.12	2.33	--	--	1.77	2.68	--
MW-38	4.44	--	3.44	1.00	--	2.00	2.01	2.44	0.01	--	2.53	1.91	--	--	2.18	2.26	--
MW-40	8.49	--	7.39	1.10	--	--	6.48	2.01	--	--	6.60	1.89	--	--	6.42	2.07	--
MW-41	8.51	--	7.46	1.05	--	--	5.80	2.71	--	--	6.89	1.62	--	--	5.91	2.60	--
MW-42	9.37	--	7.97	1.40	--	--	7.11	2.26	--	--	7.26	2.11	--	--	7.03	2.34	--
MW-43	7.81	--	6.71	1.10	--	--	5.20	2.61	--	--	5.01	2.80	--	--	5.19	2.62	--
MW-44	9.15	--	8.06	1.09	--	--	6.52	2.63	--	--	6.34	2.81	--	--	6.51	2.64	--
MW-45	8.69	--	7.55	1.14	--	--	6.65	2.04	--	--	5.46	3.23	--	--	5.61	3.08	--
MW-46	7.69	--	6.80	0.89	--	--	5.05	2.64	--	--	4.93	2.76	--	--	6.06	1.63	--
MW-47	8.03	--	6.94	1.09	--	--	5.41	2.62	--	NM	NM	NC	NC	--	5.40	2.63	--
MW-48	11.43	NM	NM	NC	NC	--	9.23	2.20	--	--	9.36	2.07	--	--	9.27	2.16	--
Recovery Wells																	
RW-1	8.26	--	7.30	0.96	--	--	6.10	2.16	--	--	6.29	1.97	--	--	6.23	2.03	--
RW-2	9.81	--	7.83	1.98	--	--	6.43	3.38	--	--	6.56	3.25	--	--	6.55	3.26	--
RW-3	9.83	--	8.60	1.23	--	--	6.98	2.85	--	--	6.81	3.02	--	--	6.99	2.84	--
RW-4	10.2	--	8.82	1.38	--	--	7.28	2.92	--	--	7.10	3.10	--	--	7.28	2.92	--
RW-5	10.27	--	8.61	1.66	--	--	7.07	3.20	--	--	6.90	3.37	--	--	7.08	3.19	--

Notes:
LNAPL - Light Non-Aqueous Phase Liquid
MPE - Measuring Point Elevation (top of well casing)
DTW - Depth to Water
DTP - Depth to Product
GWE - Groundwater Elevation (corrected for presence of LNAPL when applicable[1,2])
FPT - Free Product Thickness
NC - Not Calculated[12]
NM - Not Measured

1. The elevation datum used for the MPE is NAVD 88.
2. For monitoring wells that contained LNAPL the following formula was used to calculate the corrected water table elevation
   Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
   Assumes a specific gravity of 0.75
3. The following monitoring wells were destroyed during the performance of the remedial action from October 9, 2015 to March 11, 2016
   MW-1/1R, MW-5, MW-6, MW-6R, MW-8, MW-9, MW-12, MW-13, MW-16, MW-23, MW-24, MW-25, MW-27, MW-28, MW-30, MW-31, MW-32, and MW-35.

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-7R	MW-10
		Sample Date:	09/26/2017	09/26/2017	09/26/2017	12/21/2017	08/10/2018	09/26/2017	09/26/2017
		Normal or Field Duplicate:	N	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	6 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	8 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	4 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**39**	**8.2**	**6.8**	4.8	**6.4**	10 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	1000 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	20 U	5 U
Acetone	**50**	UG/L	7.6	4.1 J	3.9 J	5 U	3.4 J	19 J	4.5 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	8 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	20 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	20 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-7R	MW-10
		Sample Date:	09/26/2017	09/26/2017	09/26/2017	12/21/2017	08/10/2018	09/26/2017	09/26/2017
		Normal or Field Duplicate:	N	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	0.89 J	0.73 J	0.74 J	2.5 U	10 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**11**	**6.9**	**6.2**	4.7	**5.8**	**19**	2.5 U
m,p-Xylene	**5**	UG/L	1.1 J	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	3.3 J	5 U	5 U	5 U	5 U	20 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	20 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
N-Propylbenzene	**5**	UG/L	**18**	**5.8**	4.9	3.7	**5.5**	**34**	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	0.73 J	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	4.9	**11**	**10**	**8.6**	**8.4**	**15**	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
T-Butylbenzene	**5**	UG/L	3	**8.6**	**8.4**	**7.6**	**6.4**	**9.1 J**	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	4 U	1 U
Xylenes	**5**	UG/L	1.8 J	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-19
		Sample Date:	12/21/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	12/21/2017
		Normal or Field Duplicate:	N	FD	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	10 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	5 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.4 J	**14**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	1200 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	25 U
Acetone	**50**	UG/L	5 U	5 U	5 U	4.1 J	5 U	5 U	21 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	25 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	25 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-19
		Sample Date:	12/21/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	12/21/2017
		Normal or Field Duplicate:	N	FD	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**5.3 J**
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**63**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	25 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	25 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**120**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**41**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**5.1**	3.9	3.7	**14**
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	5 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
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- - No NYSDEC AWQSGV available
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Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-19	MW-21	MW-21	MW-21	MW-33	MW-33	MW-33
		Sample Date:	08/09/2018	09/26/2017	12/21/2017	08/10/2018	09/26/2017	12/21/2017	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	3.8 U	1.5 U	1.5 U	1.5 U	1.5 U	3.8 U	1.5 U
1,1-Dichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1-Dichloroethene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	5 U	2 U	2 U	2 U	2 U	5 U	2 U
1,2-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
1,2-Dichloropropane	1	UG/L	2.5 U	1 U	1 U	1 U	1 U	2.5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	3.3 J	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	620 U	250 U	250 U	250 U	250 U	620 U	250 U
2-Hexanone	50	UG/L	12 U	5 U	5 U	5 U	5 U	12 U	5 U
Acetone	**50**	UG/L	12 U	3.8 J	5 U	2.4 J	5.6	12 U	5 U
Benzene	**1**	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.23 J	1.2 U	0.5 U
Bromochloromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Bromodichloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Bromoform	50	UG/L	5 U	2 U	2 U	2 U	2 U	5 U	2 U
Bromomethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Carbon Disulfide	60	UG/L	12 U	5 U	5 U	5 U	5 U	12 U	5 U
Carbon Tetrachloride	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Chlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloroform	7	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloromethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Dibromochloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Dichlorodifluoromethane	5	UG/L	12 U	5 U	5 U	5 U	5 U	12 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-19	MW-21	MW-21	MW-21	MW-33	MW-33	MW-33
		Sample Date:	08/09/2018	09/26/2017	12/21/2017	08/10/2018	09/26/2017	12/21/2017	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Ethylbenzene	**5**	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	1.3 J	1.9 J	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**10**	2.5 U	2.5 U	2.5 U	4.2	**6 J**	1 J
m,p-Xylene	**5**	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	18	5 U	5 U	5 U	5 U	12 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	12 U	5 U	5 U	5 U	5 U	12 U	5 U
Methylene Chloride	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
N-Propylbenzene	**5**	UG/L	**16**	2.5 U	2.5 U	2.5 U	**8.2**	**12**	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**11**	2.5 U	2.5 U	2.5 U	**5.2**	**7.5**	2.9
Styrene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
T-Butylbenzene	**5**	UG/L	**7.6**	2.5 U	2.5 U	2.5 U	2.3 J	2.8 J	1.8 J
Tert-Butyl Methyl Ether	10	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Toluene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	**1.2**	1.2 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	1.2	1.2 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U
Trichlorofluoromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U
Vinyl Chloride	2	UG/L	2.5 U	1 U	1 U	1 U	1 U	2.5 U	1 U
Xylenes	**5**	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
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Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-33	MW-34	MW-37	MW-38	MW-38	MW-38	MW-40
		Sample Date:	08/09/2018	08/10/2018	08/09/2018	09/26/2017	12/21/2017	08/09/2018	12/21/2017
		Normal or Field Duplicate:	FD	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	20 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.34 J
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	10 U	0.38 J
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	2500 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	50 U	5 U
Acetone	**50**	UG/L	5 U	6.5	4.8 J	12	14	50 U	3.1 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.62	0.36 J	5 U	**8.4**
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	20 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	8.7	5 U	5 U	5 U	50 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	50 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-33	MW-34	MW-37	MW-38	MW-38	MW-38	MW-40
		Sample Date:	08/09/2018	08/10/2018	08/09/2018	09/26/2017	12/21/2017	08/09/2018	12/21/2017
		Normal or Field Duplicate:	FD	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	1 J	**29**	**13**	**25**	**10**	**52**	**32**
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	0.8 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	4.1 J	5 U	18	50 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	50 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	**40**	**23**	**34**	**12**	**69**	**6.8**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.8	**18**	**8.9**	**14**	**10**	**28**	**15**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.8 J	**8.4**	3	**5.4**	**5.6**	**12 J**	4.5
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	0.74 J	2.5 U	25 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	10 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	0.8 J

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-40	MW-41	MW-41	MW-41	MW-42	MW-42	MW-42
		Sample Date:	08/10/2018	09/26/2017	12/21/2017	08/10/2018	09/26/2017	12/21/2017	08/10/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.48 J	0.51	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	0.29 J	0.23 J	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	4.3 J	10	19	2.6 J	2.5 J	5 U	2.1 J
Benzene	**1**	UG/L	**5.1**	0.62	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	0.76 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-40	MW-41	MW-41	MW-41	MW-42	MW-42	MW-42
		Sample Date:	08/10/2018	09/26/2017	12/21/2017	08/10/2018	09/26/2017	12/21/2017	08/10/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	**44**	1.4 J	1.4 J	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	4.4 J	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	4.3	1.5 J	1 J	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	**19**	2.2 J	2.2 J	1 J	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	**5.7**	2.1 J	1.8 J	0.97 J	1.2 J	1.2 J	0.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-43	MW-43	MW-44	MW-44	MW-44	MW-45
		Sample Date:	09/26/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	**49**	**47**	**17**	**57**	**48**	**23**	**96**
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Acetone	**50**	UG/L	**57**	41	5.2	11	**56**	4.7 J	32
Benzene	**1**	UG/L	0.69	0.45 J	0.5 U	0.37 J	0.36 J	0.5 U	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	1.3 J	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-43	MW-43	MW-43	MW-44	MW-44	MW-44	MW-45
		Sample Date:	09/26/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	08/09/2018
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	**5**	UG/L	**5.9**	**5.4**	2.5 U	**6**	4.4	1.4 J	**9.1**
Isopropylbenzene (Cumene)	**5**	UG/L	**12**	**12**	1.6 J	**9.3**	**7.4**	2.7	**27**
m,p-Xylene	**5**	UG/L	**18**	**12**	0.91 J	**15**	**13**	4.2	**9.6**
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	9	6.5	5 U	2.6 J	7.8	5 U	4 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	**5**	UG/L	**18**	**18**	2.1 J	**15**	**11**	4.1	**44**
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	**10**	**6.4**	0.75 J	**13**	**10**	3.7	4.5 J
Sec-Butylbenzene	**5**	UG/L	4	4.9	1 J	4.2	4.1	2.3 J	**10**
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
T-Butylbenzene	**5**	UG/L	2.1 J	2 J	0.91 J	1.9 J	1.8 J	1.1 J	3.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	1.3 J	0.95 J	2.5 U	1.6 J	1.8 J	2.5 U	5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	**5**	UG/L	**28**	**18**	1.7 J	**28**	**23**	**7.9**	**14 J**

NYSDEC - New York State Department of Environmental Conservation
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FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-48
		Sample Date:	09/26/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	09/26/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	0.88 J	2.5 U	0.91 J	**49**	**65**	**25**	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	**50**	UG/L	2.7 J	4.8 J	5 U	13	47	5.8	3.9 J
Benzene	**1**	UG/L	0.5 U	0.5 U	0.5 U	0.31 J	0.47 J	0.17 J	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-48
		Sample Date:	09/26/2017	12/21/2017	08/09/2018	09/26/2017	12/21/2017	08/09/2018	09/26/2017
		Normal or Field Duplicate:	N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**5.2**	**7.6**	2.5	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**9.1**	**11**	4.6	1.5 J
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**13**	**19**	**6.1**	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	8	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	**15**	**17**	**7.2**	0.81 J
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U	2.5 U	**8.6**	**12**	3.6	2.5 U
Sec-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	3.5	4.3	2.1 J	2.3 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	2.5 U	2.5 U	2.5 U	1.5 J	2 J	0.95 J	1.5 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	1.7 J	2.2 J	0.73 J	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U	2.5 U	**22**	**31**	**9.7**	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

		Sample Designation:	MW-48	MW-48
		Sample Date:	12/21/2017	08/09/2018
		Normal or Field Duplicate:	N	N
Parameter	NYSDEC AWQSGVs	Units		
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	**5**	UG/L	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U
Acetone	**50**	UG/L	5 U	5 U
Benzene	**1**	UG/L	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U

Table 2. Summary of Volatile Organic Compounds in Groundwater
Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

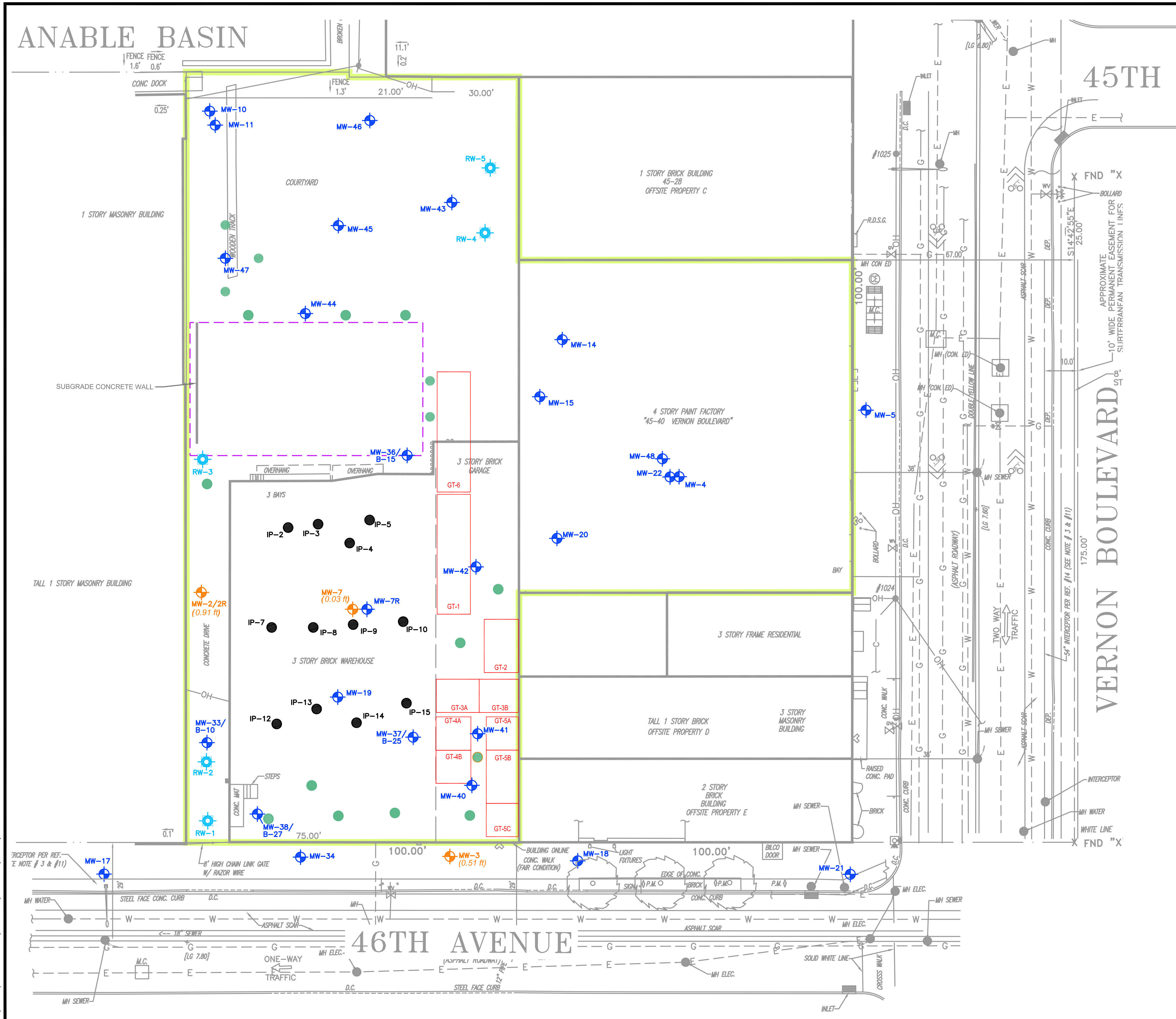
		Sample Designation:	MW-48	MW-48
		Sample Date:	12/21/2017	08/09/2018
		Normal or Field Duplicate:	N	N
Parameter	NYSDEC AWQSGVs	Units		
Dichloroethylenes	5	UG/L	2.5 U	2.5 U
Ethylbenzene	**5**	UG/L	2.5 U	2.5 U
Isopropylbenzene (Cumene)	**5**	UG/L	1.2 J	2.5 U
m,p-Xylene	**5**	UG/L	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U
N-Propylbenzene	**5**	UG/L	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	UG/L	2.5 U	2.5 U
Sec-Butylbenzene	**5**	UG/L	1.7 J	1 J
Styrene	5	UG/L	2.5 U	2.5 U
T-Butylbenzene	**5**	UG/L	1.4 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U
Xylenes	**5**	UG/L	2.5 U	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
FD - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 3. Summary of Perfluorinated Alkyl Acids and Dioxane in Groundwater, 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:		MW-33	MW-33	MW-38	MW-46	MW-48
Sample Date:		08/09/2018	08/09/2018	08/09/2018	08/09/2018	08/09/2018
Normal or Field Duplicate:		N	FD	N	N	N
Parameter	Units					
1,4-Dioxane (P-Dioxane)	UG/L	0.16 U	0.142 U	0.721 U	0.144 U	0.144 U
2-(N-methyl perfluorooctanesulfonamido) acetic acid	NG/L	2.28 U	2.42 U	10 U	**1.53 J**	**1.35 J**
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluorobutanesulfonic acid (PFBS)	NG/L	2.28 U	2.42 U	10 U	**4.64**	**3.63 J+V**
Perfluorobutanoic Acid	NG/L	2.28 U	2.42 U	10 U	**31.4**	**14.2**
Perfluorodecane Sulfonic Acid	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluorodecanoic acid (PFDA)	NG/L	**1.06 J**	**0.584 J**	**2.62 J**	**6.48**	**0.654 J**
Perfluorododecanoic acid (PFDoA)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluoroheptane Sulfonate (PFHPS)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluoroheptanoic acid (PFHpA)	NG/L	**3.16**	**3.06**	**13.3**	**19.7**	**4.22**
Perfluorohexanesulfonic acid (PFHxS)	NG/L	**1.29 J**	**1.75 J**	10 U	1.78 U	**1.01 J**
Perfluorohexanoic acid (PFHxA)	NG/L	**4.03**	**4**	**20.1**	**80**	**5.13**
Perfluorononanoic acid (PFNA)	NG/L	**1.46 J**	**1.08 J**	**4.7 J**	**5.98**	**3.23**
Perfluorooctane Sulfonamide (FOSA)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluorooctanesulfonic acid (PFOS)	NG/L	**5.46**	**3.58**	**12.5**	**50.8**	**3.57**
Perfluorooctanoic acid (PFOA)	NG/L	**8.88**	**8.35**	**21.4**	**51.5**	**10.1**
Perfluoropentanoic Acid (PFPeA)	NG/L	**4.93 JV**	2.42 UJV	**28.3**	**87.5**	**4.4**
Perfluorotetradecanoic acid (PFTA)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluorotridecanoic Acid (PFTriA)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Perfluoroundecanoic Acid (PFUnA)	NG/L	2.28 U	2.42 U	10 U	**0.587 J**	1.82 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	NG/L	2.28 U	2.42 U	10 U	1.78 U	1.82 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	NG/L	2.28 U	2.42 U	**12.2 J+V**	1.78 U	4.43 UV

μg/L -Micrograms per liter
ng/L - Nanogram per liter
FD - Duplicate
J - Estimated Value
J+ - Estimated value, high bias
U - Compound was analyzed for but not detected
V - Value altered or qualifier added during data validation
Bold data indicates that parameter was detected



LEGEND

MW-5	LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
MW-3	LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
RW-1	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
IP-2	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
	LOCATION OF FIRST ROUND ISCO INJECTION POINT
(0.91 ft)	LNAPL THICKNESS
ft	FEET
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
ISCO	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
GT-6	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	CONCRETE SLAB

Title:

LNAPL DETECTED IN GROUNDWATER

PARAGON PAINT AND VARNISH CORPORATION

Prepared For:

CSC 4540 PROPERTY Co. LLC

Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: C.H.	Date: 11JUL18	FIGURE
	Prepared by: G.M.	Scale: AS SHOWN	1
	Project Mgr: C.H.	Project: 2051.0001Y002	
	File: 2051.0001Y255.01.DWG		

V:\CAD\PROJECTS\2051Y\0001Y\255\2051.0001Y255.01.DWG

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

October 15, 2018

Christian Hoelzli
Roux Associates
209 Shafter St
Islandia, NY 11749

RE: Validation of the Former Paragon Paint Analytical Laboratory Data
Alpha Analytical SDG No. L1831083
Data Usability Summary Report (DUSR)

Dear Mr. Hoelzli:

Review has been completed for the data package generated by Alpha Analytical that pertains to samples collected 08/09/18 at the site. Four aqueous samples and a field duplicate were processed for per- and polyfluoroalkyl substances (PFAS) by a modified method 537 and 1,4-dioxane by USEPA SW846 method 8270D. Data pertaining to analyses other than the PFAS and 1,4-dioxane did not require or undergo validation review.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology and the laboratory modifications. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Isotopic Standard Recoveries
* Preparation and Field Blanks
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c) DUSR description. The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data package.

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with project requirements.

In summary, sample results are usable either as reported or with minor edit.

Data completeness, accuracy, precision, reproducibility, sensitivity, and comparability are acceptable.

