

Tony's Cleaners

NASSAU COUNTY, NEW YORK

Construction Completion Report

NYSDEC Site Number: 130217

Prepared for:

Nu-Life Realty LLC

P.O. Box 302

Roslyn, NY 11576

Prepared by:

Advanced Cleanup Technologies, Inc.

110 Main Street, Suite 103

Port Washington, NY 11050

JANUARY 2017

CERTIFICATIONS

I, Andrew R. Levenbaum, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the May 9, 2014 IRM Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved IRM Work Plan.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form 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, Andrew R. Levenbaum, of Levenbaum Associates, Inc. am certifying as Owner's Designated Site Representative for the site.

Andrew R. Levenbaum
NYS Professional Engineer #

2/1/17
Date

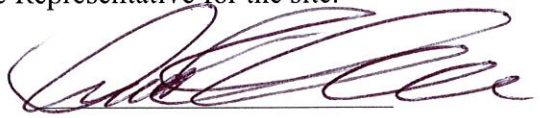

Signature



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LIST OF ACRONYMS

Acronym	Definition
ACT	Advanced Cleanup Technologies, Inc.
BES	Brockerhoff Environmental Services LLC
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CFM	Cubic feet per minute
CPP	Community Participation Plan
Cis-1,2-DCE	Cis-1,2-Dichloroethene
DUSR	Data Usability Summary Report
EC	Engineering Control
GAC	Granular Activated Carbon
HASP	Health and Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
mg/kg	Milligram per kilogram
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethene
RAO	Remedial Action Objective
SC	Site Characterization
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SSD	Sub-Slab Depressurization
SVE	Soil Vapor Extraction
SVES	Soil Vapor Extraction System
TCE	Trichloroethene
ug/l	Microgram per liter
ug/m ³	Microgram per cubic meter
UUSCO	Unrestricted Use Soil Cleanup Objective
VOCs	Volatile Organic Compounds
w.c.	Water column

CONSTRUCTION COMPLETION REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

Nu-Life Realty LLC entered into an Order on Consent with the NYSDEC in November 2013 to investigate and remediate a property known as 429-441 Merrick Road (the site) located in the Village of Lynbrook, New York. Advanced Cleanup Technologies, Inc. (ACT) was retained to characterize soil, soil vapor and groundwater quality beneath the site, mitigate the presence of contamination beneath the site and satisfy all requirements of the Order on Consent.

The site is located in the County of Nassau, New York and is identified as Block 320 and Lots 160, 161 and 162 on Section 37 of the Nassau County Tax Map. The site is situated on an approximately 0.46-acre property bounded by residential properties to the north, Merrick Road followed by commercial properties to the south, Nieman Avenue followed by a church and parochial school to the east, and commercial properties to the west. The boundaries of the site are fully described in Appendix A: Survey Map.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Site Characterization, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.

2.1.2 Soil RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in correspondence dated October 8, 2014, which approved the Interim Remedial Measure Work Plan (IRM Work Plan) dated May 9, 2014.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Construction and operation of an Soil Vapor Extraction System (SVES) at the site;
2. Replacement of the existing exhaust fan inside the dry cleaner with a new 3,000 cfm Dayton Centrifugal belt-drive upblast exhaust ventilator and new fresh air intake in the roof of the dry cleaner;
3. Execution and recording of an Environmental Easement to restrict land use to commercial and/or industrial use and prevent future exposure to any contamination remaining at the site. Permitted future uses (commercial & industrial) must comply with 6 NYCRR 375-1.8(g)(iii) for commercial uses and 6 NYCRR 375-1.8(g)(iv) for industrial uses.
4. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
5. Periodic certification of the institutional and engineering controls listed above.

3.0 INTERIM REMEDIAL MEASURE

The remedy for this site was performed as an Interim Remedial Measure (IRM).

In December 2012 a SVES was installed inside the dry cleaner. The SVES consists of two vertical 2-inch diameter by 10-foot long soil vapor extraction wells installed from the base of the slab on grade to within 1 foot of the water table. The extraction wells are connected to a 2-inch diameter overhead header pipe leading to a moisture separator, pre-filter and 3 Hp FPZ regenerative blower located in the boiler room. The air stream exiting the blower was treated with two 175-pound vapor phase granular activated carbon adsorbers in series located along the dry cleaner's northern exterior wall. An exhaust pipe exiting the second carbon canister extended 3 feet above the roofline. After receiving the NYSDEC's Division of Air Resources approval, the air stream exiting the regenerative blower was subsequently reconfigured to discharge directly through the exhaust pipe.

In July 2014, the SVES was expanded to overcome boundary effects caused by the building's central footing. The expanded SVES consists of two vertical 3-inch diameter depressurization wells screened from 2 feet to 6 feet in depth. Riser piping connects each well screen to a dedicated 320 Watt RadonAway vacuum blower installed on the roof.

In September 2014 the original exhaust fan inside the dry cleaner was replaced with a new 3,000 cfm Dayton centrifugal belt-drive upblast exhaust ventilator located next to the former exhaust fan, which was then sealed. A new fresh air intake was installed on the front roof to avoid drawing in fumes from nearby restaurant exhausts. The intake was also ducted to the back of the dry cleaner to keep the customer area warm in the winter.