The laboratory modifications to the USEPA method 537 are significant, including acceptance ranges, consistent in many respects to the advances in the available monitoring compounds. Validation actions are based on the laboratory procedures, in consideration that the laboratory undergoes NYS DOH certifications and NYS SOP review. PFAS compounds are identified by their common acronyms in this report. The data package report forms reference both the technical names and the acronyms.

The client and laboratory sample identifications are attached to this text, and should be reviewed in conjunction with this report. Also included in this report is the client EDD file, qualified to reflect the qualifications/edits recommended in this report.

Blind Field Duplicate

The blind field duplicate evaluation was performed on MW-33. Correlations are within validation guidelines, with the exception of that for PFPeA. The results for that analyte in that parent sample and its field duplicate have been qualified as estimated in value.

1,4-Dioxane Analyses by USEPA Method 8270D SIM

Holding time requirements were met. Sample surrogate and internal standard recoveries are compliant. Calibration standards show responses within the validation guidelines. Blanks show no contamination.

Matrix spikes of MW-46 show recoveries and correlations within laboratory acceptance range/limit.

PFAS by Modified EPA Method 537

Due to responses in the associated blanks, the detections of 6:2FTS in MW-48 and DUP-080918 are considered external contamination and edited to reflect non-detection at either the reporting limit or the originally reported concentration, whichever is greater.

Internal and isotopic standards recoveries are within the laboratory acceptance ranges, with the exception of elevated recoveries for those associated with the following target analytes, results for which are qualified as estimated with a high bias.

- PFBS in MW-48
- 6:2FTS in MW-38

The matrix spikes of MW-46 show recoveries and correlations within laboratory acceptance ranges.

LCS recoveries and calibration standard responses are within validation action guidelines.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Att: Validation Data Qualified Definitions
Client and Laboratory Identifications
Qualified EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Client and Laboratory Sample Identifications

Project Name:	FORMER PARAGON PAINT		**Lab Number:**	L1831083
Project Number:	2051.0001Y002		**Report Date:**	09/04/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1831083-01	MW-38	WATER	LONG ISLAND CITY, NY	08/09/18 08:40	08/09/18
L1831083-02	MW-46	WATER	LONG ISLAND CITY, NY	08/09/18 10:25	08/09/18
L1831083-03	MW-33	WATER	LONG ISLAND CITY, NY	08/09/18 11:45	08/09/18
L1831083-04	DUP-080918	WATER	LONG ISLAND CITY, NY	08/09/18 12:00	08/09/18
L1831083-05	MW-48	WATER	LONG ISLAND CITY, NY	08/09/18 12:00	08/09/18
~~L1831083-06~~	~~MW-19~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 09:20~~	~~08/09/18~~
L1831083-07	FB-080918	WATER	LONG ISLAND CITY, NY	08/09/18 10:00	08/09/18
~~L1831083-08~~	~~MW-37~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 09:50~~	~~08/09/18~~
~~L1831083-09~~	~~TRIP BLANK~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/07/18 00:00~~	~~08/09/18~~
~~L1831083-10~~	~~MW-43~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 10:00~~	~~08/09/18~~
~~L1831083-11~~	~~MW-44~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 09:00~~	~~08/09/18~~
~~L1831083-12~~	~~MW-11~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 07:30~~	~~08/09/18~~
~~L1831083-13~~	~~MW-10~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 08:00~~	~~08/09/18~~
~~L1831083-14~~	~~MW-47~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 08:30~~	~~08/09/18~~
~~L1831083-17~~	~~MW-45~~	~~WATER~~	~~LONG ISLAND CITY, NY~~	~~08/09/18 09:30~~	~~08/09/18~~

APPENDIX H

Revised Quality Assurance Project Plan

Quality Assurance Project Plan

Former Paragon Paint Manufacturing Facility
5-43 to 5-49 46th Avenue and
45-38 to 45-40 Vernon Boulevard
Long Island City, New York
Site No. C241108

July 10, 2018

Prepared for:

CSC 4540 Property Co, LLC
757 Third Avenue, 17th Floor,
New York, New York 10017

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
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Islandia, New York 11749

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2051.0001Y002.254/CV

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1. Introduction

This Quality Assurance Project Plan (QAPP) has been prepared to describe the measures that will be taken to ensure that the data generated during performance of the Site Management Phase (SMP) at the property identified as the former Paragon Paint manufacturing facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, in Long Island City (Site) are of sufficient quality to meet project-specific data quality objectives (DQOs). The QAPP was prepared in accordance with the guidance provided in New York State Department of Environmental Conservation (NYSDEC) Technical Guidance DER-10 (Technical Guidance for Site Investigation and Remediation), the Brownfield Cleanup Program Guide and the United States Environmental Protection Agency's (USEPA's) Guidance for the Data Quality Objectives Process (EPA QA/G-4).

2. Project Objectives and Scope

As described in the SMP, the objectives are to manage the residual contamination and monitor the extent of light non-aqueous phase liquid (LNAPL) and VOC impacts in groundwater. In order to achieve project objectives, Roux Environmental Engineering and Geology (Roux) has developed a scope of work for the sampling of groundwater. A brief overview of the work is provided below. SMP sampling locations are shown in Figure 1.

2.1 Groundwater

There are currently 30 monitoring wells at the Site. All monitoring wells will be gauged using an electronic interface probe capable of detecting light non-aqueous phase liquid (LNAPL) with an accuracy of +/- 0.01 feet.

Of the 30 monitoring wells, 21 are part of the SMP monitoring network. Figure 1 includes a map showing the locations and designations of all monitoring wells at the Site. Groundwater samples will be collected from those wells that do not exhibit any LNAPL at the time of gauging.

Samples will be analyzed for TCL VOCs with a library search (VOC+10) (USEPA Method 8260). Field parameters, including temperature, pH, conductivity, redox potential, dissolved oxygen, and turbidity will also be measured.

In addition, a request was made by the NYSDEC on May 9, 2018 to analyze groundwater at the Site for 1,4-dioxane and per- and poly-fluoroalkyl substances (PFAS) in support of a mandatory State-wide evaluation. After further discussion with the NYSDEC, it was later determined that the NYSDEC was mandating, and not requesting, the collection and analysis of these parameters in support of this initiative. Four (4) monitoring wells within the existing SMP monitoring network will be analyzed for these emerging contaminants, with one representative well selected for analysis at the following representative locations across the Site: The wells proposed are MW-33 in the driveway, MW-38 in the warehouse, MW-46 in the courtyard, and MW-48 in the paint factory. Samples will be analyzed for 1,4-dioxane using USEPA Method 8270D and the full list of 21 PFAS as of June 2018 using USEPA Method 537. The method detection limit for 1,4-dioxane will not exceed 0.28 ug/L. The method detection limit for PFAS compounds will not exceed 2 ng/L.

3. Project Organization

The overall management structure and a general summary of the responsibilities of project team members are presented below. Professional profiles are included in Appendix A.

Project Manager

Omar Ramotar, P.E. of Roux Environmental Engineering and Geology, D.P.C. will serve as Project Manager. The Project Manager is responsible for defining project objectives and bears ultimate responsibility for the successful completion of the investigation. This individual will provide overall management for the implementation of the scope of work and will coordinate all field activities. The Project Manager is also responsible for data review/interpretation and report preparation. Activities of the Project Manager are supported by the Project Quality Assurance Officer.

Field Team Leader

Christian Hoelzli of Roux Environmental Engineering and Geology, D.P.C. will serve as the Field Team Leader. The Field Team Leader bears the responsibility for the successful execution of the field program, as scoped in the SMP and the Field Sampling Plan (FSP). The Field Team Leader will direct the activities of all technical staff in the field as well all subcontractors. The Field Team Leader will also assist in the interpretation of data and in report preparation. The Field Team Leader reports to the Project Manager.

Laboratory Project Manager

The laboratory Project Manager is responsible for sample container preparation, sample custody in the laboratory, and completion of the required analysis through oversight of the laboratory staff. The Laboratory Project Manager will ensure that quality assurance procedures are followed and that an acceptable laboratory report is prepared and submitted. The Laboratory Project Manager reports to the Project Manager or the Field Team Leader.

Quality Assurance Officer

Wai Kwan, Ph.D., P.E. of Roux Associates will serve as the Quality Assurance Officer (QAO) for this project. The QAO is responsible for conducting reviews, inspections, and audits to ensure that the data collection is conducted in accordance with the FSP and QAPP. The QAO's responsibilities range from ensuring effective field equipment decontamination procedures and proper sample collection to the review of all laboratory analytical data for completeness and usefulness. The QAO reports to the Project Manager and makes independent recommendations to the Field Team Leader.

Field Technical Staff

Field technical staff consists of scientists, engineers, Geoprobe operators and technicians who will perform sampling activities. The field technical staff will also be responsible for the preparation of any required field documentation. The field technical staff reports to the Field Team Leader.

4. Sampling Procedures

To ensure groundwater samples collected are representative of the conditions in the surrounding aquifer, monitoring wells will be purged prior to sample collection using low flow sampling procedures as outlined in USEPA document titled "Low Stress (Low Flow) Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells" (USEPA, 1996).

Detailed discussions of sample handling, decontamination, and waste disposal procedures are provided in Sections 5.0, 6.1, and 6.2; respectively, of the site-specific Field Sampling Plan (FSP) in Appendix B of the Remedial Investigation Work Plan.

Samples collected for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from monitoring wells must follow the procedures noted above in addition to the following limitations:

- All acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate, and polypropylene.
- Equipment blanks must be generated daily.
- Grunfos and bladder pumps may NOT be used; as Grunfos pumps contain Teflon washers and bladder pumps contain LDPE bladders.
- All sampling equipment components and sample containers should not come into contact with aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE, Teflon) materials; including sample bottle cap liners.
- Samplers must avoid wearing clothing that contains PTFE material (including GORE-TEX) or waterproofed with PFC materials. All clothing worn by sampling personnel must be laundered multiple times before sampling.
- Many food and drink packaging materials contain PFCs. Food and drink should not be in the vicinity of samples.
- Waterproof adhesives like, "plumbers thread seal tape" contain PFCs and may not be used during sampling activities.
- The sampler must wear nitrile gloves while filling and sealing the sample bottles.
- Procedure for collecting a groundwater sample for PFOA and PFCs:
  1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottles with the sample.
  2. Cap the bottles with an acceptable cap and liner closure system.
  3. Label the sample bottles.
  4. Fill out the Chain of Custody.
  5. Place in a cooler maintained at 4±2° Celsius.

5. Quality Assurance/Quality Control

The primary intended use for the SMP data is to manage the residual contamination and monitor the extent of LNAPL and impacts in groundwater. The primary DQO of the groundwater sampling program, therefore, is that data be accurate and precise, and hence representative of the actual Site conditions. Accuracy refers to the ability of the laboratory to obtain a true value (i.e., compared to a standard) and is assessed through the use of laboratory quality control (QC) samples, including laboratory control samples and matrix spike samples, as well as through the use of surrogates, which are compounds not typically found in the environment that are injected into the samples prior to analysis. Precision refers to the ability to replicate a value, and is assessed through both field and laboratory duplicate samples.

Sensitivity is also a critical issue in generating representative data. Laboratory equipment must be of sufficient sensitivity to detect target compounds and analytes at levels below NYSDEC standards and guidelines whenever possible. Equipment sensitivity can be decreased by field or laboratory contamination of samples, and by sample matrix effects. Assessment of instrument sensitivity is performed through the analysis of reagent blanks, near-detection-limit standards, and response factors. Potential field and/or laboratory contamination is assessed through use of trip blanks, method blanks, and equipment rinse blanks (also called “field blanks”).

Table 1 lists the field and laboratory QC samples that will be analyzed to assess data accuracy and precision, as well as to determine if equipment sensitivity has been compromised.

All analyses will be performed in accordance with the NYSDEC Analytical Services Protocol (ASP), using USEPA SW-846 methods. The laboratory selected to analyze the field samples (groundwater) collected shall maintain a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) Contract Laboratory Protocol (CLP) certification for each of the “assessment” analyses listed in Section 2.0. Alpha Analytical, Inc. based in Mahwah, New Jersey is selected for this sampling and its New York certifications are listed in Appendix B.

All laboratory data generated for groundwater samples are to be reported in NYSDEC ASP Category B deliverables and will be delivered to NYSDEC in electronic data deliverable (EDD) format as described on NYSDEC’s website (http://www.dec.ny.gov/chemical/62440.html).

Per the NYSDEC request, a Data Usability Summary Report (DUSR) will be prepared by an independent party meeting the requirements in Section 2.2(a)1.ii and Appendix 2B of DER-10 for all data packages generated for 1,4-dioxane and PFAS analyses. The resume of the person preparing the DUSR is provided in Appendix A.

TABLE

1. Field and Laboratory QC Summary

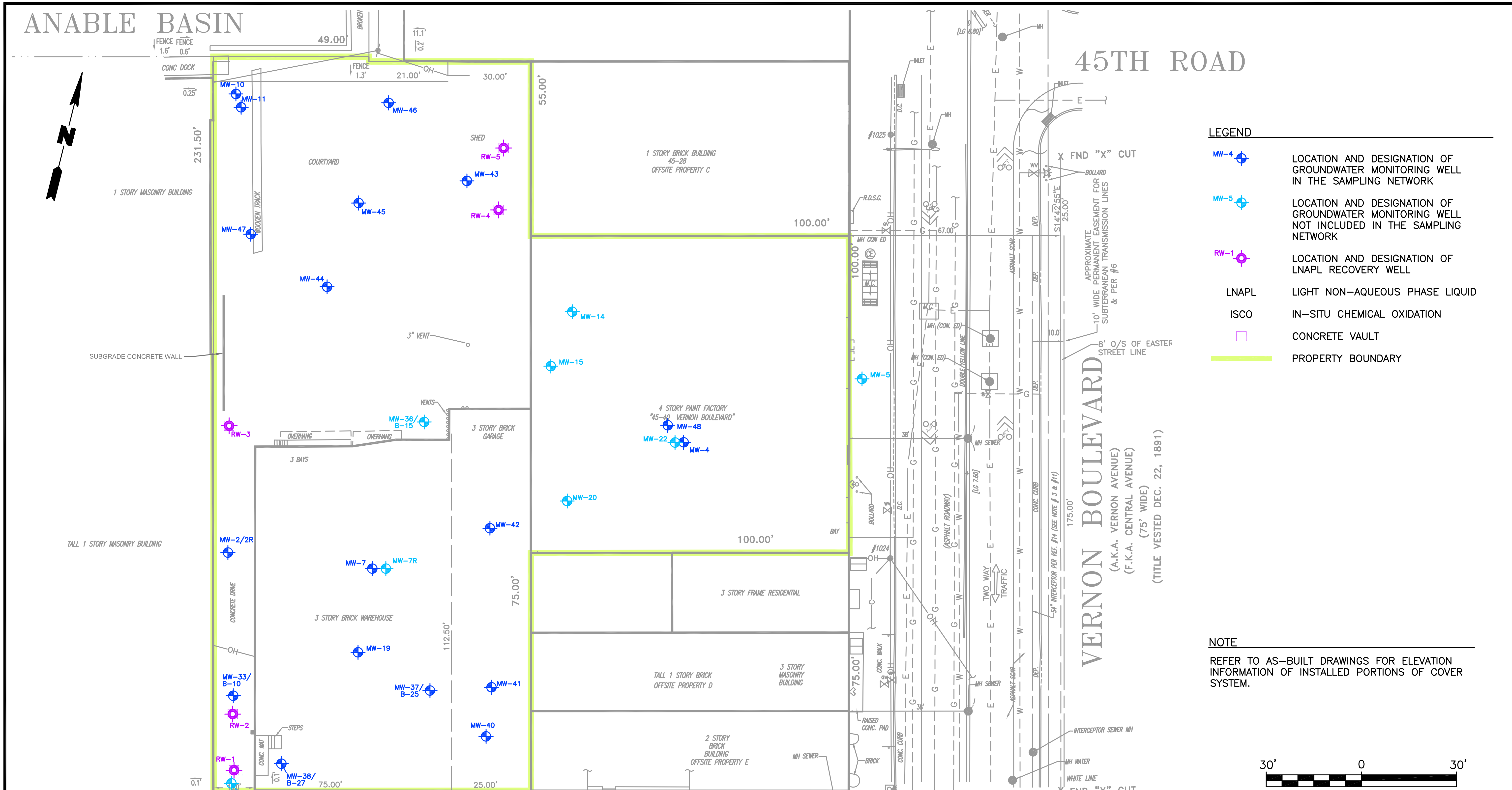
Table 1. Analytical Methods/Quality Assurance Summary
Quality Assurance Project Plan
Former Paragon Paint and Varnish Facility, Long Island City, NY

	Number of Samples / Frequency	Sample Container Volume / Type / Preservative	Sample Holding Time	Method Detection Limit	Minimum Reporting Requirements	Use
Groundwater						
SMP Phase Sampling						
TCL Volatile Organic Compounds - EPA 8260C	Varies / Annually	40 mL (x3) / VOA / HCl	14 days	Various	NYSDEC ASP - Category B	--
NYSDEC Emerging Contaminants Sampling						
Per- and Polyfluoroalkyl Substances, Perfluorooctanoic acid (PFAS/PFOA) - EPA 537	Four / One Time Event	250 mL (x3) / Plastic / Trizma	14 days	2 ng/L	NYSDEC ASP - Category B	--
1,4-dioxane - EPA 8270D	Four / One Time Event	500 mL (x2) / Amber / None	14 days	0.075 ug/L	NYSDEC ASP - Category B	--
Low-Flow Parameters*	Varies / Annually	--	--		--	--
Field QC						
Duplicate	1 per matrix per SDG**	--	--		NYSDEC ASP - Category B	Precision
Trip Blank	1 per VOC cooler	--	--		NYSDEC ASP - Category B	Sensitivity
Equipment Rinse Blank	1 per day	--	--		NYSDEC ASP - Category B	Sensitivity
Laboratory QC						
Laboratory Control Sample	1 per matrix per SDG	--	--		NYSDEC ASP - Category B	Accuracy
Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate***	1 per matrix per SDG	--	--		NYSDEC ASP - Category B	Accuracy/Precision
Surrogate Spike	All organics samples	--	--		NYSDEC ASP - Category B	Accuracy
Laboratory Duplicate	1 per matrix per SDG	--	--		NYSDEC ASP - Category B	Precision
Method Blank	1 per matrix per SDG	--	--		NYSDEC ASP - Category B	Sensitivity

Notes:
* Parameters include Temperature (°C), Hydraulic Conductivity (mS/cm), Dissolved Oxygen Concentration (mg/L), pH, Oxidation Reduction Potential (mV), and Turbidity (NTU)
** SDG - Sample Delivery Group - Assumes a single extraction or preparation
*** Provided to lab by field sampling personnel

FIGURE

1. SMP Sampling Network



Title:

SMP SAMPLING NETWORK

QUALITY ASSURANCE PROJECT PLAN
PARAGON PAINT AND VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

Prepared For:

CSC 4540 PROPERTY CO LLC

ROUX	Compiled by: C.H.	Date: 05JUN18	FIGURE
	Prepared by: G.M.	Scale: AS SHOWN	1
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y254.01.DWG		

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APPENDICES

A. Professional Profiles

B. Laboratory Certifications

APPENDIX A

Professional Profiles

ROUX
PROFESSIONAL PROFILE

Omar Ramotar, P.E.
Principal Engineer

TECHNICAL SPECIALTIES
Engineering services for the investigation, design, construction, operation, maintenance and monitoring of remedial systems for the remediation of contaminated soil, sediment, and groundwater.

EXPERIENCE SUMMARY
Twenty-one years of experience: Staff, Project, Senior, and Principal Engineer with Roux Associates, Inc.

CREDENTIALS
B.E., Environmental Engineering, Hofstra University 1994
M.E., Environmental Engineering, Manhattan College 1995
Professional Engineer: New York, 2000
OSHA 40-hour Health & Safety Course, 1995
OSHA 8-hour Health & Safety Refresher Course, 1996-2015

KEY PROJECTS
- Project Manager and Principal-In-Charge for a multi-element (large scale removal action [45,000 cubic yards of impacted materials excavated and consolidated on-site/ disposed off-site], large scale subsurface feature and UST removal action, and remediation and restoration of a 3.2-acre seasonal pond located in the Massapequa Preserve) remedial design of a USEPA Superfund Site in Nassau County, New York. Responsible for the Preparation of USEPA response letters, technical drawings, and 95% and 100% remedial design documents in accordance with the Record of Decision and Consent Judgment.
- Project Manager and Principal-In-Charge for design of a natural wastewater treatment solution for a 3,000-acre new industrial complex in Saudi Arabia. Roux Associates was tasked to design an Engineered Natural System ((to treat all wastewaters (sanitary, process and stormwater) from construction through operation, incorporate transitioning through phases, and plan for future expansion of the facility and increased wastewater flow rates. The 23-acre ENS® was designed to treat a total flow of 1.4 million gallons per day. The major system components include: dump station with five truck hookup ports to collect and convey sanitary wastewater during construction of the facility; three primary sedimentation and anaerobic treatment tanks; one oil/water separator; six patented enhanced subsurface flow constructed treatment wetlands; two down flow disinfection filters; UV disinfection system; One treated water holding tank which conveys the treated water back to the facility for reuse within the refinery and as irrigations for landscaped areas; two infiltration basins; and six activated alumina treatment cells to remove fluoride from facility stormwater runoff.
- Project Manager and Principal-In-Charge for the bidding, contractor selection, and remediation of the wetland and canal portions of a 440-acre tract in western Staten Island that was used as a Major Oil Storage Facility (MOSF) for petroleum products until the end of 1995. Responsible for the preparation of a Remedial Action Work Plans, technical drawings, and 95% and 100% remedial design documents and for the remedial construction phase in accordance with the Site-specific Consent Order issued by the NYSDEC. Key elements of the Work include dredging/ excavation of approximately 20,000 cubic yards of petroleum and lead impacted sediments/ soils, off-site disposal, on-site capping and restoration of approximately 6.5 acres of disturbed wetlands. Routine activities included coordinating weekly construction meetings; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design, CAMP and project-specific erosion and sedimentation controls; and managing the overall project budget and schedule.
- Project Manager and Principal-In-Charge for the bidding, contractor selection, and remediation of a New York State Superfund Project. Responsible for the preparation of a Remedial Action Work Plans, technical drawings, remedial design documents and for the remedial construction phase in accordance with the Amended Record of Decision issued by the NYSDEC. Key elements of the Work include excavation and off-site disposal of approximately 20,000 tons of VOC impacted soils, on-site capping and *in situ* chemical oxidation. Routine activities included coordinating weekly construction meetings and preparing associated meeting minutes; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design, CAMP and project-specific soil erosion and sedimentation controls; and managing the overall project budget and schedule.
- Project Manager for the bidding, contractor selection, and remedial construction phase at a 40 acre former metals manufacturing facility in Staten Island under the NYSDEC Voluntary Cleanup Program. Responsible for overall construction management for dredging/stabilization and off-site disposal of approximately 7,000 cubic yards of metal-impacted sediments from a tidally influenced embayment area and creek system, off-site disposal of approximately 3,000 cubic yards of sediment, on-site consolidation of approximately 4,000 cubic yards of sediment; capping of fill material/ bank stabilization; in-place abandonment of former water and sanitary sewer system; construction of an 8 acre asphalt cap, installation of new stormwater sewer system and restoration and mitigation of approximately 2 acres of wetland areas disturbed by ongoing remedial activities. Routine activities included coordinating weekly construction meetings; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design; and managing the overall project budget and schedule.
- Project Construction Manager for a NYCDEP storm and sanitary sewer construction project in Brooklyn, New York. Work included design and construction of approximately 690 linear feet of RCP storm sewer, approximately 725 feet of ductile iron sanitary sewer, 6 new house connection spurs, new sewer and sanitary manholes and 12,000 square feet of asphalt removal and replacement. Routine activities included coordinating weekly construction meetings; ensuring

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Contractor compliance with remedial design, CAMP and SWPPP implementation; and managing the overall project budget and schedule.

- Project Manager for the preparation of a Feasibility Study Report and ongoing remediation of a 40-acre former manufacturing facility in Rensselaer, New York as part of the NY State Superfund Program. Responsible for the preparation and implementation of multiple large-scale IRM soil removal remedial actions resulting in approximately 12,000 tons of non-hazardous waste and 10,720 tons of hazardous waste shipped off-site. Also, responsible for the preparation and implementation of the remediation of two 80,000-square foot former wastewater treatment lagoons. Approximately 7,000 cubic yards of hazardous waste sediments shipped off-site. Approximately 4,000 cubic yards of riprap lining the perimeter of both lagoons mechanical screened to remove interstitial sludge within the riprap matrix. NYSDEC approval gained for on-site reuse of 3,200 tons of riprap saving the client approximately $400,000 in disposal costs. Provided ongoing support for various tasks associated with constructing, operating and maintaining the on-site groundwater treatment system.
- Principal Engineer and Project Manager for On-Site Environmental Monitor (OEM) Program implemented at the largest redevelopment project in New York City (over $5 billion). Required to ensure environmental compliance with regards to air, storm-water, noise, traffic and other relevant environmental concerns during the performance of any construction related activity across the 22-acre redevelopment project Site. The Project consists of the construction of 30 buildings (commercial and residential); eight (8) acres of public open space and approximately 1,200 below grade parking spaces and some retail and community facility uses. The Project also includes the development and construction a new storage and maintenance rail yard facility for the Long Island Rail Road (LIRR) below grade across two city blocks over which a platform will be constructed along with six of the Project buildings and some of the open space.

Additional Soil and Groundwater Remediation Experience:

- Principal in Charge and Project Manager for the preparation and implementation of a Remedial Action Work Plan (RAWP) at a former ink ribbon and carbon manufacturer in Glen Cove, New York. Scope of work included the removal of approximately 20,000 tons of listed-hazardous toluene-contaminated soil at various final excavation depths within 1.4-acre area, followed by ISCO injections across the excavated area. All on-site sources of contamination were removed and on-site groundwater was remediated to Site cleanup levels within 18 months from initiation of Site construction activities. Prepared Final Engineering Report (FER) and Site Management Plan (SMP) as required by the NYSDEC.
- Principal in Charge and Project Manager for the source-area excavation and treatment of groundwater and soil grossly impacted by light non-aqueous phase liquid (LNAPL), volatile organic compounds (VOCs), and hazardous materials at a 33,150-square foot lot entered into a NYSDEC Brownfield Cleanup Agreement site in Long Island City, New York. Prepared and certified the NYSDEC-required Remedial Action Work Plan, Site Management Plan and Final Engineering Report. Remediation efforts included removal of approximately 5,000 tons of grossly contaminated material removal using steel sheet piling and disposal/ abandonment eleven (11) underground storage tanks (USTs) ranging in size from 2,000 to 25,000+ gallons that contain diesel fuel/fuel oil, mineral spirits, and linseed oil. In Situ Chemical Oxidation (ISCO) injections completed to address residual VOC contamination in soil and groundwater during the performance of the remedial action.
- Project Manager for the remedial design and remediation of a 23-acre former municipal landfill located in Glen Cove, New York as part of the NY State Superfund Program. The work was performed in accordance with Title 3 of the NYS Environmental Quality Bond Act under contract to the City of Glen Cove. Design elements included excavation of hazardous and radiological waste (8,500 cubic yards in total), 44,000 cubic yards of bulky waste, VOC and radiological waste monitoring, demo debris and waste separation and screening, dewatering, waste disposal, capping and site restoration. Additional work included the de-listing of a six-acre "clean" portion of the site to allow the development of a ferry terminal and esplanade and development of alternative cleanup standards consistent with future site uses.
  Site remediation will accommodate site redevelopment as a commercial waterfront and operating ferry service and seaport area.
- Project Manager for the investigation and remediation of several sites spanning multiple blocks for a major pharmaceutical company in Brooklyn, New York. Environmental investigation is being conducted in preparation of possible property transfer. Responsibilities include development and preparation of investigation and remedial action work plans and coordination and management of resulting field investigation and remediation efforts. Project Engineer for a SVE/AS system to treat groundwater contaminated with VOCs and chlorinated VOCs at one 0.8-acre block. Designed and performed two SVE/AS pilot studies. Designed the full-scale SVE/AS system. Managed bidding, contractor selection, remedial construction, system start-up, operation, maintenance and monitoring phases for the full-scale SVE/AS system.
- Project Manager for the design of a soil and groundwater remediation system for a nationwide overnight delivery distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. A risk-based remedial approach that called for the remediation of "hot spot" source area soils and mass-reduction of VOCs was successfully utilized for the Site. As a result, the focus of remediation was on

reducing the mass of VOCs in on-site groundwater to a level where natural attenuation would be effective in remediation of VOCs. To address the contamination in the source area, a SVE/ AS system consisting of 8 SVE wells and 17 AS wells was designed, constructed, operated, and maintained for a period of approximately 3 years. The SVE/ AS system has been permanently shut down and the Site is currently in the post-remediation monitoring phase.

- Project Manager for the remediation of a former major pharmaceutical plant located in Hicksville, New York as part of the NY State Superfund Program. The project consisted of the excavation of non-hazardous soil from 5 on-site drywells and a former waste disposal area, implementation of a community air monitoring plan, coordination with the Long Island Rail Road (LIRR) for work performed within the LIRR's right of way, steel sheeting installation and removal, backfilling, monitoring well abandonment and replacement, transportation and disposal of 3,300 tons of VOC, SVOC and metal contaminated soil, and restoration of approximately 9,800 square feet of asphalt. A 7-foot diameter steel caisson was used to support the deeper excavation required at the invert of two drywells. This innovative approach saved the client approximately $50,000 in costs that would have been incurred by using a traditional steel sheeting support system to protect the on-site commercial building.
- Project Engineer for the complete design, implementation and startup of five distinct air sparge (AS) and soil vapor extraction (SVE) systems for the remediation of gasoline contaminated groundwater and soils. Pilot studies were performed at several locations at an 850-acre petroleum terminal site in Rhode Island and lead to the design of full-scale AS and SVE remediation systems that are being used in a phased approach, to remediate selected areas of the site. The designs included specialized modeling techniques to determine the optimum system requirements and components.
- Project Engineer for the design and construction management of a soil remediation project at a 28-acre former pesticide warehouse facility in Dayton, New Jersey. The project consisted of the excavation and on-site consolidation and capping of 7,500 cubic yards of pesticide-contaminated soil. The capped areas were designed to be incorporated into a Site re-development plan for use as a storage and trailer parking lot. A Soil Erosion and Sedimentation Control Plan and a NJPDES General Permit were prepared for the project.
- Project Engineer for the design and remediation of a former sanitary wastewater leaching system at a 16.6 acre NYS RCRA site in Bethpage, New York. The project consisted of the excavation, staging, transportation, and disposal of VOC, SVOC, metal and pesticide contaminated soil. Approximately, 5,100 tons of non-hazardous soil, 1,300 tons of hazardous metals contaminated soil and 350 tons of hazardous VOCs contaminated soil. Structures remediated consisted of an imhoff tank, 33 leach pools, 2 distribution boxes, 2 stormwater drains, 2 sludge drying beds, and a blast fence area.
- Staff Engineer for the preparation and implementation of a Soil IRM plan for a major pharmaceutical plant in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. Work elements included contractor plan preparation, steel sheeting and removal, excavation of hazardous and non-hazardous waste, VOC and particulate monitoring, dewatering water management, waste transportation, disposal and tracking, backfill placement and compaction. IRM Soil remediation included excavation of over 1,620 tons of non-hazardous soil and 524 tons of hazardous soil.
- Senior Engineer for design and construction of several elements of a 40-gpm treatment system for a 40-acre former manufacturing facility in Rensselaer, New York. BASF Site. Design support for 4,000 linear feet of collection trenches, 7 extraction well vaults, 2 air release chambers, and 2 groundwater re-injection galleries and a 50 foot by 60-foot treatment system containment pad. Coordination of construction efforts between mechanical and electrical contractors.
- Project Engineer for preparation and certification of Final Engineering Report and Site Management Plans for remediation of a 40-acre former metals manufacturing facility in Staten Island under the NYSDEC Voluntary Cleanup Program. Remediation included dredging/stabilization and off-site disposal of approximately 7,000 cubic yards of metal-impacted sediments from a tidally influenced embayment area and creek system, off-site disposal of approximately 3,000 cubic yards of sediment, on-site consolidation of approximately 4,000 cubic yards of sediment; capping of fill material/ bank stabilization; in-place abandonment of former water and sanitary sewer system; construction of an 8-acre asphalt cap, installation of new stormwater sewer system and restoration and mitigation of approximately 2 acres of wetland areas disturbed by ongoing remedial activities. Routine activities included coordinating weekly construction meetings and preparing associated meeting minutes; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design; and managing the overall project budget and schedule.
- Project Engineer for preparation of Final Engineering Report and Site Management Plan for the remediation of a 40-acre former manufacturing facility in Rensselaer, New York as part of the NY State Superfund Program. Remediation included: multiple large-scale IRM soil removal remedial actions resulting in approximately 12,000 tons of non-hazardous waste and 10,720 tons of hazardous waste shipped off-site; remediation of two 80,000-square foot former wastewater treatment lagoons; groundwater containment and treatment system construction and Site-wide capping.

Additional Feasibility Study Experience:

- Principal Engineer for the preparation of a Feasibility Study Report for a NYS Superfund Site in Glen Cove, New York. The Site is approximately 15 acres in size

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with a 1.4-acre portion of the site impacted by historical disposal of industrial wastes. Approximately 10,000 cubic yards of non-hazardous and hazardous waste has been identified to be potentially shipped off-site.

- Principal Engineer for preparation of a Focused Feasibility Study to optimize ongoing free-product recovery efforts for an 18-million gallon release of petroleum hydrocarbon product from a former refinery and petroleum storage terminal in Brooklyn, New York. The remedial action objectives of the feasibility study were: removal of free product to the extent practicable, prevention and/or elimination of any product seeps from the Site that result in visual petroleum product sheens on surface water and eliminate through removal, treatment, and/or containment the source of surface water contamination to the extent practicable. Technologies evaluated and retained included: Excavation, skimming, dual pump liquid extraction, water flooding, surfactant enhanced subsurface remediation, cosolvent flushing, vapor enhanced fluid recovery, enhanced fluid recovery, and natural source zone depletion.
- Project Manager and Senior Engineer for the preparation of a Remedial Action Selection (RAS) Report for a 9-acre landfill in Rensselaer, New York as part of the NYSDEC Voluntary Cleanup Program. The primary goal of the RASR was to select a remedial alternative that was most protective of human health and the environment under the contemplated future use of the Site as a landfill with an integrated wildlife habitat vegetative cap. The final remedy for the landfill will include 1,000 linear feet of perimeter groundwater collection trenches, a 40-gpm treatment system for metals and VOCs and excavation and *in situ* chemical oxidation of VOC source areas.
- Project Engineer for the preparation of a Focused Feasibility Study (FFS) Report for the remediation of two dry wells at a formerly government owned, contractor operated, 105 acre New York State RCRA site in Bethpage, New York. The soils below and in the vicinity of each drywell were contaminated at various locations from 2 to 55 feet below land surface (bls) with PCBs exceeding NYSDEC standards. The FFS evaluated the following options: no action, *in situ* thermal desorption and excavation and off-site disposal. The no action alternative was recommended because the Site characterization and exposure assessment results indicated that there was no potential risk to persons using the Site for commercial or industrial activities, PCB impacted soils had been previously excavated to a depth of 28 feet bls and because PCBs are generally immobile in the environment, so migration is unlikely.

Additional Miscellaneous Design Experience:

- Project Engineer for the design and construction management of a private vehicle fueling area at a New York City railyard. System components included: UST and process piping, level/monitoring systems, pump dispenser and keycard system, pump island, canopy and fire suppression system. Design met all substantive requirements of the New York City Fire Department (NYCFD) and New York City Department of Buildings (NYCDOB). Tasks included equipment selection, equipment sizing, piping layout, preparation of plans and specifications and shop drawing review and approval.

Additional Stormwater Design Experience:

- Project Engineer for the design and construction management of a stormwater drainage project for a 28-acre former chemical pesticide manufacturing facility located in Dayton, New Jersey. The stormwater drainage system consisted of multiple catch basins, over 2,000 linear feet of reinforced concrete pipe ranging in size from 15 to 30 inches, and a recharge basin. The TR-55 computation method was used to size the drainage system for a 25-year storm event. The drainage system was designed in strict accordance with the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Soil Conservation District (NJSCD) and the local planning departments.

Additional Engineered Natural System Design Experience:

- Senior Engineer for the design of a compost treatment (CT) cell retrofitted into an existing sludge drying bed located at an integrated aluminum smelting and fabricating facility in Massena, New York. The principal objective of the CT will be to remove and sequester low level PCBs in the Site wastewater stream prior to discharge to the Site's permitted outfall. The proposed CT cell will be incorporated into the wastewater treatment process to evaluate PCB treatability in a CT environment as an alternative to other technologies currently being considered for the Site. The CT cell will be designed to accommodate variable hydraulic loading rates (10 to 70 gpm) and retention times in order to evaluate and define optimal system performance.
- Senior Engineer for the design of two pilot-scale compost treatment (CT) systems for stormwater management at an active aluminum manufacturing facility in Lafayette, Indiana. The design included the retrofit of a 1,000 gallon above-grade septic tank (to handle a variable flow of 0.1 to 1 gpm) and a 100,000-gallon above-grade storage tank (to handle a variable flow of 10 to 50 gpm). The remedial goal of the pilot CT systems is for the removal of PCBs and aluminum from stormwater currently collected in the on-Site 100,000-gallon storage tank. The pilot systems were designed for incorporation into the existing stormwater system, thus precluding the need for additional permitting. The systems have been designed for year round operation.
- Senior Engineer for the development of design improvements for a 45-acre former Landfill in Holtsville, New York to minimize the source of contamination to a downgradient pond and its' associated creek. A detailed budget water analysis was performed comparing current and proposed conditions to determine the best methods to minimize infiltration into the landfill and divert the stormwater runoff to the

onsite recharge basin and away from the landfill. The proposed strategy currently entails modifying the existing stormwater conveyance controls (i.e., lining drainage swales), reducing the permeability of the landfill surface through the addition of recreational areas and lined stormwater storage ponds, and planting hybrid poplar trees to increase evapotranspiration at the Landfill. Overall, these modifications would be expected to reduce annual infiltration in the landfill surface from 24 inches to 18 inches, equivalent to approximately 8.2 million gallons of water annually.

- Project Engineer for the design of structural SMPs to manage runoff generated from a LEED certified 70,000 ft2 athletic facility, which is being constructed as part of a redevelopment of a 110-acre park facility in Staten Island, New York. Innovative structural stormwater management practices incorporated into the Site design include the following: micropool extended detention pond and infiltration basin. The pond will be comprised of a sedimentation forebay, shallow marsh, and pond. Suspended solids will drop out as runoff passes through the forebay, thereby enhancing treatment performance, reducing maintenance, and increasing the longevity of the system. The permanent pool provides additional dry storage capacity to mitigate peak flow rates prior to discharge into the overflow meadow. The forebay and pond are designed with shallow ledges along its fringe to support aquatic marsh plants. These wetland plants will aid in the stormwater treatment by impeding flow and trapping contaminants as they enter the forebay and pond. The fringe vegetation will stabilize and protect deposited sediments from resuspension during large storm events. The fringe wetland plants will include species such as rushes, reeds, and sedges, designed to improve water quality through the trapping and filtering of fine particles and soluble pollutants (metals, organics, and nutrients). Effluent from the micropool extended detention pond will then be discharged to an infiltration basin (i.e., Overflow Meadow) planted with a variety of native wildflower and wetland species for groundwater recharge.
- Project Engineer for the design of a pilot constructed treatment wetland system to treat stormwater discharge from an aluminum manufacturing facility located in Massena, New York. The 0.3-acre treatment system uses activated alumina and compost filter cells, and a sub-surface flow wetland to treat 1,400-4,300 gallons of stormwater daily.

Additional Operation and Maintenance (O&M) Experience:

- Senior Engineer responsible for supporting the OM&M of a 40-gpm treatment system for a 40-acre former manufacturing facility in Rensselaer, New York. Processes and system maintained include aeration, bag filtration, air stripping, metals adsorption, liquid and vapor phase carbon adsorption.
- Senior Engineer responsible for the O&M and monitoring of a soil vapor extraction (SVE) and air sparge (AS) system for nationwide distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. O&M activities included system operation and maintenance, performance monitoring, soil gas monitoring, quarterly monitoring, and preparation of quarterly and annual status reports for submission to the NYSDEC. The SVE and AS system consists of 8 SVE wells and 17 AS wells and was designed, constructed, operated and maintained for a period of approximately 3 years. The SVE and AS system has permanently shut down and the Site is currently in the post-remediation monitoring phase.
- Project Engineer responsible for the O&M of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Processes and system maintained include dual-phase groundwater and product recovery, low profile air strippers and a catalytic oxidation unit. The Site encompasses one of the nation's largest petroleum releases (18 million gallons).
- Project Engineer for the metals removal system upgrade of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Upgrades included design, procurement and construction oversight to install a metals removal system, allowing the remedial system to run at full capacity with minimal O&M. The metals removal system included two 10-foot diameter continuously backwashing sand filters, process liquid aeration system and ancillary equipment. The pre-design phase also included the performance of an extensive bench study to optimize the system design.
- Project Engineer for the control system upgrade of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Upgrade included design procurement and construction oversight to install a new control system to eliminate intermittent power surges and sags which, in combination with the communication problems, had caused the previous control system to operate unpredictably. These upgrades included installation of new remote input/output systems, new uninterruptible power supplies and new remote communication cables at all six remote well sites.
- Staff Engineer for the O&M of a product recovery system in Howard Beach, New York. O&M activities include system maintenance and performance monitoring through on-site and off-site monitoring wells.
- Staff Engineer for the O&M of a 40 gpm groundwater remediation system at an industrial facility in Queens, New York as part of the State Superfund Program. O&M activities included system maintenance, effluent sampling, quarterly monitoring, and preparation of quarterly and annual status reports for submission to the NYSDEC.
- Staff Engineer for the design, implementation and O&M for two remedial treatment facilities to remediate groundwater impacted by leaking USTs at two service garages owned by a New York state telecommunications company. System was designed to treat groundwater at a flow-rate between 5 and 10 gpm

using granular activated carbon adsorption treatment units.

Additional Health and Safety Management or Facility Decontamination or Demolition Experience:

- Principal Engineer for the decontamination and decomissioning (D&D) of a 700,000+ square foot facility, in Brooklyn, New York for a major pharmaceutical company. The D&D activities were performed to allow for future use of the former facility for commercial, retail, and/or industrial purposes after renovation and redevelopment by others, by removing, cleaning, encapsulating or otherwise abating: (1) contaminants in indoor concrete identified during previous environmental investigations, (2) pharmaceutical manufacturing residues in ductwork identified during previous environmental investigations, (3) pharmaceutical manufacturing residues in select existing manufacturing infrastructure [including but not limited to relic air handling units (AHUs), dust collection systems, and air exhaust units], and performing partial interior building demolition and cleaning in connection with such infrastructure, (4) the horizontal drain piping associated with the eighth floor laboratories, and (5) paint containing polychlorinated biphenyls (PCBs) at a concentration of 50 milligrams per kilogram (mg/kg) or greater.
- Senior Engineer responsible for providing both worker and community Health and Safety through the monitoring of air particulates and VOCs during the electrical upgrade of pharmaceutical manufacturing facility in Brooklyn, New York. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.
- Senior Engineer responsible for providing both worker and community Health and Safety through the monitoring of air particulates and VOCs during the construction of a parking lot redevelopment project for a pharmaceutical manufacturing facility in Brooklyn, New York. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.
- Staff Engineer and Site Health and Safety Officer for the decommissioning of a pharmaceutical manufacturing facility in Brooklyn, New York. Responsibilities included construction oversight of all contractors for the following: dewatering, removal of 26 USTs ranging in capacity up to 30,000 gallons, excavation and stabilization of soil contaminated with VOCs, lead and mercury, and disposal of all waste generated. Additional responsibilities included providing both worker and community Health and Safety through the monitoring of air particulates, VOCs and mercury vapors. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.
- Staff Engineer and Site Health and Safety Officer providing construction oversight and management for the completion of a building demolition and UST Removal Program at a metals manufacturing facility in Staten Island, New York. The project included asbestos and lead abatement oversight prior to building demolition activities and the removal of six 550-gallon gasoline USTs, one 1,000-gallon No. 2 fuel oil UST and one 600-gallon No 2 fuel oil UST. A total of four buildings, two smelting kettles, a 200-foot emissions stack and a 50-foot water tower were removed as part of the demolition program. Responsibilities included providing both worker and community Health and Safety through the monitoring of air particulates and VOCs, performing all required sampling, waste disposal tracking to document all activities performed, providing construction oversight of all contractors and preparing weekly progress reports.