The information and certifications contained in this CCR certify that the remediation requirements for the site have been met.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

4.1 GOVERNING DOCUMENTS

Remedial activities completed at the Site were conducted in accordance with a NYSDEC-approved IRM Work Plan (May, 2014) and Site Characterization Work Plan (August, 2014). All deviations from the IRM Work Plan and Site Characterization Work Plan are noted below.

4.1.1 Site Specific Health & Safety Plan

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

A site-specific Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Community Air Monitoring Plan

Community air monitoring was performed during all invasive remedial activities, including soil boring installation and ground water monitoring. Monitoring consisted of trained personnel utilizing a hand-held Photoionization Detector (PID) to monitor for the presence of organic vapors. Monitoring took place on a continuous basis and the results recorded in the daily field log.

4.1.3 Community Participation Plan

A Community Participation Plan was prepared which included a background of the site and remedial activities to date. It also included tasks required to provide the public with information about the site, including the site's document repository and site contact list along with a fact sheet prepared by the NYSDEC.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

- ACT constructed and installed the soil vapor extraction and sub-slab depressurization systems and was responsible for remedial performance and documentation sampling to verify that air quality inside the building had been restored and that significant vacuum was being maintained beneath the building;
- Milicia Electric installed electric service to each of the motors and constructed the roof penetrations for the expanded sub-slab depressurization system.
- Norm and Sons Inc. installed an upgraded exhaust ventilator, fresh air intake and ductwork inside the dry cleaner.
- Andrew R. Levenbaum, PE of Levenbaum Associates, Inc. was responsible for directing and supervising all work and is the certifying Engineer of Record.

4.2.2 Site Preparation

A pre-construction meeting was held with NYSDEC on December 19, 2013.

Documentation of agency approvals required by the IRM Work Plan is included in Appendix B.

4.2.3 General Site Controls

- Each commercial unit is secured by front and back locking doors accessible only by the tenant and owner. Tenants have agreed to provide access to all remedial equipment and monitoring locations installed at the site.
- Wireless telemetry provides 24/7/365 continuous logging of blower and exhaust fan operating status as well as email and text notification of alarm conditions.
- Soil sampling was performed utilizing 4 and 5-foot long disposable acetate liners.
- Ground water sampling was performed utilizing a peristaltic pump and 3/8 inch diameter disposable neoprene and polyethylene tubing.
- Soil vapor sampling was performed utilizing 1/4 inch diameter disposal Teflon tubing and laboratory-supplied Summa canisters.
- All non-disposable equipment such as drilling tools and ground water sampling equipment was decontaminated using a combination of detergent and tap water

rinses prior to first use on site, between each investigation location and depth and prior to demobilization.

- All waste derived from remedial activities, including but not limited to drill cuttings and monitoring well purge and development water, were containerized in 55-gallon DOT-approved drums, stored onsite and transported offsite for disposal as manifested waste. Copies of the fully executed waste manifests are contained in Appendix C.

4.2.4 Nuisance controls

- Truck wash and egress housekeeping,
- Dust generated during interior installation work was mitigated by a combination of polyethylene drop cloths and ventilation fans. No dust was generated during exterior soil, soil vapor or ground water sampling or well installation.
- All work vehicles were parked in the front parking lot or along side streets. No vehicle routing issues or other complaints were received.

4.3 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

A detailed description of all investigations performed at the site is provided in the June 12, 2015 Site Characterization Report. A summary of the investigations performed before, during and after implementation of the IRM work plan to verify its effectiveness is provided below.

4.3.1 Soil Sampling and Analysis

The locations where soil samples were collected at the site are depicted in Figure 1. A summary of historical soil quality data is provided in Table 1. In February 2012 a subsurface investigation by Brockerhoff Environmental Services LLC (BES) found PCE and TCE above their respective UUSCOs in soil sample SS-2 collected next to the dry cleaning machine and PCE above its UUSCO in soil sample SS-4 collected beneath the northern portion of the building.

On August 15, 2012 ACT installed and sampled three soil borings inside the dry cleaner. No VOCs were detected above UUSCOs in any of the soil borings except Methylene Chloride, which was attributed to a laboratory artifact.

On October 9 and October 10, 2014, ACT installed one soil boring (SB-5) along the southern property boundary and one soil boring (SB-6) along the northern property boundary. No VOCs were detected above the laboratory method detections limits in any of the soil samples.

Residual soil contamination may be present beneath the building. Endpoint soil sampling will be performed at the completion of remedial activities to verify the absence of soil contamination above UUSCOs. Soil quality data should be compared to the commercial use soil cleanup objectives identified in 6 NYCRR Part 375, Table 375-6.8(b).

4.3.2 Ground Water Sampling and Analysis

The locations where ground water samples were collected from cased monitoring wells at the site are depicted in Figure 2. Historical ground water flow diagrams are provided in Appendix D. A summary of historical ground water sampling results is provided in Table 2. All exceedances of ground water standards are highlighted.