Additional UST Experience:

- Staff Engineer for the excavation oversight of 11 gasoline USTs, one waste oil UST, three pump islands and all associated underground and aboveground piping at a national railroad company in Queens, New York. Field oversight included post-excavation and waste characterization soil sampling, health and safety monitoring, supervision during the removal of the USTs and preparation of a Closure Report.
- Staff Engineer for the excavation oversight of three 8,000-gallon USTs, two pump islands and all associated piping at a service station in Greenwich, New York. Field oversight included post-excavation and waste characterization soil sampling, health and safety monitoring, supervision during the removal, cleaning, and disposal of the USTs and preparation of a Closure Report.

ROUX

PROFESSIONAL PROFILE

Wai Kwan, Ph.D., P.E.

Principal Engineer

TECHNICAL SPECIALTIES:

Environmental chemistry, engineered natural systems, PCBs, chlorinated solvents, design of remediation systems utilizing traditional and innovative techniques.

EXPERIENCE SUMMARY:

Over 13 years of experience as a Principal, Senior, and Project Engineer with Roux Associates, Inc.

CREDENTIALS:

Ph.D., Environmental Engineering, Massachusetts Institute of Technology, 2003

M.S., Environmental Engineering, Massachusetts Institute of Technology, 1999

B.S., Chemistry, California Institute of Technology, 1997

B.S., Engineering & Applied Science, California Institute of Technology, 1997

Professional Engineer – New York

PUBLICATIONS/PRESENTATIONS/ABSTRACTS:

Proactive Evaluation of PRP Status at Hazardous Waste Disposal Sites. Sullivan, D., Kwan, W. P., Gerbig, C. A., and Moore, C., Environmental Claims Journal, 27(2), 2015.

Extricating Membership as a PRP at Hazardous Waste Disposal Sites. Ram, N. M., Kwan, W. P., Gerbig, C. A., and Moore, C., Remediation Journal. Spring 2014.

Long-Term Performance of a Phytoremediation Cap. Kwan, W. P., USEPA Engineering Forum, August 2012.

Long-Term Performance of an Integrated CTW/Phyto Cap System. Kwan, W. P., and W. Eifert, 8th International Phytotechnology Society Conference, 2011.

Large-Scale Enhanced Reductive Dechlorination for the Remediation of Chlorinated Volatile Organic Compounds. Kwan, W. P., Senh, S., and Netuschil, G., Proceedings of The Seventh International Conference on Remediation of Chlorinated and Recalcitrant Compounds, Paper F-036, 2010.

Predicting Oxidation Rates of Dissolved Contaminants During In Situ Remediation Using Fenton's Reaction. Kwan, W. P., and B. M. Voelker, Abstracts of Papers of the American Chemical Society, 228(352 ENVR), 2004.

Influence of Electrostatics on the Oxidation Rates of Organic Compounds in Heterogeneous Fenton Systems. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 38(12), 2004.

Rates of Hydroxyl Radical Generation and Organic Compound Oxidation in Mineral-Catalyzed Fenton Like Systems. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 37(6), 2003.

Decomposition of Hydrogen Peroxide and Organic Compounds in the Presence of Dissolved Iron and Ferrihydrite. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 36(7), 2002.

Heterogeneous Fenton-Like Chain Reactions Initiated by Iron Oxides. Kwan, W. P. and B. M. Voelker, Abstracts of Papers of the American Chemical Society, 200(283 ENVR), 2000.

PROFESSIONAL AFFILIATIONS:

American Chemical Society

KEY PROJECTS:

Landfills

- Project Manager for the remediation of a former petroleum refinery terminal in Buffalo, New York, under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program. Prepared conceptual and final designs for stabilization of 1,400 linear feet of river embankment using tiered slopes, rip rap, and reinforced bioengineering as part of a landfill closure remedial action. The stabilized shoreline uses a variety of flora and land features to create multiple habitats for aquatic and terrestrial lifeforms, while also serving as a component of the vegetated landfill cover. Prepared Alternatives Analysis Report to document analysis of engineering options and remedy recommendation. Prepared permit application, Remedial Design and Bid Document for implementation of remedy. Reviewed contractor submittals. Provided oversight and engineering support during remedy construction. Prepared Final Engineering Report (FER) and Site Management Plan (SMP).
- Project Manager for the performance of a Corrective Measures Study (CMS) at a 30-acre land parcel undergoing RCRA Corrective Action in Williamsburg, Virginia. The site is a former fibers manufacturing facility, and a RCRA regulated landfill is located within the parcel. The CMS was conducted to identify, evaluate, and recommend a final remedy to address zinc-impacted groundwater discharging to a tributary. Managed multi-person field crew who installed multiple monitoring wells, gauged and sampled groundwater, and conducted slug tests. Analyzed the CMS data to show more than 96 percent of the zinc loading is attributed to groundwater discharge along approximately 20 percent of the shoreline. Proposed a final remedy consisting of a 6.5 acre phytotechnology cover and 960 linear feet of compost reactive barrier, at a significantly lower cost compared to conventional treatment approaches.

Regulated Sites

- Engineer for the remediation of soil and soil vapor impacted by the release of approximately 1,500 gallons of fuel at an operating gas station in San Bernandino County, California. Designed and involved in the operation of a soil vapor extraction (SVE) system consisting of five extraction wells focused on addressing the source area spanning 55 vertical feet.
- Engineer for the remediation of soil and soil vapor impacted by the release of tetrachloroethene (PCE) from a former dry cleaner in Compton, California. Prepared a

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pilot study to evaluate the feasibility of expanding the current SVE system to treat impacted soil and soil vapor at shallow and deep intervals underneath an existing supermarket.

- Operations Deputy for rapid mobilization and coordination of over 75 people to screen and sample for lead and other heavy metals in soil across 500 residences within 1.7 miles of the source in 10 days in the County of Los Angeles, California. Soil screening involved use of handheld x-ray fluorescence analyzer. Provided laboratory coordination, logistics and technical support, and QA/QC check of data.
- Engineer for the conceptual design of a two-acre engineered phyto cap for a site in Los Angeles County, California. The site is approximately seven acres and contains a waste dump and two abandoned oil production wells. The engineered phyto cap is designed to mitigate the potential for exposure of future residents to trash materials and is incorporated into the private, community-use park.
- Project Manager for a SVE and air sparge (AS) system to treat groundwater contaminated with volatile organic compounds (VOCs) and chlorinated VOCs (CVOCs) at a 0.8-acre NYSDEC Voluntary Cleanup Site in Brooklyn, New York. Designed and performed two SVE/AS pilot studies. Designed the full-scale SVE/AS system. Provided oversight during installation of the full-scale SVE/AS system. Prepared the FER and SMP. Managed daily operations of the SVE/AS system and groundwater gauging and sampling personnel. Responsible for communications with the NYSDEC and reviewing progress reports.
- Project Manager for the performance of multiple soil, groundwater, and soil vapor investigations at a NYSDEC Voluntary Cleanup Site in Brooklyn, New York. Prepared reports, work plans and directed field staff in the collection of discrete soil, groundwater, and soil vapor samples to delineate the extent of CVOC contamination in groundwater, soil, and soil vapor. Used membrane interface probe (MIP) technology as a screening tool to focus subsequent sample collection efforts and to reduce overall investigation costs.
- Senior and Project Engineer for the evaluation of methods to treat petroleum impacted soils at a former petroleum refinery terminal in Buffalo, New York. Evaluated bench scale studies using organoclay, nitrate, RegenOx, cement/slag, and lime kiln dust. Designed, supervised, and evaluated the performance of favorable treatment agents based on results generated from pilot scale field tests. Also critiqued scanning electron microscopy photographs and energy dispersive x-ray spectroscopy absorption spectra that were used to identify and support the conclusion that multiple, unrelated lead species are present within one operable unit.
- Project Manager for the remediation and closure of a former dry cleaner site in Brooklyn, New York, under the NYSDEC Brownfield Cleanup Program. Managed field staff and provided engineering support during excavation and removal of 55 cubic yards of soil and concrete impacted by PCE and its breakdown products from a basement. Prepared Remedial Action Work Plan, permit application, daily construction reports, FER and SMP. Interacted with client, contractor, and regulatory agency project manager.
- Project Manager for the remedial investigation of a shopping center in Enfield, Connecticut. Designed a focused investigation using MIP technology to focus subsequent collection of groundwater and soil samples using a standard size and portable Geoprobe for interior locations, and installation of soil vapor pins for the collection of sub-slab samples. Managed field staff during the implementation of the remedial investigation, and interacted with store proprietors to coordinate the work with minimal business interruptions.
- Field Engineer for the remediation of two 6.25-million gallon process lagoons adjacent to the Hudson River at a former dye manufacturing facility in Rensselaer, New York. Supervised the excavation, staging, screening, and transport of riprap and soil contaminated with hazardous concentrations of arsenic. Interacted daily with the client and regulatory agency representatives during implementation of the remedial action.
- Prepared a treatability study work plan to evaluate the feasibility of using surfactant-enhanced subsurface remediation technology to enhance free-product recovery at a former petroleum refinery and distribution terminal in Greenpoint, Brooklyn, New York. Corresponded with surfactant vendors, performing literature review, designed a bench scale treatability study, and assessed the feasibility of implementing enhanced recovery of residual free-product in the regional aquifer that is exhibiting decreases in recovery rates via dual-pump liquid extraction.
- Prepared reports that evaluated bench scale and field scale results of using surfactant-enhanced subsurface remediation technology to enhance free-product recovery at an active railroad yard in Sunnyside, Queens, New York. Coordinated lab and field activities with a surfactant vendor, performed literature review, designed a multi-month field scale treatability study, and evaluated the findings for potential application during full scale remediation.
- Project Engineer for a multi-element remedial design of a USEPA Superfund Site in Nassau, New York. Prepared response letters, technical drawings, and 95 percent and 100 percent remedial design documents in accordance with the Record of Decision and Consent Judgment.
- Field Engineer for the remediation of a NYSDEC Brownfield Site in Staten Island, New York. Supervised

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the removal of soil and groundwater contaminated with hazardous levels of PCE and trichloroethene (TCE) released from a defunct dry cleaner. Evaluated the performance of molasses injections to enhance in situ bioremediation of impacted groundwater. Prepared the Final Engineering Report to document the remedial action.

- Evaluated laboratory data packages of post-excavation soil samples generated during the interim remediation of a former storage and loading area of a pharmaceutical company in Brooklyn, New York. Initial site investigations concluded site contamination was limited to petroleum-related compounds. Supplemental site investigations conducted a few years after the conclusion of the interim remediation showed a dissolved CVOC plume was present site-wide. Reviewed chromatograms and concluded that CVOCs were detected – but not reported since the reporting scope was limited to petroleum-related compounds – in many of the post-excavation soil samples, which would have provided earlier indications of the presence of the CVOC plume.
- Designed and oversaw construction of a full-scale in situ enhanced bioremediation treatment system for groundwater impacted with CVOCs at an 18 acre former electronics manufacturing facility in Taiwan. Evaluated the effectiveness of different substrates for in situ treatment from the results of two concurrent 6 month pilot studies, resulting in selection of enhanced bioremediation. The full-scale treatment system consists of over 9,000 feet of piping and 189 molasses injection wells. The technology decreased PCE concentrations by 99 percent, TCE concentrations by 98 percent, and total CVOC concentrations by 96 percent.

<u>Stormwater Management</u>

- Project Manager and Engineer for the design of a full-scale natural media filtration (NMF) system consisting of two stormwater storage basins (0.4 MM and 1.8 MM gallons) and four NMF cells (two 114,000-gallon aboveground cells and 0.15- and 0.25-acre in-ground cells) at a 172-acre active aluminum manufacturing facility in Lafayette, Indiana. The NMF cells treat up to 1,500 GPM of stormwater runoff and process water impacted by polychlorinated biphenyls (PCBs), dissolved and particulate aluminum, and suspended solids. Researched the fate and transport of PCBs, and assessed the treatability of PCBs in wetlands. Evaluated a compost treatability bench-scale experiment. Designed and coordinated groundwater percolation tests. Used HydroCAD to model treatment capacity for multiple storm events.
- Project Engineer for the design of a passive stormwater management system for a 3,500-acre aluminum manufacturing facility in Point Comfort, Texas. The passive stormwater management system uses sedimentation trenches and swales to manage and convey bauxite-laden runoff. Stormwater runoff is managed by a constructed treatment wetland (CTW) and is consumptively used by a phytotechnology tree plot. Completed a hydrologic analysis using USACE HEC-HMS modeling software. Prepared bid specifications and provided bid support.
- Project Manager for the design of a NMF system to reduce PCBs to non-detect levels in stormwater at an aluminum extrusion facility in Cressona, Pennsylvania. The NMF system treats the first flush volume of 240,000 gallons containing residual PCBs. Conducted a detailed analysis of the site's constituents and runoff volumes during dry weather and wet weather to properly size the pump station and the NMF cell. Prepared bid document and provided bid support.
- Project Engineer for the design of a CTW to manage stormwater runoff generated from a scrap metal recycling facility in Sayreville, New Jersey. The CTW was designed to handle and treat runoff with elevated levels of suspended solids prior to discharge to adjacent coastal and freshwater jurisdictional wetlands.
- Evaluated the feasibility of using CTW to treat 110 GPM of groundwater containing elevated levels of cyanide at an aluminum manufacturing facility in Hannibal, Ohio. The CTW was designed to address the site's constituents and winter environment, and was modularized to facilitate the expansion and incorporation of the pilot-scale CTW into the full-scale CTW.
- Project Manager for a feasibility study to mitigate land subsidence at a golf course adjacent to Long Island Sound in Northport, New York. Completed a data review of existing reports from USGS and local municipality, previous soil investigation, and current stormwater drainage design. Directed a field investigation to obtain data in support of the conceptual model for land movement. Concluded that existing stormwater management measures accelerated the rate of land movement. Evaluated potential engineering remedies.

<u>Litigation Support</u>

- Senior Engineer for the analysis of expert reports and preparation of rebuttal for three superfund sites in New York and Massachusetts. The case involved assigning the percentage of PCBs released over time during the operation of the facilities at the three sites for the purpose of remedial costs allocation to various insurance carriers. Reviewed information submitted by opposing experts, conducted independent research to verify methodologies, and provided technical calculations indicating flaws in positions advocated by the opposing experts.
- Senior Engineer and Project Manager for the analysis of the sources and fate and transport of dioxins and PCBs into Newark Bay in New Jersey. Reviewed sediment and water column data from existing investigations, performed independent review of third party publications, and

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worked with geochemical expert on principal component analysis to identify dioxin contributions from several nearby sources.

- Senior Engineer for the preparation of an expert report for a fuel oil release in Rochelle Park, New Jersey. The release was from a residential underground storage tank (UST). The expert report opined on the age of the release, the reliability of the estimation method used by the opposing expert, and the accuracy of the age dating of the perforations in the UST.
- Project Engineer for the preparation of an affidavit regarding a cesspool explosion on Long Island, New York. The affidavit was prepared for the defendant's counsel providing technical calculations and opining on the improbability that the defendant's use of a drain cleaner contributed to a flash fire that injured the plaintiff. Also prepared an expert rebuttal affidavit to demonstrate the fallacies in the plaintiff's expert's arguments. The judge dismissed the case after reviewing all admitted information.
- Senior Engineer for the evaluation of expected remedial costs for waste disposal sites as part of a large bankruptcy litigation. Reviewed over 70 site records to identify potential liabilities and appropriate statute of limitations. Developed present value of remedial investigation and action costs and apportionment ranging from $160,000 to $1,200,000.
- Senior Engineer for the evaluation of gas chromatograms from multiple retail gasoline stations in Puerto Rico as part of a class action lawsuit. Responsibilities included reviewing for indicators of methyl tert-butyl ether (MTBE) and determining MTBE concentrations from historic laboratory data packages.

<u>Compliance</u>

- Project Engineer for the evaluation of air emissions data from a steel mill melt shop in Sayreville, New Jersey. Prepared annual emissions statement in accordance with permit requirements using RADIUS software and emissions factors from AP-42 and CEMS data. Evaluated and summarized trends and anomalies observed in over one year's worth of air monitoring data on particulates and metals from monitors set up in the surrounding community.
- Project Engineer for the preparation of Title V emissions statement for two major hospitals in Nassau County, New York. Responsibilities included reviewing annual fuel usage data, calculating air emissions using emissions factors from AP-42, and preparing the emissions statement.
- Project Manager for the coordination, preparation, and submission of PCB TMDL reporting requirements for multiple sites in Virginia. Responsibilities included managing subcontractors, preparing submission forms in accordance with state guidelines, and preparing the first Pollutant Minimization Plan (PMP) in the state for PCBs.

Christian Hoelzli, E.I.T.
Project Engineer

TECHNICAL SPECIALTIES
Environmental engineering services associated with LNAPL recovery, groundwater treatment, and air sparging with soil vapor extraction systems. Led multiple sampling events for groundwater, soil, indoor air, and soil vapor investigations.

EXPERIENCE SUMMARY
Three years of experience: Staff and Staff Assistant Engineer with Roux Environmental Engineering and Geology, D.P.C., Islandia, New York.

CREDENTIALS
Engineer in Training (EIT), 2015

B.S. Civil and Environmental Engineering, Villanova University, 2015

OSHA 40-Hour HAZWOPER Training, 2015

OSHA 8-Hour Annual Refresher Training, Certificate Current

OSHA 10-Hour Construction Safety and Health Training, 2018

Amtrak Railroad Safety Trained

LPS Awareness 8-Hour Certified

First Aid and CPR Certified

Transportation Worker Identification Credential (TWIC)

KEY PROJECTS
- Project Manager at an active petroleum storage and distribution terminal in Inwood, New York with petroleum-related volatile organic compound impacted soil and groundwater. This site required system optimizations to improve protection of public health and the environment and consistently maintain peak performance of two soil vapor extraction/air sparging systems and a groundwater remediation system, while concurrently fulfilling NYSDEC regulatory reporting requirements per New York Code of Rules and Regulations (6 NYCRR) Part 750. Each soil vapor extraction system contains multiple vapor extraction wells, a moisture separator, air dilution valve, in line filter screen, regenerative blower, and emissions stack. The groundwater remediation systems contain air stripping units (packed tower), recovery and transfer pumps, associated piping, and multiple safety, control, and isolation valves. Associated tasks include coordinating with the client and regulators; scheduling and management of staff and technical personnel; preparation of NYSDEC quarterly monitoring reports, discharge monitoring reports, and other regulatory deliverables; coordinating facility upgrades and routine equipment maintenance; collecting performance monitoring samples and data to track the efficiency of the treatment systems; and collecting compliance monitoring data.
- Project Manager for a site in the New York State Brownfields Cleanup Program (BCP) that also required a RCRA compliant facility closure. The site is a former paint factory located in Long Island City, New York. Due diligence environmental investigations determined historical site operations adversely impacted the subsurface including a LNAPL plume in addition to petroleum hydrocarbon impacts to the soil and groundwater. Responsibilities include: management of implementation of the SMP which includes coordinating quarterly groundwater sampling events, operation and maintenance of LNAPL recovery system, inspection of RCA cap, and coordination of an ISCO injection program.
- Site Safety Officer for various remedial investigation sites. Responsibilities include preparation of health and safety plans (HASPs), job safety analysis (JSA) documents development and review, onsite safety meeting management, safety document preparation (Lessons Learned, Near Loss, Field Audits, etc.), and planning/execution of corrective actions.
- Staff Engineer for the operation and maintenance of a Dual Phase Vapor Extraction System (DPVE) consisting of 20 vapor recovery wells. The vacuum enhanced recovery system consisted of liquid ring pumps, pneumatic submersible pumps, low profile air stripper, bag filters, granular activated carbon units, and oil/water separator. Operated system in conjunction with a Surfactant injection program to treat groundwater for residual separate-phase petroleum hydrocarbons.
- Field manager for bentonite-cement grout injections at a former petroleum refinery and terminal. Responsibilities included oversight of injection crew, selection of injection points, performance monitoring, vibration monitoring, result evaluation and reporting.
- Field manager responsible for construction and excavation oversight of an active railyard in Queens, New York. Responsibilities included coordination with the general contractor on site, excavation support and soil inspection, organization and proper handling of waste manifests and submittal of daily reports on site activity.
- Field manager for environmental subsurface investigation for a former petroleum refinery and terminal. Responsibilities include oversight of test pits, soil classification, implementing a Community Air Monitoring Program, managing subcontractors and providing health and safety oversight.
- Field manager for multiple quarterly groundwater monitoring rounds at a former petroleum refinery and terminal. Activities included gauging of water levels and the collection of groundwater samples from on-site monitoring wells.
- Third party inspector for lead abatement of a technology manufacturer.
- Field manager for excavation and site restoration of a former drainage pond and subsequent renovation into a public park in Glen Cove, NY. Responsibilities included managing the subcontractors, tracking the progress of the excavation, installation of a floatables collection system, preparing daily reports, and interactions with local townspeople.

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JUDY V. HARRY
P. O. Box 208
120 Cobble Creek Rd.
North Creek, NY 12853

Occupation:	Data Validator/Environmental Technical Consultant
Years Experience:	41
Education:	B.S., Chemistry, Magna cum laude, 1976, Phi Beta Kappa
Certifications:	New York State Woman-Owned Business Enterprise (WBE)

Relevant Work History:

Data Validation Services: September 1989 - present

Sole proprietor of Data Validation Services, a woman-owned small business registered with SAM, providing consultation/validation services to regulatory and commercial clients.

These services include the review of analytical laboratory data for compliance with respect to specific protocols, accuracy and defensibility of data, verification of reported values, and evaluation of quality parameters for analytical usability of results. Approved by USEPA, NYSDEC, NJDEP, NYSERDA, and NYCDEP as a data validator for projects, including USEPA Superfund, Brownfield, and lead sites, and those contracted through the NYSDEC Division of Hazardous Waste Remediation, Division of Solid Waste, and Division of Water Quality.

Performed validation for compliance with laboratory analytical protocols including USEPA OLM, USEPA OLC, USEPA ILM, USEPA DFLM, USEPA SOW3/90, USEPA SOW 7/87 CLP, USEPA SOW 2/88 CLP, USEPA SW846, RCRA, AFCEE, NYS 6 NYCRR Part 360, 40 CFR, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, including TO-15, 1989/1991/1995/2000/2005 NYSDEC ASPs, and 1987 NYSDEC CLP.

Performed validation according to the USEPA National and Regional SOPs and Functional Guidelines, AFCEE requirements, NYSDEC Validation Scope of Work, NYS DUSR, and NJDEP Division of Hazardous Site Mitigation/Publicly Funded Site Remediation SOPs.

Performed validation for USEPA Superfund Sites including Salem Acres, York Oil, Port Washington L-4 Landfill, Bridgeport Rental and Oil Services, GE-MRFA, MMR/ OTIS AFB, LCP, and Peter Cooper site; and for USEPA lead sites including SJ&J Piconne, Maska, Bowe System, Jones Sanitation, and Syossett Landfill, involving CLP, RAS, and SAS protocols.

Contracted for NYSDEC Superfund Standby Contracts with LMS Engineers, HDR, CDM Smith, Malcolm-Pirnie/ARCADIS, Ecology & Environment, Shaw Environmental, CG&I, O’Brien & Gere Engineers, and EC Jordan, involving samples collected at NYS Superfund Sites and analyzed under the NYSDEC ASP.

Performed validation services for NYSDEC Phase II remedial investigations, RI/FS projects, Brownfield sites, and PRP over-site projects for hazardous waste sites.

Performed validation services for clients conducting RI/FS activities involving samples of many matrices, including waste, air, sludges, leachates, solids/sediments, aqueous, and biota.

Clients have included AECOM, ARCADIS, Barton & Loguidice, Benchmark Engineering, Bergmann Associates, Blasland, Bouck & Lee, Brown and Caldwell, CDM Smith, CB&I Shaw Environmental, C&S Consulting Engineers, Chazen Companies, Clough Harbour & Associates, Columbia Analytical Services, C.T. Male, Dames & Moore, Day Engineering, EA Engineering, EcolSciences, Ecology & Environment, Ecosystems, EC Jordan, Environmental Chemical Corporation, EHRT, ENSR Consulting, ELM, ERM-Northeast, Fagan Engineers, Fanning Phillips & Molnar, FluorDaniel GTI, Frontier, Foster Wheeler Environmental Corp, Frontier Technical, Galson Consultants, GE&R, Geomatrix Consultants, GZA Environmental, Handex of N, H2M Group, HDR, HRP, IT Corp, Jacques Whitford, JTM Associates, Labella Associates, Langan Engineers, Leader Environmental, Lockwood, Kessler & Bartlett, LMS Engineers, Malcolm-Pirnie, Metcalf & Eddy, NWEC&C, O'Brien & Gere Engineers, Pace, Parsons Engineering-Science, Plumley Engineering, Prescott Environmental, P. W. Grosser, Rizzo Associates, Roux Associates, Sear Brown Group, SECOR, Shaw Environmental, Stantec, ThermoRemediation Inc., TRC Environmental, Turnkey Environmental Restoration, TVGA Engineering, URS Consultants, Wehran Emcon, Weston, YEC, and private firms.

Provided consultation services to laboratories regarding analytical procedures and protocol interpretation, and to law firms for litigation support.

Provided services to firms involving audits of environmental analytical laboratories to determine analytical capability, particularly for compliance with NYSDEC ASP and AFCEE requirements.

Guest speaker on a panel discussing Data Review/Compliance and Usability, for an analysis workshop for the New York Association of Approved Environmental Laboratories, 1993.

Adirondack Environmental Services: June 1987 - August 1989

Senior mass spectroscopist for AES. Responsible for GC/MS analyses of environmental samples by USEPA and NYSDEC protocols, development of the GC/MS laboratory, initiating the instrumental and computer operations from the point of installation, and for implementing the procedures and methodologies for Contract Laboratory Protocol.

CompuChem Laboratories: May 1982 - January 1987

Managed a GC/MS production laboratory; developed, implemented, and supervised QA/QC criteria at three different levels of review; and was responsible for the development and production of the analysis of environmental and clinical samples. Directed a staff of 23 technical and clerical personnel, and managed the extraction and GC/MS labs and data review operations.

Research Triangle Institute: December 1979 - May 1982

Worked as an analytical research chemist responsible for development of analytical methods for the EPA Federal Register at RTI. This involved analysis of biological and environmental samples for priority pollutants, primarily relating to wastewaters and to human sampling studies. Method development included modification and interfacing of the initially developed Tekmar volatile purge apparatus to GC/MS, development and refinement of methods for entrapment and concentration of the air medium for subsequent volatile analysis, and the analysis and resolution/ identification of individual PCB congeners within Aroclor mixtures by capillary column and mass spectra.

Guardsman Chemical Company: February 1977 - November 1979

Performed all quality control functions for the manufacturing plant. Performed research and development on coatings and dyes.

Almay Cosmetics: May 1976 - December 1976

Product evaluation chemist. Responsible for analytical QC of manufactured products.

Publication

Pellizzzari, E.D., Moseley, M.A., Cooper, S.D., Harry, J.V., Demian, B., & Mullin, M. D. (1985). Recent Advances in the Analysis of Polychlorinated Biphenyls in Environmental and Biological Media. *Journal of Chromatography,* 334(3) 277-314.

APPENDIX B

Laboratory Certifications

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Lead on Air Filter	EPA 40 CFR Part 50 App. G	AE	x	Y	
NY	PCBs and Aroclors	EPA TO-10A	AE	x	Y	
NY	Acenaphthene	EPA TO-13A Full Scan	AE	x	Y	
NY	Acenaphthylene	EPA TO-13A Full Scan	AE	x	Y	
NY	Anthracene	EPA TO-13A Full Scan	AE	x	Y	
NY	Benzo(a)anthracene	EPA TO-13A Full Scan	AE	x	Y	
NY	Benzo(a)pyrene	EPA TO-13A Full Scan	AE	x	Y	
NY	Benzo(b)fluoranthene	EPA TO-13A Full Scan	AE	x	Y	
NY	Benzo(ghi)perylene	EPA TO-13A Full Scan	AE	x	Y	
NY	Benzo(k)fluoranthene	EPA TO-13A Full Scan	AE	x	Y	
NY	Chrysene	EPA TO-13A Full Scan	AE	x	Y	
NY	Dibenzo(a,h)anthracene	EPA TO-13A Full Scan	AE	x	Y	
NY	Fluoranthene	EPA TO-13A Full Scan	AE	x	Y	
NY	Fluorene	EPA TO-13A Full Scan	AE	x	Y	
NY	Indeno(1,2,3-cd)pyrene	EPA TO-13A Full Scan	AE	x	Y	
NY	Naphthalene	EPA TO-13A Full Scan	AE	x	Y	
NY	Phenanthrene	EPA TO-13A Full Scan	AE	x	Y	
NY	Pyrene	EPA TO-13A Full Scan	AE	x	Y	
NY	1,1,1-Trichloroethane	EPA TO-15	AE	x	Y	
NY	1,1,2,2-Tetrachloroethane	EPA TO-15	AE	x	Y	
NY	1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA TO-15	AE	x	Y	
NY	1,1,2-Trichloroethane	EPA TO-15	AE	x	Y	
NY	1,1-Dichloroethane	EPA TO-15	AE	x	Y	
NY	1,1-Dichloroethene	EPA TO-15	AE	x	Y	
NY	1,2,4-Trichlorobenzene	EPA TO-15	AE	x	Y	
NY	1,2,4-Trimethylbenzene	EPA TO-15	AE	x	Y	
NY	1,2-Dibromo-3-Chloropropane (DBCP)	EPA TO-15	AE	x	Y	
NY	1,2-Dibromoethane (EDB)	EPA TO-15	AE	x	Y	
NY	1,2-Dichlorobenzene	EPA TO-15	AE	x	Y	
NY	1,2-Dichloroethane	EPA TO-15	AE	x	Y	
NY	1,2-Dichloropropane	EPA TO-15	AE	x	Y	
NY	1,2-Dichlorotetrafluoroethane	EPA TO-15	AE	x	Y	
NY	1,3,5-Trimethylbenzene	EPA TO-15	AE	x	Y	
NY	1,3-Butadiene	EPA TO-15	AE	x	Y	
NY	1,3-Dichlorobenzene	EPA TO-15	AE	x	Y	
NY	1,4-Dichlorobenzene	EPA TO-15	AE	x	Y	
NY	1,4-Dioxane	EPA TO-15	AE	x	Y	
NY	2,2,4-Trimethylpentane	EPA TO-15	AE	x	Y	
NY	2-Butanone	EPA TO-15	AE	x	Y	
NY	2-Chlorotoluene	EPA TO-15	AE	x	Y	
NY	3-Chloropropene	EPA TO-15	AE	x	Y	
NY	4-Methyl-2-Pentanone	EPA TO-15	AE	x	Y	
NY	Acetaldehyde	EPA TO-15	AE	x	Y	
NY	Acetone	EPA TO-15	AE	x	Y	
NY	Acetonitrile	EPA TO-15	AE	x	Y	
NY	Acrolein	EPA TO-15	AE	x	Y	
NY	Acrylonitrile	EPA TO-15	AE	x	Y	
NY	Benzene	EPA TO-15	AE	x	Y	
NY	Benzyl Chloride	EPA TO-15	AE	x	Y	

Alpha Analytical

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Bromodichloromethane	EPA TO-15	AE	x	Y	
NY	Bromoform	EPA TO-15	AE	x	Y	
NY	Bromomethane	EPA TO-15	AE	x	Y	
NY	Carbon Disulfide	EPA TO-15	AE	x	Y	
NY	Carbon Tetrachloride	EPA TO-15	AE	x	Y	
NY	Chlorobenzene	EPA TO-15	AE	x	Y	
NY	Chloroethane	EPA TO-15	AE	x	Y	
NY	Chloroform	EPA TO-15	AE	x	Y	
NY	Chloromethane	EPA TO-15	AE	x	Y	
NY	cis-1,2-Dichloroethene	EPA TO-15	AE	x	Y	
NY	cis-1,3-Dichloropropene	EPA TO-15	AE	x	Y	
NY	Cyclohexane	EPA TO-15	AE	x	Y	
NY	Dibromochloromethane	EPA TO-15	AE	x	Y	
NY	Dichlorodifluoromethane	EPA TO-15	AE	x	Y	
NY	Ethylbenzene	EPA TO-15	AE	x	Y	
NY	Hexachlorobutadiene	EPA TO-15	AE	x	Y	
NY	Isopropyl Alcohol	EPA TO-15	AE	x	Y	
NY	Isopropylbenzene	EPA TO-15	AE	x	Y	
NY	m+p-Xylene	EPA TO-15	AE	x	Y	
NY	Methyl Alcohol (methanol)	EPA TO-15	AE	x	Y	
NY	Methyl Methacrylate	EPA TO-15	AE	x	Y	
NY	Methyl tert-butyl ether	EPA TO-15	AE	x	Y	
NY	Methylene Chloride	EPA TO-15	AE	x	Y	
NY	Naphthalene	EPA TO-15	AE	x	Y	
NY	n-Heptane	EPA TO-15	AE	x	Y	
NY	n-Hexane	EPA TO-15	AE	x	Y	
NY	o-Xylene	EPA TO-15	AE	x	Y	
NY	Styrene	EPA TO-15	AE	x	Y	
NY	Tert-Butyl Alcohol	EPA TO-15	AE	x	Y	
NY	Tetrachloroethene	EPA TO-15	AE	x	Y	
NY	Toluene	EPA TO-15	AE	x	Y	
NY	Total Xylenes	EPA TO-15	AE	x	Y	
NY	Trans-1,2-Dichloroethene	EPA TO-15	AE	x	Y	
NY	Trans-1,3-Dichloropropene	EPA TO-15	AE	x	Y	
NY	Trichloroethene	EPA TO-15	AE	x	Y	
NY	Trichlorofluoromethane	EPA TO-15	AE	x	Y	
NY	Vinyl acetate	EPA TO-15	AE	x	Y	
NY	Vinyl Bromide	EPA TO-15	AE	x	Y	
NY	Vinyl Chloride	EPA TO-15	AE	x	Y	
NY	Turbidity	EPA 180.1	DW	Y	x	
NY	Aluminum	EPA 200.7	DW	x	Y	
NY	Barium	EPA 200.7	DW	x	Y	
NY	Beryllium	EPA 200.7	DW	x	Y	
Ny	Boron	EPA 200.7	DW	x	Y	
NY	Cadmium	EPA 200.7	DW	x	Y	
NY	Calcium	EPA 200.7	DW	x	Y	
NY	Calcium Hardness	EPA 200.7	DW	x	Y	
NY	Chromium	EPA 200.7	DW	x	Y	
NY	Copper	EPA 200.7	DW	x	Y	

Alpha Analytical

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Iron	EPA 200.7	DW	x	Y	
NY	Magnesium	EPA 200.7	DW	x	Y	
NY	Manganese	EPA 200.7	DW	x	Y	
NY	Nickel	EPA 200.7	DW	x	Y	
NY	Potassium	EPA 200.7	DW	x	Y	
NY	Silver	EPA 200.7	DW	x	Y	
NY	Sodium	EPA 200.7	DW	x	Y	
Ny	Vanadium	EPA 200.7	DW	x	Y	
NY	Zinc	EPA 200.7	DW	x	Y	
NY	Aluminum	EPA 200.8	DW	x	Y	
NY	Antimony	EPA 200.8	DW	x	Y	
NY	Arsenic	EPA 200.8	DW	x	Y	
NY	Barium	EPA 200.8	DW	x	Y	
NY	Beryllium	EPA 200.8	DW	x	Y	
NY	Cadmium	EPA 200.8	DW	x	Y	
NY	Copper	EPA 200.8	DW	x	Y	
NY	Lead	EPA 200.8	DW	x	Y	
Ny	Manganese	EPA 200.8	DW	x	Y	
NY	Nickel	EPA 200.8	DW	x	Y	
NY	Selenium	EPA 200.8	DW	x	Y	
NY	Silver	EPA 200.8	DW	x	Y	
NY	Thallium	EPA 200.8	DW	x	Y	
NY	Vanadium	EPA 200.8	DW	x	Y	
NY	Zinc	EPA 200.8	DW	x	Y	
NY	Mercury	EPA 245.1	DW	x	Y	
NY	Chloride	EPA 300.0	DW	Y	x	
NY	Fluoride	EPA 300.0	DW	Y	x	
NY	Sulfate	EPA 300.0	DW	Y	x	
NY	Perchlorate	EPA 332.0	DW	Y	x	
NY	1,2-Dibromo-3-Chloropropane (DBCP)	EPA 504.1	DW	Y	x	
NY	1,2-Dibromoethane (EDB)	EPA 504.1	DW	Y	x	
NY	1,1,1,2-Tetrachloroethane	EPA 524.2	DW	Y	x	
NY	1,1,1-Trichloroethane	EPA 524.2	DW	Y	x	
NY	1,1,2,2-Tetrachloroethane	EPA 524.2	DW	Y	x	
NY	1,1,2-Trichloroethane	EPA 524.2	DW	Y	x	
NY	1,1-Dichloroethane	EPA 524.2	DW	Y	x	
NY	1,1-Dichloroethene	EPA 524.2	DW	Y	x	
NY	1,1-Dichloropropene	EPA 524.2	DW	Y	x	
NY	1,2,3-Trichlorobenzene	EPA 524.2	DW	Y	x	
NY	1,2,3-Trichloropropane	EPA 524.2	DW	Y	x	
NY	1,2,4-Trichlorobenzene	EPA 524.2	DW	Y	x	
NY	1,2,4-Trimethylbenzene	EPA 524.2	DW	Y	x	
NY	1,2-Dichlorobenzene	EPA 524.2	DW	Y	x	
NY	1,2-Dichloroethane	EPA 524.2	DW	Y	x	
NY	1,2-Dichloropropane	EPA 524.2	DW	Y	x	
NY	1,3,5-Trimethylbenzene	EPA 524.2	DW	Y	x	
NY	1,3-Dichlorobenzene	EPA 524.2	DW	Y	x	
NY	1,3-Dichloropropane	EPA 524.2	DW	Y	x	
NY	1,4-Dichlorobenzene	EPA 524.2	DW	Y	x	

Alpha Analytical

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	2,2-Dichloropropane	EPA 524.2	DW	Y	x	
NY	2-Chlorotoluene	EPA 524.2	DW	Y	x	
NY	4-Chlorotoluene	EPA 524.2	DW	Y	x	
NY	Benzene	EPA 524.2	DW	Y	x	
NY	Bromobenzene	EPA 524.2	DW	Y	x	
NY	Bromochloromethane	EPA 524.2	DW	Y	x	
NY	Bromodichloromethane	EPA 524.2	DW	Y	x	
NY	Bromoform	EPA 524.2	DW	Y	x	
NY	Bromomethane	EPA 524.2	DW	Y	x	
NY	Carbon Tetrachloride	EPA 524.2	DW	Y	x	
NY	Chlorobenzene	EPA 524.2	DW	Y	x	
NY	Chloroethane	EPA 524.2	DW	Y	x	
NY	Chloroform	EPA 524.2	DW	Y	x	
NY	Chloromethane	EPA 524.2	DW	Y	x	
NY	cis-1,2-Dichloroethene	EPA 524.2	DW	Y	x	
NY	cis-1,3-Dichloropropene	EPA 524.2	DW	Y	x	
NY	Dibromochloromethane	EPA 524.2	DW	Y	x	
NY	Dibromomethane	EPA 524.2	DW	Y	x	
NY	Dichlorodifluoromethane	EPA 524.2	DW	Y	x	
NY	Ethylbenzene	EPA 524.2	DW	Y	x	
NY	Hexachlorobutadiene	EPA 524.2	DW	Y	x	
NY	Isopropylbenzene	EPA 524.2	DW	Y	x	
NY	Methyl tert-butyl ether	EPA 524.2	DW	Y	x	
NY	Methylene chloride	EPA 524.2	DW	Y	x	
NY	Naphthalene	EPA 524.2	DW	Y	x	
NY	n-Butylbenzene	EPA 524.2	DW	Y	x	
NY	n-Propylbenzene	EPA 524.2	DW	Y	x	
NY	p-Isopropyltoluene	EPA 524.2	DW	Y	x	
NY	sec-Butylbenzene	EPA 524.2	DW	Y	x	
NY	Styrene	EPA 524.2	DW	Y	x	
NY	Tert-Butylbenzene	EPA 524.2	DW	Y	x	
NY	Tetrachloroethene	EPA 524.2	DW	Y	x	
NY	Toluene	EPA 524.2	DW	Y	x	
NY	Total Trihalomethanes	EPA 524.2	DW	Y	x	
NY	Total Xylenes	EPA 524.2	DW	Y	x	
NY	Trans-1,2-Dichloroethene	EPA 524.2	DW	Y	x	
NY	Trans-1,3-Dichloropropene	EPA 524.2	DW	Y	x	
NY	Trichloroethene	EPA 524.2	DW	Y	x	
NY	Trichlorofluoromethane	EPA 524.2	DW	Y	x	
NY	Vinyl chloride	EPA 524.2	DW	Y	x	
NY	Perfluoro-n-octanoic acid (PFOA)	EPA 537	DW	x	Y	
NY	Perfluorooctanesulfonic acid (PFOS)	EPA 537	DW	x	Y	
NY	Color	SM 2120B	DW	Y	x	
NY	Turbidity	SM 2130B	DW	Y	x	
NY	Odor	SM 2150B	DW	Y	x	
NY	Alkalinity	SM 2320B	DW	Y	x	
NY	Specific Conductance	SM 2510B	DW	Y	x	
NY	Total Dissolved Solids	SM 2540C	DW	Y	x	
NY	Cyanide, Distillation	SM 4500 CN C	DW	Y	x	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Cyanide, Total	SM 4500 CN E	DW	Y	x	
NY	Fluoride	SM 4500 F-C	DW	Y	x	
NY	Nitrate-N	SM 4500 NO3-F	DW	Y	x	
NY	Nitrite-N	SM 4500 NO3-F	DW	Y	x	
NY	Total Organic Carbon	SM 5310C	DW	Y	x	
NY	Heterotrophic Plate Count	SM 9215B	DW	Y	x	
NY	Coliform, Total	SM 9223B	DW	Y	x	
NY	E. Coli	SM 9223B	DW	Y	x	P/A
NY	E. Coli	SM 9223B	DW	Y	x	Enumeration
NY	Specific Conductance	EPA 120.1	NPW	Y	x	
NY	Mercury	EPA 1631E	NPW	x	Y	
NY	Oil & Grease	EPA 1664A	NPW	Y	x	
NY	Oil & Grease (TPH)	EPA 1664A	NPW	Y	x	
NY	Turbidity	EPA 180.1	NPW	Y	x	
NY	Aluminum	EPA 200.7	NPW	x	Y	
NY	Antimony	EPA 200.7	NPW	x	Y	
NY	Arsenic	EPA 200.7	NPW	x	Y	
NY	Barium	EPA 200.7	NPW	x	Y	
NY	Beryllium	EPA 200.7	NPW	x	Y	
NY	Boron	EPA 200.7	NPW	x	Y	
NY	Cadmium	EPA 200.7	NPW	x	Y	
NY	Calcium	EPA 200.7	NPW	x	Y	
NY	Chromium	EPA 200.7	NPW	x	Y	
NY	Cobalt	EPA 200.7	NPW	x	Y	
NY	Copper	EPA 200.7	NPW	x	Y	
NY	Iron	EPA 200.7	NPW	x	Y	
NY	Lead	EPA 200.7	NPW	x	Y	
NY	Magnesium	EPA 200.7	NPW	x	Y	
NY	Manganese	EPA 200.7	NPW	x	Y	
NY	Molybdenum	EPA 200.7	NPW	x	Y	
NY	Nickel	EPA 200.7	NPW	x	Y	
NY	Potassium	EPA 200.7	NPW	x	Y	
NY	Selenium	EPA 200.7	NPW	x	Y	
NY	Silica, Dissolved	EPA 200.7	NPW	x	Y	
NY	Silver	EPA 200.7	NPW	x	Y	
NY	Sodium	EPA 200.7	NPW	x	Y	
NY	Strontium	EPA 200.7	NPW	x	Y	
NY	Thallium	EPA 200.7	NPW	x	Y	
NY	Tin	EPA 200.7	NPW	x	Y	
NY	Titanium	EPA 200.7	NPW	x	Y	
NY	Total Hardness (CaCO3)	EPA 200.7	NPW	x	Y	
NY	Vanadium	EPA 200.7	NPW	x	Y	
NY	Zinc	EPA 200.7	NPW	x	Y	
NY	Aluminum	EPA 200.8	NPW	x	Y	
NY	Antimony	EPA 200.8	NPW	x	Y	
NY	Arsenic	EPA 200.8	NPW	x	Y	
NY	Barium	EPA 200.8	NPW	x	Y	
NY	Beryllium	EPA 200.8	NPW	x	Y	
NY	Cadmium	EPA 200.8	NPW	x	Y	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Chromium	EPA 200.8	NPW	x	Y	
NY	Cobalt	EPA 200.8	NPW	x	Y	
NY	Copper	EPA 200.8	NPW	x	Y	
NY	Lead	EPA 200.8	NPW	x	Y	
NY	Manganese	EPA 200.8	NPW	x	Y	
NY	Molybdenum	EPA 200.8	NPW	x	Y	
NY	Nickel	EPA 200.8	NPW	x	Y	
NY	Selenium	EPA 200.8	NPW	x	Y	
NY	Silver	EPA 200.8	NPW	x	Y	
NY	Thallium	EPA 200.8	NPW	x	Y	
NY	Vanadium	EPA 200.8	NPW	x	Y	
NY	Zinc	EPA 200.8	NPW	x	Y	
NY	Mercury	EPA 245.1	NPW	x	Y	
NY	Bromide	EPA 300.0	NPW	Y	x	
NY	Chloride	EPA 300.0	NPW	Y	x	
NY	Fluoride	EPA 300.0	NPW	Y	x	
NY	Nitrate-N	EPA 300.0	NPW	Y	x	
NY	Sulfate	EPA 300.0	NPW	Y	x	
NY	Acid Digestion of Waters	EPA 3005A	NPW	x	**Y**	
NY	Microwave Acid Digestion	EPA 3015A	NPW	x	**Y**	
NY	Acid Digestion of Waters	EPA 3020A	NPW	x	**Y**	
NY	Ammonia	EPA 350.1	NPW	Y	x	
NY	Nitrogen, Total Kjeldahl	EPA 351.1	NPW	Y	x	
NY	Separatory Funnel Extraction	EPA 3510C	NPW	Y	**Y**	
NY	Nitrate-N	EPA 353.2	NPW	Y	x	
NY	Nitrate-Nitrite	EPA 353.2	NPW	Y	x	
NY	Chemical Oxygen Demand	EPA 410.4	NPW	Y	x	
NY	Total Phenolics	EPA 420.1	NPW	Y	x	
NY	Purge & Trap Aqueous	EPA 5030C	NPW	Y	x	
NY	Aluminum	EPA 6010C	NPW	x	Y	
NY	Antimony	EPA 6010C	NPW	x	Y	
NY	Arsenic	EPA 6010C	NPW	x	Y	
NY	Barium	EPA 6010C	NPW	x	Y	
NY	Beryllium	EPA 6010C	NPW	x	Y	
NY	Boron	EPA 6010C	NPW	x	Y	
NY	Cadmium	EPA 6010C	NPW	x	Y	
NY	Calcium	EPA 6010C	NPW	x	Y	
NY	Chromium	EPA 6010C	NPW	x	Y	
NY	Cobalt	EPA 6010C	NPW	x	Y	
NY	Copper	EPA 6010C	NPW	x	Y	
NY	Iron	EPA 6010C	NPW	x	Y	
NY	Lead	EPA 6010C	NPW	x	Y	
NY	Magnesium	EPA 6010C	NPW	x	Y	
NY	Manganese	EPA 6010C	NPW	x	Y	
NY	Molybdenum	EPA 6010C	NPW	x	Y	
NY	Nickel	EPA 6010C	NPW	x	Y	
NY	Potassium	EPA 6010C	NPW	x	Y	
NY	Selenium	EPA 6010C	NPW	x	Y	
NY	Silver	EPA 6010C	NPW	x	Y	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Sodium	EPA 6010C	NPW	x	Y	
NY	Strontium	EPA 6010C	NPW	x	Y	
NY	Thallium	EPA 6010C	NPW	x	Y	
NY	Tin	EPA 6010C	NPW	x	Y	
NY	Vanadium	EPA 6010C	NPW	x	Y	
NY	Zinc	EPA 6010C	NPW	x	Y	
NY	Aluminum	EPA 6020A	NPW	x	Y	
NY	Antimony	EPA 6020A	NPW	x	Y	
NY	Arsenic	EPA 6020A	NPW	x	Y	
NY	Barium	EPA 6020A	NPW	x	Y	
NY	Beryllium	EPA 6020A	NPW	x	Y	
NY	Boron	EPA 6020A	NPW	x	Y	
NY	Cadmium	EPA 6020A	NPW	x	Y	
NY	Calcium	EPA 6020A	NPW	x	Y	
NY	Chromium	EPA 6020A	NPW	x	Y	
NY	Cobalt	EPA 6020A	NPW	x	Y	
NY	Copper	EPA 6020A	NPW	x	Y	
NY	Iron	EPA 6020A	NPW	x	Y	
NY	Lead	EPA 6020A	NPW	x	Y	
NY	Magnesium	EPA 6020A	NPW	x	Y	
NY	Manganese	EPA 6020A	NPW	x	Y	
NY	Molybdenum	EPA 6020A	NPW	x	Y	
NY	Nickel	EPA 6020A	NPW	x	Y	
NY	Potassium	EPA 6020A	NPW	x	Y	
NY	Selenium	EPA 6020A	NPW	x	Y	
NY	Silver	EPA 6020A	NPW	x	Y	
NY	Strontium	EPA 6020A	NPW	x	Y	
NY	Thallium	EPA 6020A	NPW	x	Y	
NY	Tin	EPA 6020A	NPW	x	Y	
NY	Titanium	EPA 6020A	NPW	x	Y	
NY	Vanadium	EPA 6020A	NPW	x	Y	
NY	Zinc	EPA 6020A	NPW	x	Y	
NY	4,4'-DDD	EPA 608	NPW	Y	x	
NY	4,4'-DDE	EPA 608	NPW	Y	x	
NY	4,4'-DDT	EPA 608	NPW	Y	x	
NY	Aldrin	EPA 608	NPW	Y	x	
NY	Alpha-BHC	EPA 608	NPW	Y	x	
NY	Beta-BHC	EPA 608	NPW	Y	x	
NY	Chlordane	EPA 608	NPW	Y	x	
NY	Delta-BHC	EPA 608	NPW	Y	x	
NY	Dieldrin	EPA 608	NPW	Y	x	
NY	Endosulfan I	EPA 608	NPW	Y	x	
NY	Endosulfan II	EPA 608	NPW	Y	x	
NY	Endosulfan Sulfate	EPA 608	NPW	Y	x	
NY	Endrin	EPA 608	NPW	Y	x	
NY	Endrin Aldehyde	EPA 608	NPW	Y	x	
NY	Heptachlor	EPA 608	NPW	Y	x	
NY	Heptachlor Epoxide	EPA 608	NPW	Y	x	
NY	Lindane (gamma-BHC)	EPA 608	NPW	Y	x	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Methoxychlor	EPA 608	NPW	Y	x	
NY	PCB-1016	EPA 608	NPW	Y	x	
NY	PCB-1221	EPA 608	NPW	Y	x	
NY	PCB-1232	EPA 608	NPW	Y	x	
NY	PCB-1242	EPA 608	NPW	Y	x	
NY	PCB-1248	EPA 608	NPW	Y	x	
NY	PCB-1254	EPA 608	NPW	Y	x	
NY	PCB-1260	EPA 608	NPW	Y	x	
NY	Toxaphene	EPA 608	NPW	Y	x	
NY	1,1,1-Trichloroethane	EPA 624	NPW	Y	x	
NY	1,1,2,2-Tetrachloroethane	EPA 624	NPW	Y	x	
NY	1,1,2-Trichloroethane	EPA 624	NPW	Y	x	
NY	1,1-Dichloroethane	EPA 624	NPW	Y	x	
NY	1,1-Dichloroethene	EPA 624	NPW	Y	x	
NY	1,2-Dichlorobenzene	EPA 624	NPW	Y	x	
NY	1,2-Dichloroethane	EPA 624	NPW	Y	x	
NY	1,2-Dichloropropane	EPA 624	NPW	Y	x	
NY	1,3-Dichlorobenzene	EPA 624	NPW	Y	x	
NY	1,4-Dichlorobenzene	EPA 624	NPW	Y	x	
NY	2-Chloroethyl Vinyl ether	EPA 624	NPW	Y	x	
NY	Acetone	EPA 624	NPW	Y	x	
NY	Acrolein	EPA 624	NPW	Y	x	
NY	Acrylonitrile	EPA 624	NPW	Y	x	
NY	Benzene	EPA 624	NPW	Y	x	
NY	Bromodichloromethane	EPA 624	NPW	Y	x	
NY	Bromoform	EPA 624	NPW	Y	x	
NY	Bromomethane	EPA 624	NPW	Y	x	
NY	Carbon Tetrachloride	EPA 624	NPW	Y	x	
NY	Chlorobenzene	EPA 624	NPW	Y	x	
NY	Chloroethane	EPA 624	NPW	Y	x	
NY	Chloroform	EPA 624	NPW	Y	x	
NY	Chloromethane	EPA 624	NPW	Y	x	
NY	cis-1,2-Dichloroethene	EPA 624	NPW	Y	x	
NY	cis-1,3-Dichloropropene	EPA 624	NPW	Y	x	
NY	Dibromochloromethane	EPA 624	NPW	Y	x	
NY	Dichlorodifluoromethane	EPA 624	NPW	Y	x	
NY	Ethylbenzene	EPA 624	NPW	Y	x	
NY	Methylene Chloride	EPA 624	NPW	Y	x	
NY	Methyl tert-butyl ether	EPA 624	NPW	Y	x	
NY	Styrene	EPA 624	NPW	Y	x	
NY	Tert-Butyl Alcohol	EPA 624	NPW	Y	x	
NY	Tetrachloroethene	EPA 624	NPW	Y	x	
NY	Toluene	EPA 624	NPW	Y	x	
NY	Total Xylenes	EPA 624	NPW	Y	x	
NY	Trans-1,2-Dichloroethene	EPA 624	NPW	Y	x	
NY	Trans-1,3-Dichloropropene	EPA 624	NPW	Y	x	
NY	Trichloroethene	EPA 624	NPW	Y	x	
NY	Trichlorofluoromethane	EPA 624	NPW	Y	x	
NY	Vinyl Acetate	EPA 624	NPW	Y	x	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Vinyl Chloride	EPA 624	NPW	Y	x	
NY	1,2,4-Trichlorobenzene	EPA 625	NPW	Y	x	
NY	2,4,5-Trichlorophenol	EPA 625	NPW	Y	x	
NY	2,4,6-Trichlorophenol	EPA 625	NPW	Y	x	
NY	2,4-Dichlorophenol	EPA 625	NPW	Y	x	
NY	2,4-Dimethylphenol	EPA 625	NPW	Y	x	
NY	2,4-Dinitrophenol	EPA 625	NPW	Y	x	
NY	2,4-Dinitrotoluene (2,4-DNT)	EPA 625	NPW	Y	x	
NY	2,6-Dinitrotoluene (2,6-DNT)	EPA 625	NPW	Y	x	
NY	2-Chloronaphthalene	EPA 625	NPW	Y	x	
NY	2-Chlorophenol	EPA 625	NPW	Y	x	
NY	2-Methyl-4,6-dinitrophenol	EPA 625	NPW	Y	x	
NY	2-Methylphenol	EPA 625	NPW	Y	x	
NY	2-Nitrophenol	EPA 625	NPW	Y	x	
NY	3,3-Dichlorobenzidine	EPA 625	NPW	Y	x	
NY	3-Methylphenol	EPA 625	NPW	Y	x	
NY	4-Bromophenyl phenyl ether	EPA 625	NPW	Y	x	
NY	4-Chloro-3-methylphenol	EPA 625	NPW	Y	x	
NY	4-Chlorophenyl phenyl ether	EPA 625	NPW	Y	x	
NY	4-Methylphenol	EPA 625	NPW	Y	x	
NY	4-Nitrophenol	EPA 625	NPW	Y	x	
NY	Acenaphthene	EPA 625	NPW	Y	x	
NY	Acenaphthylene	EPA 625	NPW	Y	x	
NY	Acetophenone	EPA 625	NPW	Y	x	
NY	Aniline	EPA 625	NPW	Y	x	
NY	Anthracene	EPA 625	NPW	Y	x	
NY	Benzidine	EPA 625	NPW	Y	x	
NY	Benzo(a)anthracene	EPA 625	NPW	Y	x	
NY	Benzo(a)pyrene	EPA 625	NPW	Y	x	
NY	Benzo(b)fluoranthene	EPA 625	NPW	Y	x	
NY	Benzo(ghi)perylene	EPA 625	NPW	Y	x	
NY	Benzo(k)fluoranthene	EPA 625	NPW	Y	x	
NY	Bis(2-chloroethoxy) methane	EPA 625	NPW	Y	x	
NY	Bis(2-chloroethyl) ether	EPA 625	NPW	Y	x	
NY	Bis(2-chloroisopropyl) ether	EPA 625	NPW	Y	x	
NY	Bis(2-ethylhexyl) phthalate	EPA 625	NPW	Y	x	
NY	Butyl Benzyl phthalate	EPA 625	NPW	Y	x	
NY	Carbazole	EPA 625	NPW	Y	x	
NY	Chrysene	EPA 625	NPW	Y	x	
NY	Dibenzo(a,h)anthracene	EPA 625	NPW	Y	x	
NY	Diethyl phthalate	EPA 625	NPW	Y	x	
NY	Dimethyl phthalate	EPA 625	NPW	Y	x	
NY	Di-n-butyl phthalate	EPA 625	NPW	Y	x	
NY	Di-n-octyl phthalate	EPA 625	NPW	Y	x	
NY	Fluoranthene	EPA 625	NPW	Y	x	
NY	Fluorene	EPA 625	NPW	Y	x	
NY	Hexachlorobenzene	EPA 625	NPW	Y	x	
NY	Hexachlorobutadiene	EPA 625	NPW	Y	x	
NY	Hexachlorocyclopentadiene	EPA 625	NPW	Y	x	

Alpha Analytical **Summary of Certification**

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Hexachloroethane	EPA 625	NPW	Y	x	
NY	Indeno(1,2,3-cd)pyrene	EPA 625	NPW	Y	x	
NY	Isophorone	EPA 625	NPW	Y	x	
NY	Naphthalene	EPA 625	NPW	Y	x	
NY	N-Decane	EPA 625	NPW	Y	x	
NY	Nitrobenzene	EPA 625	NPW	Y	x	
NY	N-Nitrosodimethylamine	EPA 625	NPW	Y	x	
NY	N-Nitrosodi-n-propylamine	EPA 625	NPW	Y	x	
NY	N-Nitrosodiphenylamine	EPA 625	NPW	Y	x	
NY	N-Octadecane	EPA 625	NPW	Y	x	
NY	Pentachlorophenol	EPA 625	NPW	Y	x	
NY	Phenanthrene	EPA 625	NPW	Y	x	
NY	Phenol	EPA 625	NPW	Y	x	
NY	Pyrene	EPA 625	NPW	Y	x	
NY	Pyridine	EPA 625	NPW	Y	x	
NY	Chromium VI	EPA 7196A	NPW	Y	x	
NY	Mercury	EPA 7470A	NPW	x	Y	
NY	1,2-Dibromoethane (EDB)	EPA 8011	NPW	Y	x	
NY	1,2-Dibromo-3-Chloropropane (DBCP)	EPA 8011	NPW	Y	x	
NY	Diesel Range Organics	EPA 8015C	NPW	Y	x	
NY	Gasoline Range Organics	EPA 8015C	NPW	Y	x	
NY	Amyl alcohol	EPA 8015D	NPW	x	Y	
NY	Diesel Range Organics	EPA 8015D	NPW	x	Y	
NY	Ethyl alcohol	EPA 8015D	NPW	x	Y	
NY	Ethylene glycol	EPA 8015D	NPW	x	Y	
NY	Gasoline Range Organics	EPA 8015D	NPW	x	Y	
NY	Iso-butyl Alcohol	EPA 8015D	NPW	x	Y	
NY	Methyl Alcohol (methanol)	EPA 8015D	NPW	x	Y	
NY	Tert-Butyl Alcohol	EPA 8015D	NPW	x	Y	
NY	4,4'-DDD	EPA 8081B	NPW	Y	Y	
NY	4,4'-DDE	EPA 8081B	NPW	Y	Y	
NY	4,4'-DDT	EPA 8081B	NPW	Y	Y	
NY	Aldrin	EPA 8081B	NPW	Y	Y	
NY	alpha-BHC	EPA 8081B	NPW	Y	Y	
NY	alpha-Chlordane	EPA 8081B	NPW	Y	Y	
NY	beta-BHC	EPA 8081B	NPW	Y	Y	
NY	Chlordane	EPA 8081B	NPW	Y	Y	
NY	delta-BHC	EPA 8081B	NPW	Y	Y	
NY	Dieldrin	EPA 8081B	NPW	Y	Y	
NY	Endosulfan I	EPA 8081B	NPW	Y	Y	
NY	Endosulfan II	EPA 8081B	NPW	Y	Y	
NY	Endosulfan Sulfate	EPA 8081B	NPW	Y	Y	
NY	Endrin	EPA 8081B	NPW	Y	Y	
NY	Endrin Aldehyde	EPA 8081B	NPW	Y	Y	
NY	Endrin Ketone	EPA 8081B	NPW	Y	Y	
NY	gamma-Chlordane	EPA 8081B	NPW	Y	Y	
NY	Heptachlor	EPA 8081B	NPW	Y	Y	
NY	Heptachlor Epoxide	EPA 8081B	NPW	Y	Y	
NY	Hexachlorobenzene	EPA 8081B	NPW	x	Y	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Lindane (gamma-BHC)	EPA 8081B	NPW	Y	Y	
NY	Methoxychlor	EPA 8081B	NPW	Y	Y	
NY	Mirex	EPA 8081B	NPW	x	Y	
NY	Toxaphene	EPA 8081B	NPW	Y	Y	
NY	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (PCB	EPA 8082A	NPW	x	Y	
NY	2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	EPA 8082A	NPW	x	Y	
NY	2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)	EPA 8082A	NPW	x	Y	
NY	2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)	EPA 8082A	NPW	x	Y	
NY	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	EPA 8082A	NPW	x	Y	
NY	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	EPA 8082A	NPW	x	Y	
NY	2,2',5-Trichlorobiphenyl (PCB 18)	EPA 8082A	NPW	x	Y	
NY	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	EPA 8082A	NPW	x	Y	
NY	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	EPA 8082A	NPW	x	Y	
NY	PCB-1016	EPA 8082A	NPW	Y	Y	
NY	PCB-1221	EPA 8082A	NPW	Y	Y	
NY	PCB-1232	EPA 8082A	NPW	Y	Y	
NY	PCB-1242	EPA 8082A	NPW	Y	Y	
NY	PCB-1248	EPA 8082A	NPW	Y	Y	
NY	PCB-1254	EPA 8082A	NPW	Y	Y	
NY	PCB-1260	EPA 8082A	NPW	Y	Y	
NY	PCB-1262	EPA 8082A	NPW	Y	Y	
NY	PCB-1268	EPA 8082A	NPW	Y	Y	
NY	2,4,5-T	EPA 8151A	NPW	Y	x	
NY	2,4,5-TP (Silvex)	EPA 8151A	NPW	Y	x	
NY	2,4-D	EPA 8151A	NPW	Y	x	
NY	2,4-DB	EPA 8151A	NPW	Y	x	
NY	Dalapon	EPA 8151A	NPW	Y	x	
NY	Dicamba	EPA 8151A	NPW	Y	x	
NY	Dichloroprop	EPA 8151A	NPW	Y	x	
NY	Dinoseb	EPA 8151A	NPW	Y	x	
NY	1,1,1,2-Tetrachloroethane	EPA 8260C	NPW	Y	x	
NY	1,1,1-Trichloroethane	EPA 8260C	NPW	Y	x	
NY	1,1,2,2-Tetrachloroethane	EPA 8260C	NPW	Y	x	
NY	1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260C	NPW	Y	x	
NY	1,1,2-Trichloroethane	EPA 8260C	NPW	Y	x	
NY	1,1-Dichloroethane	EPA 8260C	NPW	Y	x	
NY	1,1-Dichloroethene	EPA 8260C	NPW	Y	x	
NY	1,1-Dichloropropene	EPA 8260C	NPW	Y	x	
NY	1,2,3-Trichlorobenzene	EPA 8260C	NPW	Y	x	
NY	1,2,3-Trichloropropane	EPA 8260C	NPW	Y	x	
NY	1,2,4-Trichlorobenzene	EPA 8260C	NPW	Y	x	
NY	1,2,4-Trimethylbenzene	EPA 8260C	NPW	Y	x	
NY	1,2-Dibromo-3-Chloropropane (DBCP)	EPA 8260C	NPW	Y	x	
NY	1,2-Dibromoethane (EDB)	EPA 8260C	NPW	Y	x	
NY	1,2-Dichlorobenzene	EPA 8260C	NPW	Y	x	
NY	1,2-Dichloroethane	EPA 8260C	NPW	Y	x	
NY	1,2-Dichloropropane	EPA 8260C	NPW	Y	x	
NY	1,3,5-Trimethylbenzene	EPA 8260C	NPW	Y	x	
NY	1,3-Dichlorobenzene	EPA 8260C	NPW	Y	x	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	1,3-Dichloropropane	EPA 8260C	NPW	Y	x	
NY	1,4-Dichlorobenzene	EPA 8260C	NPW	Y	x	
NY	1,4-Dioxane	EPA 8260C	NPW	Y	x	
NY	1-Butanol	EPA 8260C	NPW	Y	x	
NY	2,2-Dichloropropane	EPA 8260C	NPW	Y	x	
NY	2-Butanone	EPA 8260C	NPW	Y	x	
NY	2-Chloroethyl Vinyl ether	EPA 8260C	NPW	Y	x	
NY	2-Chlorotoluene	EPA 8260C	NPW	Y	x	
NY	2-Hexanone	EPA 8260C	NPW	Y	x	
NY	4-Chlorotoluene	EPA 8260C	NPW	Y	x	
NY	4-Methyl-2-Pentanone	EPA 8260C	NPW	Y	x	
NY	Acetone	EPA 8260C	NPW	Y	x	
NY	Acrolein	EPA 8260C	NPW	Y	x	
NY	Acrylonitrile	EPA 8260C	NPW	Y	x	
NY	Benzene	EPA 8260C	NPW	Y	x	
NY	Bromobenzene	EPA 8260C	NPW	Y	x	
NY	Bromochloromethane	EPA 8260C	NPW	Y	x	
NY	Bromodichloromethane	EPA 8260C	NPW	Y	x	
NY	Bromoform	EPA 8260C	NPW	Y	x	
NY	Bromomethane	EPA 8260C	NPW	Y	x	
NY	Carbon Disulfide	EPA 8260C	NPW	Y	x	
NY	Carbon Tetrachloride	EPA 8260C	NPW	Y	x	
NY	Chlorobenzene	EPA 8260C	NPW	Y	x	
NY	Chloroethane	EPA 8260C	NPW	Y	x	
NY	Chloroform	EPA 8260C	NPW	Y	x	
NY	Chloromethane	EPA 8260C	NPW	Y	x	
NY	cis-1,2-Dichloroethene	EPA 8260C	NPW	Y	x	
NY	cis-1,3-Dichloropropene	EPA 8260C	NPW	Y	x	
NY	Cyclohexane	EPA 8260C	NPW	Y	x	
NY	Dibromochloromethane	EPA 8260C	NPW	Y	x	
NY	Dibromomethane	EPA 8260C	NPW	Y	x	
NY	Dichlorodifluoromethane	EPA 8260C	NPW	Y	x	
NY	Diethyl ether	EPA 8260C	NPW	Y	x	
NY	Diisopropyl ether	EPA 8260C	NPW	Y	x	
NY	Ethanol	EPA 8260C	NPW	Y	x	
NY	Ethyl acetate	EPA 8260C	NPW	Y	x	
NY	Ethyl Methacrylate	EPA 8260C	NPW	Y	x	
NY	Ethylbenzene	EPA 8260C	NPW	Y	x	
NY	Hexachlorobutadiene	EPA 8260C	NPW	Y	x	
NY	Isopropyl Alcohol	EPA 8260C	NPW	Y	x	
NY	Isopropylbenzene	EPA 8260C	NPW	Y	x	
NY	m+p-Xylene	EPA 8260C	NPW	Y	x	
NY	Methyl Acetate	EPA 8260C	NPW	Y	x	
NY	Methyl Cyclohexane	EPA 8260C	NPW	Y	x	
NY	Iodomethane (Methyl Iodide)	EPA 8260C	NPW	Y	x	
NY	Methyl Methacrylate	EPA 8260C	NPW	Y	x	
NY	Methyl tert-butyl ether	EPA 8260C	NPW	Y	x	
NY	Methylene Chloride	EPA 8260C	NPW	Y	x	
NY	Naphthalene	EPA 8260C	NPW	Y	x	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	n-Butylbenzene	EPA 8260C	NPW	Y	x	
NY	n-Propylbenzene	EPA 8260C	NPW	Y	x	
NY	o-Xylene	EPA 8260C	NPW	Y	x	
NY	p-Isopropyltoluene	EPA 8260C	NPW	Y	x	
NY	sec-Butylbenzene	EPA 8260C	NPW	Y	x	
NY	Styrene	EPA 8260C	NPW	Y	x	
NY	Tert-Amyl Methyl Ether (TAME)	EPA 8260C	NPW	Y	x	
NY	Tert-Butyl Alcohol	EPA 8260C	NPW	Y	x	
NY	tert-butyl Ethyl Ether	EPA 8260C	NPW	Y	x	
NY	Tert-Butylbenzene	EPA 8260C	NPW	Y	x	
NY	Tetrachloroethene	EPA 8260C	NPW	Y	x	
NY	Tetrahydrofuran	EPA 8260C	NPW	Y	x	
NY	Toluene	EPA 8260C	NPW	Y	x	
NY	Total Xylenes	EPA 8260C	NPW	Y	x	
NY	Trans-1,2-Dichloroethene	EPA 8260C	NPW	Y	x	
NY	Trans-1,3-Dichloropropene	EPA 8260C	NPW	Y	x	
NY	Trans-1,4-Dichloro-2-butene	EPA 8260C	NPW	Y	x	
NY	Trichloroethene	EPA 8260C	NPW	Y	x	
NY	Trichlorofluoromethane	EPA 8260C	NPW	Y	x	
NY	Vinyl acetate	EPA 8260C	NPW	Y	x	
NY	Vinyl Chloride	EPA 8260C	NPW	Y	x	
NY	1,1'-Biphenyl	EPA 8270D	NPW	x	Y	
NY	1,2,4,5-Tetrachlorobenzene	EPA 8270D	NPW	Y	Y	
NY	1,2,4-Trichlorobenzene	EPA 8270D	NPW	Y	Y	
NY	1,2-Dichlorobenzene	EPA 8270D	NPW	Y	Y	
NY	1,2-Diphenylhydrazine	EPA 8270D	NPW	Y	Y	
NY	1,3-Dichlorobenzene	EPA 8270D	NPW	Y	Y	
NY	1,4-Dichlorobenzene	EPA 8270D	NPW	Y	Y	
NY	1,4-Dioxane	EPA 8270D	NPW	x	Y	
NY	2,3,4,6-Tetrachlorophenol	EPA 8270D	NPW	Y	Y	
NY	2,4,5-Trichlorophenol	EPA 8270D	NPW	Y	Y	
NY	2,4,6-Trichlorophenol	EPA 8270D	NPW	Y	Y	
NY	2,4-Dichlorophenol	EPA 8270D	NPW	Y	Y	
NY	2,4-Dimethylphenol	EPA 8270D	NPW	Y	Y	
NY	2,4-Dinitrophenol	EPA 8270D	NPW	Y	Y	
NY	2,4-Dinitrotoluene (2,4-DNT)	EPA 8270D	NPW	Y	Y	
NY	2,6-Dinitrotoluene (2,6-DNT)	EPA 8270D	NPW	Y	Y	
NY	2-Chloronaphthalene	EPA 8270D	NPW	Y	Y	
NY	2-Chlorophenol	EPA 8270D	NPW	Y	Y	
NY	2-Methyl-4,6-dinitrophenol	EPA 8270D	NPW	Y	Y	
NY	2-Methylnaphthalene	EPA 8270D	NPW	Y	Y	
NY	2-Methylphenol	EPA 8270D	NPW	Y	Y	
NY	2-Nitroaniline	EPA 8270D	NPW	Y	Y	
NY	2-Nitrophenol	EPA 8270D	NPW	Y	Y	
NY	3,3-Dichlorobenzidine	EPA 8270D	NPW	Y	Y	
NY	3-Methylphenol	EPA 8270D	NPW	Y	Y	
NY	3-Nitroaniline	EPA 8270D	NPW	Y	Y	
NY	4-Bromophenyl phenyl ether	EPA 8270D	NPW	Y	Y	
NY	4-Chloro-3-methylphenol	EPA 8270D	NPW	Y	Y	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	4-Chloroaniline	EPA 8270D	NPW	Y	Y	
NY	4-Chlorophenyl phenyl ether	EPA 8270D	NPW	Y	Y	
NY	4-Methylphenol	EPA 8270D	NPW	Y	Y	
NY	4-Nitroaniline	EPA 8270D	NPW	Y	Y	
NY	4-Nitrophenol	EPA 8270D	NPW	Y	Y	
NY	Acenaphthene	EPA 8270D	NPW	Y	Y	
NY	Acenaphthylene	EPA 8270D	NPW	Y	Y	
NY	Acetophenone	EPA 8270D	NPW	Y	x	
NY	Aniline	EPA 8270D	NPW	Y	Y	
NY	Anthracene	EPA 8270D	NPW	Y	Y	
NY	Atrazine	EPA 8270D	NPW	Y	x	
NY	Benzaldehyde	EPA 8270D	NPW	Y	Y	
NY	Benzidine	EPA 8270D	NPW	Y	Y	
NY	Benzo(a)anthracene	EPA 8270D	NPW	Y	Y	
NY	Benzo(a)pyrene	EPA 8270D	NPW	Y	Y	
NY	Benzo(b)fluoranthene	EPA 8270D	NPW	Y	Y	
NY	Benzo(ghi)perylene	EPA 8270D	NPW	Y	Y	
NY	Benzo(k)fluoranthene	EPA 8270D	NPW	Y	Y	
NY	Benzoic Acid	EPA 8270D	NPW	Y	Y	
NY	Benzyl alcohol	EPA 8270D	NPW	Y	Y	
NY	Biphenyl	EPA 8270D	NPW	Y	x	
NY	Bis(2-chloroethoxy) methane	EPA 8270D	NPW	Y	Y	
NY	Bis(2-chloroethyl) ether	EPA 8270D	NPW	Y	Y	
NY	Bis(2-chloroisopropyl) ether	EPA 8270D	NPW	Y	Y	
NY	Bis(2-ethylhexyl) phthalate	EPA 8270D	NPW	Y	Y	
NY	Butyl Benzyl phthalate	EPA 8270D	NPW	Y	Y	
NY	Caprolactam	EPA 8270D	NPW	Y	Y	
NY	Carbazole	EPA 8270D	NPW	Y	Y	
NY	Chrysene	EPA 8270D	NPW	Y	Y	
NY	Cresols, Total	EPA 8270D	NPW	Y	x	
NY	Dibenzo(a,h)anthracene	EPA 8270D	NPW	Y	Y	
NY	Dibenzofuran	EPA 8270D	NPW	Y	Y	
NY	Diethyl phthalate	EPA 8270D	NPW	Y	Y	
NY	Dimethyl phthalate	EPA 8270D	NPW	Y	Y	
NY	Di-n-butyl phthalate	EPA 8270D	NPW	Y	Y	
NY	Di-n-octyl phthalate	EPA 8270D	NPW	Y	Y	
NY	Diphenylamine	EPA 8270D	NPW	Y	x	
NY	Fluoranthene	EPA 8270D	NPW	Y	Y	
NY	Fluorene	EPA 8270D	NPW	Y	Y	
NY	Hexachlorobenzene	EPA 8270D	NPW	Y	Y	
NY	Hexachlorobutadiene	EPA 8270D	NPW	Y	Y	
NY	Hexachlorocyclopentadiene	EPA 8270D	NPW	Y	Y	
NY	Hexachloroethane	EPA 8270D	NPW	Y	Y	
NY	Indeno(1,2,3-cd)pyrene	EPA 8270D	NPW	Y	Y	
NY	Isophorone	EPA 8270D	NPW	Y	x	
NY	Naphthalene	EPA 8270D	NPW	Y	Y	
NY	Nitrobenzene	EPA 8270D	NPW	Y	Y	
NY	N-Nitrosodimethylamine	EPA 8270D	NPW	Y	Y	
NY	N-Nitrosodi-n-propylamine	EPA 8270D	NPW	Y	Y	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	N-Nitrosodiphenylamine	EPA 8270D	NPW	Y	Y	
NY	Parathion	EPA 8270D	NPW	Y	x	
NY	Pentachlorophenol	EPA 8270D	NPW	Y	Y	
NY	Phenanthrene	EPA 8270D	NPW	Y	Y	
NY	Phenol	EPA 8270D	NPW	Y	Y	
NY	Pyrene	EPA 8270D	NPW	Y	Y	
NY	Pyridine	EPA 8270D	NPW	Y	Y	
NY	Thionazin	EPA 8270D	NPW	Y	x	
NY	Acenaphthene	EPA 8270D-SIM	NPW	Y	Y	
NY	Acenaphthylene	EPA 8270D-SIM	NPW	Y	Y	
NY	Anthracene	EPA 8270D-SIM	NPW	Y	Y	
NY	Benzo(a)anthracene	EPA 8270D-SIM	NPW	Y	Y	
NY	Benzo(a)anthracene	EPA 8270D-SIM	NPW	Y	x	
NY	Benzo(a)pyrene	EPA 8270D-SIM	NPW	Y	Y	
NY	Benzo(a)pyrene	EPA 8270D-SIM	NPW	Y	x	
NY	Benzo(b)fluoranthene	EPA 8270D-SIM	NPW	Y	Y	
NY	Benzo(b)fluoranthene	EPA 8270D-SIM	NPW	Y	x	
NY	Benzo(ghi)perylene	EPA 8270D-SIM	NPW	Y	Y	
NY	Benzo(k)fluoranthene	EPA 8270D-SIM	NPW	Y	x	
NY	Benzo(k)fluoranthene	EPA 8270D-SIM	NPW	Y	Y	
NY	Chrysene	EPA 8270D-SIM	NPW	Y	Y	
NY	Dibenzo(a,h)anthracene	EPA 8270D-SIM	NPW	Y	Y	
NY	Dibenzo(a,h)anthracene	EPA 8270D-SIM	NPW	Y	x	
NY	Fluoranthene	EPA 8270D-SIM	NPW	Y	Y	
NY	Fluorene	EPA 8270D-SIM	NPW	Y	Y	
NY	Indeno(1,2,3-cd)pyrene	EPA 8270D-SIM	NPW	Y	Y	
NY	Indeno(1,2,3-cd)pyrene	EPA 8270D-SIM	NPW	Y	x	
NY	Naphthalene	EPA 8270D-SIM	NPW	Y	Y	
NY	Phenanthrene	EPA 8270D-SIM	NPW	Y	Y	
NY	Pyrene	EPA 8270D-SIM	NPW	Y	Y	
NY	Formaldehyde	EPA 8315A	NPW	Y	x	
NY	Cyanide - Amenable, Distillation	EPA 9010C	NPW	Y	x	
NY	Cyanide, Distillation	EPA 9010C	NPW	Y	x	
NY	Total Cyanide	EPA 9012B	NPW	Y	x	
NY	Total Cyanide	EPA 9014	NPW	Y	x	
NY	Sulfide	EPA 9030B	NPW	Y	x	
NY	Phenolics	EPA 9065	NPW	Y	x	
NY	Ethane	EPA RSK-175	NPW	x	Y	
NY	Ethene	EPA RSK-175	NPW	x	Y	
NY	Methane	EPA RSK-175	NPW	x	Y	
NY	Propane	EPA RSK-175	NPW	x	Y	
NY	Nitrogen, Total Kjeldahl	Lachat 10-107-06-2	NPW	Y	x	
NY	Cyanide, Total	Lachat 10-204-00-1-X	NPW	Y	x	
NY	Color	SM 2120B	NPW	Y	x	
NY	Turbidity	SM 2130B	NPW	Y	x	
NY	Acidity	SM 2310B	NPW	Y	x	
NY	Alkalinity	SM 2320B	NPW	Y	x	
NY	Total Hardness (CaCO3)	SM 2340B	NPW	x	Y	
NY	Specific Conductance	SM 2510B	NPW	Y	x	

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State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Total Residue	SM 2540B	NPW	Y	x	
NY	Total Dissolved Solids	SM 2540C	NPW	Y	x	
NY	Total Suspended Solids	SM 2540D	NPW	Y	x	
NY	Volatile Solids	SM 2540E	NPW	Y	x	
NY	Total Settleable Solids	SM 2540F	NPW	Y	x	
NY	Chromium VI	SM 3500 Cr B	NPW	Y	x	
NY	Sulfate	SM 4500 SO4-E	NPW	Y	x	
NY	Chloride	SM 4500 CL-E	NPW	Y	x	
NY	Cyanide, Total	SM 4500 CN E	NPW	Y	x	
NY	Fluoride Preliminary Distillation	SM 4500 F-B	NPW	Y	x	
NY	Fluoride	SM 4500 F-C	NPW	Y	x	
NY	Ammonia	SM 4500 NH3 B	NPW	Y	x	
NY	Ammonia	SM 4500 NH3-H	NPW	Y	x	
NY	Nitrogen, Total Kjeldahl	SM 4500 NH3-H	NPW	Y	x	
NY	Nitrogen, Total Kjeldahl (Distillation)	SM 4500Norg-C	NPW	Y	x	
NY	Nitrite-N	SM 4500 NO2-B	NPW	Y	x	
NY	Nitrate-N	SM 4500 NO3-F	NPW	Y	x	
NY	Nitrate-N	SM 4500 NO3-F	NPW	Y	x	
NY	Nitrate-Nitrite	SM 4500 NO3-F	NPW	Y	x	
NY	Orthophosphate	SM 4500 P-E	NPW	Y	x	
NY	Total Phosphorus (Digestion)	SM 4500 P-B	NPW	Y	x	
NY	Total Phosphorus	SM 4500 P-E	NPW	Y	x	
NY	Sulfide	SM 4500 S2-D	NPW	Y	x	
NY	Sulfate	SM 4500 SO4-E	NPW	Y	x	
NY	Biochemical Oxygen Demand	SM 5210B	NPW	Y	x	
NY	Biochemical Oxygen Demand - Carbonaceous	SM 5210B	NPW	Y	x	
NY	Chemical Oxygen Demand	SM 5220D	NPW	Y	x	
NY	Total Organic Carbon	SM 5310C	NPW	Y	x	
NY	Surfactants (MBAS)	SM 5540C	NPW	Y	x	
NY	Heterotrophic Plate Count	SM 9215B	NPW	Y	x	
NY	Coliform, Total MPN	SM 9221B	NPW	Y	x	
NY	Coliform, Fecal MPN	SM 9221C	NPW	Y	x	
NY	Coliform, Fecal MPN	SM 9221E	NPW	Y	x	
NY	Coliform, Total MF	SM 9222B	NPW	Y	x	
Ny	Titanium	EPA 6010C	NPW	x	Y	
NY	Flashpoint	EPA 1010A	SCM	Y	x	
NY	Ignitability	EPA 1030	SCM	Y	x	
NY	TCLP	EPA 1311	SCM	Y	Y	
NY	SPLP	EPA 1312	SCM	Y	x	
NY	Microwave Acid Digestion	EPA 3050B	SCM	Y	Y	
NY	Microwave Acid Digestion	EPA 3051A	SCM	Y	Y	
NY	Chromium VI Digestion	EPA 3060A	SCM	x	Y	
NY	Soxhlet Extraction	EPA 3540C	SCM	Y	Y	
NY	Microwave Acid Digestion	EPA 3546	SCM	Y	x	
NY	Microscale Solvent Extraction (MSE)	EPA 3570	SCM	x	Y	
NY	Waste Dilution	EPA 3580A	SCM	Y	Y	
NY	Purge & Trap Soil Low/High	EPA 5035A	SCM	Y	x	
NY	Aluminum	EPA 6010C	SCM	x	Y	
NY	Antimony	EPA 6010C	SCM	x	Y	

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State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Arsenic	EPA 6010C	SCM	x	Y	
NY	Barium	EPA 6010C	SCM	x	Y	
NY	Beryllium	EPA 6010C	SCM	x	Y	
NY	Boron	EPA 6010C	SCM	x	Y	
NY	Cadmium	EPA 6010C	SCM	x	Y	
NY	Calcium	EPA 6010C	SCM	x	Y	
NY	Chromium	EPA 6010C	SCM	x	Y	
NY	Cobalt	EPA 6010C	SCM	x	Y	
NY	Copper	EPA 6010C	SCM	x	Y	
NY	Iron	EPA 6010C	SCM	x	Y	
NY	Lead	EPA 6010C	SCM	x	Y	
NY	Magnesium	EPA 6010C	SCM	x	Y	
NY	Manganese	EPA 6010C	SCM	x	Y	
NY	Molybdenum	EPA 6010C	SCM	x	Y	
NY	Nickel	EPA 6010C	SCM	x	Y	
NY	Potassium	EPA 6010C	SCM	x	Y	
NY	Selenium	EPA 6010C	SCM	x	Y	
NY	Silver	EPA 6010C	SCM	x	Y	
NY	Sodium	EPA 6010C	SCM	x	Y	
NY	Strontium	EPA 6010C	SCM	x	Y	
NY	Thallium	EPA 6010C	SCM	x	Y	
NY	Tin	EPA 6010C	SCM	x	Y	
NY	Titanium	EPA 6010C	SCM	x	Y	
NY	Vanadium	EPA 6010C	SCM	x	Y	
NY	Zinc	EPA 6010C	SCM	x	Y	
NY	Aluminum	EPA 6020A	SCM	x	Y	
NY	Antimony	EPA 6020A	SCM	x	Y	
NY	Arsenic	EPA 6020A	SCM	x	Y	
NY	Barium	EPA 6020A	SCM	x	Y	
NY	Beryllium	EPA 6020A	SCM	x	Y	
NY	Boron	EPA 6020A	SCM	x	Y	
NY	Cadmium	EPA 6020A	SCM	x	Y	
NY	Calcium	EPA 6020A	SCM	x	Y	
NY	Chromium	EPA 6020A	SCM	x	Y	
NY	Cobalt	EPA 6020A	SCM	x	Y	
NY	Copper	EPA 6020A	SCM	x	Y	
NY	Iron	EPA 6020A	SCM	x	Y	
NY	Lead	EPA 6020A	SCM	x	Y	
NY	Magnesium	EPA 6020A	SCM	x	Y	
NY	Manganese	EPA 6020A	SCM	x	Y	
NY	Molybdenum	EPA 6020A	SCM	x	Y	
NY	Nickel	EPA 6020A	SCM	x	Y	
NY	Potassium	EPA 6020A	SCM	x	Y	
NY	Selenium	EPA 6020A	SCM	x	Y	
NY	Silver	EPA 6020A	SCM	x	Y	
NY	Sodium	EPA 6020A	SCM	x	Y	
NY	Strontium	EPA 6020A	SCM	x	Y	
NY	Thallium	EPA 6020A	SCM	x	Y	
NY	Tin	EPA 6020A	SCM	x	Y	

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State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Vanadium	EPA 6020A	SCM	x	Y	
NY	Zinc	EPA 6020A	SCM	x	Y	
NY	Chromium VI	EPA 7196A	SCM	Y	x	
NY	Mercury	EPA 7471B	SCM	x	Y	
NY	Mercury	EPA 7474	SCM	x	Y	
NY	Diesel Range Organics	EPA 8015C	SCM	Y	x	
NY	Gasoline Range Organics	EPA 8015C	SCM	Y	x	
NY	Diesel Range Organics	EPA 8015D	SCM	x	Y	
NY	Ethylene glycol	EPA 8015D	SCM	x	Y	
NY	Gasoline Range Organics	EPA 8015D	SCM	x	Y	
NY	Iso-butyl Alcohol	EPA 8015D	SCM	x	Y	
NY	Tert-Butyl Alcohol	EPA 8015D	SCM	x	Y	
NY	4,4'-DDD	EPA 8081B	SCM	Y	Y	
NY	4,4'-DDE	EPA 8081B	SCM	Y	Y	
NY	4,4'-DDT	EPA 8081B	SCM	Y	Y	
NY	Aldrin	EPA 8081B	SCM	Y	Y	
NY	alpha-BHC	EPA 8081B	SCM	Y	Y	
NY	alpha-Chlordane	EPA 8081B	SCM	Y	x	
NY	beta-BHC	EPA 8081B	SCM	Y	Y	
NY	Chlordane	EPA 8081B	SCM	Y	Y	
NY	delta-BHC	EPA 8081B	SCM	Y	Y	
NY	Dieldrin	EPA 8081B	SCM	Y	Y	
NY	Endosulfan I	EPA 8081B	SCM	Y	Y	
NY	Endosulfan II	EPA 8081B	SCM	Y	Y	
NY	Endosulfan Sulfate	EPA 8081B	SCM	Y	Y	
NY	Endrin	EPA 8081B	SCM	Y	Y	
NY	Endrin Aldehyde	EPA 8081B	SCM	Y	Y	
NY	Endrin Ketone	EPA 8081B	SCM	Y	Y	
NY	gamma-Chlordane	EPA 8081B	SCM	Y	Y	
NY	Heptachlor	EPA 8081B	SCM	Y	Y	
NY	Heptachlor Epoxide	EPA 8081B	SCM	Y	Y	
NY	Lindane (gamma-BHC)	EPA 8081B	SCM	Y	Y	
NY	Methoxychlor	EPA 8081B	SCM	Y	Y	
NY	Mirex	EPA 8081B	SCM	x	Y	
NY	Toxaphene	EPA 8081B	SCM	Y	Y	
NY	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (PCB	EPA 8082A	SCM	x	Y	
NY	2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	EPA 8082A	SCM	x	Y	
NY	2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4,4',5,5'-Heptacholorbiphenyl (PCB 180)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4,5,5'-Hexachlorobiphenyl (PCB 141)	EPA 8082A	SCM	x	Y	
NY	2,2',3,4,5'-Pentachlorobiphenyl (PCB 87)	EPA 8082A	SCM	x	Y	
NY	2,2',3,5,5',6-Hexachlorobiphenyl (PCB 151)	EPA 8082A	SCM	x	Y	
NY	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	EPA 8082A	SCM	x	Y	
NY	2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153)	EPA 8082A	SCM	x	Y	
NY	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	EPA 8082A	SCM	x	Y	
NY	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	EPA 8082A	SCM	x	Y	

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Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	2,2',5-Trichlorobiphenyl (PCB 18)	EPA 8082A	SCM	x	Y	
NY	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	EPA 8082A	SCM	x	Y	
NY	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	EPA 8082A	SCM	x	Y	
NY	2,3-Dichlorobiphenyl (PCB 5)	EPA 8082A	SCM	x	Y	
NY	2,4'-Trichlorobiphenyl (PCB 31)	EPA 8082A	SCM	x	Y	
NY	2-Chlorobiphenyl (PCB 1)	EPA 8082A	SCM	x	Y	
NY	PCB-1016	EPA 8082A	SCM	Y	Y	
NY	PCB-1221	EPA 8082A	SCM	Y	Y	
NY	PCB-1232	EPA 8082A	SCM	Y	Y	
NY	PCB-1242	EPA 8082A	SCM	Y	Y	
NY	PCB-1248	EPA 8082A	SCM	Y	Y	
NY	PCB-1254	EPA 8082A	SCM	Y	Y	
NY	PCB-1260	EPA 8082A	SCM	Y	Y	
NY	PCB-1262	EPA 8082A	SCM	Y	Y	
NY	PCB-1268	EPA 8082A	SCM	Y	Y	
NY	PCBs in Oil	EPA 8082A	SCM	Y	x	
NY	2,4,5-T	EPA 8151A	SCM	Y	x	
NY	2,4,5-TP (Silvex)	EPA 8151A	SCM	Y	x	
NY	2,4-D	EPA 8151A	SCM	Y	x	
NY	2,4-DB	EPA 8151A	SCM	Y	x	
NY	Dalapon	EPA 8151A	SCM	Y	x	
NY	Dicamba	EPA 8151A	SCM	Y	x	
NY	Dichloroprop	EPA 8151A	SCM	Y	x	
NY	Dinoseb	EPA 8151A	SCM	Y	x	
NY	MCPA	EPA 8151A	SCM	Y	x	
NY	MCPP	EPA 8151A	SCM	Y	x	
NY	1,1,1,2-Tetrachloroethane	EPA 8260C	SCM	Y	x	
NY	1,1,1-Trichloroethane	EPA 8260C	SCM	Y	x	
NY	1,1,2,2-Tetrachloroethane	EPA 8260C	SCM	Y	x	
NY	1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260C	SCM	Y	x	
NY	1,1,2-Trichloroethane	EPA 8260C	SCM	Y	x	
NY	1,1-Dichloroethane	EPA 8260C	SCM	Y	x	
NY	1,1-Dichloroethene	EPA 8260C	SCM	Y	x	
NY	1,1-Dichloropropene	EPA 8260C	SCM	Y	x	
NY	1,2,3-Trichloropropane	EPA 8260C	SCM	Y	x	
NY	1,2,4-Trichlorobenzene	EPA 8260C	SCM	Y	x	
NY	1,2,4-Trimethylbenzene	EPA 8260C	SCM	Y	x	
NY	1,2-Dibromo-3-Chloropropane (DBCP)	EPA 8260C	SCM	Y	x	
NY	1,2-Dibromoethane (EDB)	EPA 8260C	SCM	Y	x	
NY	1,2-Dichlorobenzene	EPA 8260C	SCM	Y	x	
NY	1,2-Dichloroethane	EPA 8260C	SCM	Y	x	
NY	1,2-Dichloropropane	EPA 8260C	SCM	Y	x	
NY	1,3,5-Trimethylbenzene	EPA 8260C	SCM	Y	x	
NY	1,3-Dichlorobenzene	EPA 8260C	SCM	Y	x	
NY	1,3-Dichloropropane	EPA 8260C	SCM	Y	x	
NY	1,4-Dichlorobenzene	EPA 8260C	SCM	Y	x	
NY	1,4-Dioxane	EPA 8260C	SCM	Y	x	
NY	2,2-Dichloropropane	EPA 8260C	SCM	Y	x	
NY	2-Butanone	EPA 8260C	SCM	Y	x	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	2-Chloroethyl Vinyl ether	EPA 8260C	SCM	Y	x	
NY	2-Chlorotoluene	EPA 8260C	SCM	Y	x	
NY	2-Hexanone	EPA 8260C	SCM	Y	x	
NY	4-Chlorotoluene	EPA 8260C	SCM	Y	x	
NY	4-Methyl-2-Pentanone	EPA 8260C	SCM	Y	x	
NY	Acetone	EPA 8260C	SCM	Y	x	
NY	Acrolein	EPA 8260C	SCM	Y	x	
NY	Acrylonitrile	EPA 8260C	SCM	Y	x	
NY	Benzene	EPA 8260C	SCM	Y	x	
NY	Bromobenzene	EPA 8260C	SCM	Y	x	
NY	Bromochloromethane	EPA 8260C	SCM	Y	x	
NY	Bromodichloromethane	EPA 8260C	SCM	Y	x	
NY	Bromoform	EPA 8260C	SCM	Y	x	
NY	Bromomethane	EPA 8260C	SCM	Y	x	
NY	Carbon Disulfide	EPA 8260C	SCM	Y	x	
NY	Carbon Tetrachloride	EPA 8260C	SCM	Y	x	
NY	Chlorobenzene	EPA 8260C	SCM	Y	x	
NY	Chloroethane	EPA 8260C	SCM	Y	x	
NY	Chloroform	EPA 8260C	SCM	Y	x	
NY	Chloromethane	EPA 8260C	SCM	Y	x	
NY	cis-1,2-Dichloroethene	EPA 8260C	SCM	Y	x	
NY	cis-1,3-Dichloropropene	EPA 8260C	SCM	Y	x	
NY	Cyclohexane	EPA 8260C	SCM	Y	x	
NY	Dibromochloromethane	EPA 8260C	SCM	Y	x	
NY	Dibromomethane	EPA 8260C	SCM	Y	x	
NY	Dichlorodifluoromethane	EPA 8260C	SCM	Y	x	
NY	Diethyl ether	EPA 8260C	SCM	Y	x	
NY	Ethyl acetate	EPA 8260C	SCM	Y	x	
NY	Ethyl Methacrylate	EPA 8260C	SCM	Y	x	
NY	Ethylbenzene	EPA 8260C	SCM	Y	x	
NY	Hexachlorobutadiene	EPA 8260C	SCM	Y	x	
NY	Isopropylbenzene	EPA 8260C	SCM	Y	x	
NY	m+p-Xylene	EPA 8260C	SCM	Y	x	
NY	Methyl Acetate	EPA 8260C	SCM	Y	x	
NY	Methyl Cyclohexane	EPA 8260C	SCM	Y	x	
NY	Methyl tert-butyl ether	EPA 8260C	SCM	Y	x	
NY	Methylene Chloride	EPA 8260C	SCM	Y	x	
NY	Naphthalene	EPA 8260C	SCM	Y	x	
NY	n-Butanol	EPA 8260C	SCM	Y	x	
NY	n-Butylbenzene	EPA 8260C	SCM	Y	x	
NY	n-Propylbenzene	EPA 8260C	SCM	Y	x	
NY	o-Xylene	EPA 8260C	SCM	Y	x	
NY	p-Isopropyltoluene	EPA 8260C	SCM	Y	x	
NY	sec-Butylbenzene	EPA 8260C	SCM	Y	x	
NY	Styrene	EPA 8260C	SCM	Y	x	
NY	Tert-Butyl Alcohol	EPA 8260C	SCM	Y	x	
NY	Tert-Butylbenzene	EPA 8260C	SCM	Y	x	
NY	Tetrachloroethene	EPA 8260C	SCM	Y	x	
NY	Toluene	EPA 8260C	SCM	Y	x	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Total Xylenes	EPA 8260C	SCM	Y	x	
NY	Trans-1,2-Dichloroethene	EPA 8260C	SCM	Y	x	
NY	Trans-1,3-Dichloropropene	EPA 8260C	SCM	Y	x	
NY	Trans-1,4-Dichloro-2-butene	EPA 8260C	SCM	Y	x	
NY	Trichloroethene	EPA 8260C	SCM	Y	x	
NY	Trichlorofluoromethane	EPA 8260C	SCM	Y	x	
NY	Vinyl Acetate	EPA 8260C	SCM	Y	x	
NY	Vinyl Chloride	EPA 8260C	SCM	Y	x	
NY	1,1'-Biphenyl	EPA 8270D	SCM	x	Y	
NY	1,2,4,5-Tetrachlorobenzene	EPA 8270D	SCM	Y	Y	
NY	1,2,4-Trichlorobenzene	EPA 8270D	SCM	Y	Y	
NY	1,2-Dichlorobenzene	EPA 8270D	SCM	Y	Y	
NY	1,2-Diphenylhydrazine	EPA 8270D	SCM	Y	Y	
NY	1,3-Dichlorobenzene	EPA 8270D	SCM	Y	Y	
NY	1,4-Dichlorobenzene	EPA 8270D	SCM	Y	Y	
NY	2,3,4,6-Tetrachlorophenol	EPA 8270D	SCM	Y	Y	
NY	2,4,5-Trichlorophenol	EPA 8270D	SCM	Y	Y	
NY	2,4,6-Trichlorophenol	EPA 8270D	SCM	Y	Y	
NY	2,4-Dichlorophenol	EPA 8270D	SCM	Y	Y	
NY	2,4-Dimethylphenol	EPA 8270D	SCM	Y	Y	
NY	2,4-Dinitrophenol	EPA 8270D	SCM	Y	Y	
NY	2,4-Dinitrotoluene (2,4-DNT)	EPA 8270D	SCM	Y	x	
NY	2,6-Dinitrotoluene (2,6-DNT)	EPA 8270D	SCM	Y	x	
NY	2-Chloronaphthalene	EPA 8270D	SCM	Y	Y	
NY	2-Chlorophenol	EPA 8270D	SCM	Y	Y	
NY	2-Methyl-4,6-dinitrophenol	EPA 8270D	SCM	Y	Y	
NY	2-Methylnaphthalene	EPA 8270D	SCM	Y	Y	
NY	2-Methylphenol	EPA 8270D	SCM	Y	Y	
NY	2-Nitroaniline	EPA 8270D	SCM	Y	Y	
NY	2-Nitrophenol	EPA 8270D	SCM	Y	Y	
NY	3,3-Dichlorobenzidine	EPA 8270D	SCM	Y	Y	
NY	3-Methylphenol	EPA 8270D	SCM	Y	Y	
NY	3-Nitroaniline	EPA 8270D	SCM	Y	Y	
NY	4-Bromophenyl phenyl ether	EPA 8270D	SCM	Y	Y	
NY	4-Chloro-3-methylphenol	EPA 8270D	SCM	Y	Y	
NY	4-Chlorophenyl phenyl ether	EPA 8270D	SCM	Y	Y	
NY	4-Methylphenol	EPA 8270D	SCM	Y	Y	
NY	4-Nitroaniline	EPA 8270D	SCM	Y	Y	
NY	4-Nitrophenol	EPA 8270D	SCM	Y	Y	
NY	Acenaphthene	EPA 8270D	SCM	Y	Y	
NY	Acenaphthylene	EPA 8270D	SCM	Y	Y	
NY	Acetophenone	EPA 8270D	SCM	Y	Y	
NY	Aniline	EPA 8270D	SCM	Y	Y	
NY	Anthracene	EPA 8270D	SCM	Y	Y	
NY	Atrazine	EPA 8270D	SCM	Y	x	
NY	Benzaldehyde	EPA 8270D	SCM	Y	Y	
NY	Benzidine	EPA 8270D	SCM	Y	Y	
NY	Benzo(a)anthracene	EPA 8270D	SCM	Y	Y	
NY	Benzo(a)pyrene	EPA 8270D	SCM	Y	Y	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Benzo(b)fluoranthene	EPA 8270D	SCM	Y	Y	
NY	Benzo(ghi)perylene	EPA 8270D	SCM	Y	Y	
NY	Benzo(k)fluoranthene	EPA 8270D	SCM	Y	Y	
NY	Benzoic Acid	EPA 8270D	SCM	Y	Y	
NY	Benzyl alcohol	EPA 8270D	SCM	Y	Y	
NY	Biphenyl	EPA 8270D	SCM	Y	x	
NY	Bis(2-chloroethoxy) methane	EPA 8270D	SCM	Y	Y	
NY	Bis(2-chloroethyl) ether	EPA 8270D	SCM	Y	Y	
NY	Bis(2-chloroisopropyl) ether	EPA 8270D	SCM	Y	Y	
NY	Bis(2-ethylhexyl) phthalate	EPA 8270D	SCM	Y	Y	
NY	Butyl Benzyl phthalate	EPA 8270D	SCM	Y	Y	
NY	Caprolactam	EPA 8270D	SCM	Y	Y	
NY	Carbazole	EPA 8270D	SCM	Y	Y	
NY	Chrysene	EPA 8270D	SCM	Y	Y	
NY	Dibenzo(a,h)anthracene	EPA 8270D	SCM	Y	Y	
NY	Dibenzofuran	EPA 8270D	SCM	Y	Y	
NY	Diethyl phthalate	EPA 8270D	SCM	Y	Y	
NY	Dimethyl phthalate	EPA 8270D	SCM	Y	Y	
NY	Di-n-butyl phthalate	EPA 8270D	SCM	Y	Y	
NY	Di-n-octyl phthalate	EPA 8270D	SCM	Y	Y	
NY	Diphenylamine	EPA 8270D	SCM	Y	x	
NY	Fluoranthene	EPA 8270D	SCM	Y	Y	
NY	Fluorene	EPA 8270D	SCM	Y	Y	
NY	Hexachlorobenzene	EPA 8270D	SCM	Y	Y	
NY	Hexachlorobutadiene	EPA 8270D	SCM	Y	x	
NY	Hexachlorocyclopentadiene	EPA 8270D	SCM	Y	Y	
NY	Hexachloroethane	EPA 8270D	SCM	Y	Y	
NY	Indeno(1,2,3-cd)pyrene	EPA 8270D	SCM	Y	Y	
NY	Isophorone	EPA 8270D	SCM	Y	Y	
NY	Naphthalene	EPA 8270D	SCM	Y	Y	
NY	Nitrobenzene	EPA 8270D	SCM	Y	Y	
NY	N-Nitrosodimethylamine	EPA 8270D	SCM	Y	Y	
NY	N-Nitrosodi-n-propylamine	EPA 8270D	SCM	Y	Y	
NY	N-Nitrosodiphenylamine	EPA 8270D	SCM	Y	Y	
NY	Parathion	EPA 8270D	SCM	Y	x	
NY	Pentachloronitrobenzene	EPA 8270D	SCM	Y	Y	
NY	Pentachlorophenol	EPA 8270D	SCM	Y	Y	
NY	Phenanthrene	EPA 8270D	SCM	Y	Y	
NY	Phenol	EPA 8270D	SCM	Y	Y	
NY	Pyrene	EPA 8270D	SCM	Y	Y	
NY	Pyridine	EPA 8270D	SCM	Y	Y	
NY	Acenaphthene	EPA 8270D-SIM	SCM	Y	x	
NY	Acenaphthylene	EPA 8270D-SIM	SCM	Y	x	
NY	Anthracene	EPA 8270D-SIM	SCM	Y	x	
NY	Benzo(a)anthracene	EPA 8270D-SIM	SCM	Y	x	
NY	Benzo(a)pyrene	EPA 8270D-SIM	SCM	Y	x	
NY	Benzo(b)fluoranthene	EPA 8270D-SIM	SCM	Y	x	
NY	Benzo(ghi)perylene	EPA 8270D-SIM	SCM	Y	x	
NY	Benzo(k)fluoranthene	EPA 8270D-SIM	SCM	Y	x	

Summary of Certification

State	Parameter	Method	Matrix	Alpha Westboro	Alpha Mansfield	Notes
NY	Chrysene	EPA 8270D-SIM	SCM	Y	x	
NY	Dibenzo(a,h)anthracene	EPA 8270D-SIM	SCM	Y	x	
NY	Fluoranthene	EPA 8270D-SIM	SCM	Y	x	
NY	Fluorene	EPA 8270D-SIM	SCM	Y	x	
NY	Indeno(1,2,3-cd)pyrene	EPA 8270D-SIM	SCM	Y	x	
NY	Naphthalene	EPA 8270D-SIM	SCM	Y	x	
NY	Phenanthrene	EPA 8270D-SIM	SCM	Y	x	
NY	Pyrene	EPA 8270D-SIM	SCM	Y	x	
NY	Cyanide - Amenable, Distillation	EPA 9010C	SCM	Y	x	
NY	Cyanide, Distillation	EPA 9010C	SCM	Y	x	
NY	Cyanide, Total	EPA 9012B	SCM	Y	x	
NY	Cyanide, Total	EPA 9014	SCM	Y	x	
NY	Extractable Organic Halides (EOX)	EPA 9023	SCM	Y	x	
NY	Sulfate	EPA 9038	SCM	Y	x	
NY	pH	EPA 9040C	SCM	Y	x	
NY	pH	EPA 9045D	SCM	Y	x	
NY	Specific Conductance	EPA 9050A	SCM	Y	x	
NY	Total Organic Carbon	EPA 9060	SCM	x	Y	
NY	Total Phenolics	EPA 9065	SCM	Y	x	
NY	Oil & Grease	EPA 9071B	SCM	Y	x	
NY	Chloride	EPA 9251	SCM	Y	x	
NY	Total Organic Carbon	Lloyd Kahn	SCM	x	Y	

APPENDIX I

Turbidity Curtain Removal Waste Manifest

MIDDLESEX COUNTY UTILITIES AUTHORITY
Solid Waste Division
Administrative Office - 53 Edgeboro Road
East Brunswick, NJ 08816
(732) 246-4313 Fax (732) 246-8846

MIDDLESEX COUNTY LANDFILL
FACILITY I.D. NO. 1204A
INVOICE / RECEIPT DOCUMENT NUMBER

100081002

ATLA843893

I agree to deliver solid waste for disposal in accordance with current Middlesex County Utility Authority landfill policies and procedures. I hereby certify that the information provided on this form is true to the best of my knowledge.

ATLANTIC RESPONSE INC
12D CONNERTY COURT
EAST BRUNSWICK, NJ08816-

Driver Signature:

Date	Entry Time	Operator	Exit Time	Operator	Gross Weight	Tare Weight	Net Weight
2/21/2019	08:40:42 SCALEHOUSE3PC	Kelly A.	09:36:15 SCALEHOUSE3PC	Kelly A.	35860 lb Scale 4 17.9300 Tons	33840 lb Scale 4 16.9200 Tons	2020 lb 1.0100 Tons

Vehicle No.	Type	Plate	DEP Info		
022129	OPEN 20	AT271Y	Carrier: 024183	Truck: 022129	Container: 263692

Quantity	W.C.	Description/Origin	Units	Unit Price	Amount
1.0100	13	BULKY WASTE / East Brunswick Twp. (Middlesex) 100%	Ton	$82.00/TON	$82.82

BOX 205

ok (PD) AR-3350

Check # 10714: $82.82
Change: $0.00

Total Amount **$82.82**