Ground water quality was determined on four separate monitoring events between 2012 and 2014. Several trends in ground water quality were observed over this time period. Firstly, water quality in MW-2, located closest to the dry cleaning machine, consistently improved from 160 ug/l of PCE and 37 ug/l of TCE in 2012 to 3.8 ug/l of PCE and 0.41 ug/l of TCE in November 2014.

A similar improvement in water quality was observed in monitoring well MW-1 located in the southeast corner of the property where concentrations of PCE and TCE declined from 12 ug/l and 2.3 ug/l, respectively, in 2012 to 1.0 ug/l and not detected, respectively, in 2014. Water quality in MW-3 located cross-gradient of the dry cleaner improved from 3.0 ug/l PCE in 2012 to 1.5 ug/l PCE in 2014.

Monitoring well MW-4, located hydraulically downgradient of the dry cleaners, was the only monitoring well to show declining water quality where PCE concentrations increased from 7.5 ug/l in 2012 to 63 ug/l in 2014. This trend coincided with startup of the SVES, which may have resulted in a slight increase in PCE concentrations in the downgradient direction. On December 28, 2016, all onsite monitoring wells were collected and analyzed for VOCs and found to meet water quality standards.

4.3.3 Vapor Intrusion Sampling and Analysis

A summary of pre- and post-installation indoor air and sub-slab vapor quality data is provided in Table 3. All exceedances of NYSDOH indoor air guidelines or soil vapor screening levels are highlighted.

On March 13, 2014 vapor intrusion sampling was performed at the commercial units adjacent to the existing dry cleaner at the site. The results indicated that PCE was present above its indoor air guideline in air inside the pizzeria and salon, while PCE and TCE were present in soil vapor above their respective NYSDOH soil vapor screening levels only beneath the pizzeria.

On June 3, 2014 additional air samples were collected inside the pizzeria and salon after adjustments to the existing ventilation systems inside the pizzeria and salon. The results indicated significantly improved air quality in both commercial units, although PCE remained slightly above its indoor air guideline in the pizzeria.

In July 2014 the expanded SSD systems were installed and put into operation. In September 2014, a new exhaust ventilator was installed inside the dry cleaner to reduce fugitive emissions from the operating dry cleaner.

In January 2015 indoor air samples were collected inside the pizzeria and salon to verify that fugitive emissions from the dry cleaner had been controlled following installation of the new exhaust ventilator. Surprising, the results indicated an increase in PCE and TCE over the June 2014 results. Following interviews with field personnel, it was learned that the operator of the dry cleaner had turned off the new exhaust ventilator during the January 2015 sampling event.

The operator subsequently provided assurances that the exhaust ventilator would be kept running continuously to protect public health. To verify that the exhaust ventilator remains on, a pressure sensor was installed on the influent air duct and tied into the wireless telemetry system monitoring the SVES. An alarm condition will occur if pressure in the intake duct drops below 0.10 in. w.c. The exhaust ventilator has remained on since installation of the pressure sensor.

On March 5 and 18, 2015, post-installation indoor air and sub-slab vapor sampling was performed inside the pizzeria and salon, respectively. The results demonstrate that air quality inside the pizzeria and salon meet NYSDOH indoor air guidelines.

December 21, 2015 correspondence from the NYSDEC requested the installation of additional vacuum monitoring points in the southern portions of the beauty salon and pizzeria to ensure that negative pressure is being maintained beneath the entirety of the dry cleaners and two adjacent tenant spaces. On February 24 and 25, 2016, permanent vacuum monitoring points VP-5 and VP-6 were installed inside the pizzeria and beauty salon, respectively. A summary of vacuum measurements recorded in the six permanent vacuum monitoring points is provided below and in Table 4.

Table 4 - Induced Vacuum at Vacuum Monitoring Points (in. w.c.)

Date	VP-1	VP-2	VP-3	VP-4	VP-5	VP-6
4/27/15	0.22	1.29	0.36	0.56	NI	NI
5/29/15	0.25	2.64	0.36	0.61	NI	NI
2/24-25/16	0.145	2.60	0.27	0.60	1.62	0.58
NI = Not Installed						

The improved air quality inside the pizzeria and salon and significant vacuum being maintained beneath the dry cleaner and adjacent commercial units demonstrate that the IRM is effectively preventing sub-slab vapors from entering the breathing zones of the adjacent commercial units.

4.3.4 Treatment System Sampling and Analysis

A summary of historical treatment system influent and effluent sampling results is provided below and in Table 5.

Table 5 – Treatment System Sampling Data

Date		8/2/13	5/14/14	9/3/14	1/23/15/	4/27/15	6/11/15
PCE Concentration (µg/m ³)	Influent	15,100	713	2,500	630	180	2,200
	Effluent	4.54	13	340	1,400	410	1,500
Percentage Adsorbed by Both Carbons (%)		100	98	86	-122	-128	32

It can be seen from the above that prior to January 2015, the majority of PCE in the influent air stream was removed once passing through both carbon adsorbers. By January 2015, PCE had broken through the carbon adsorbers, which were subsequently removed and their contents disposed of as manifested wastes.

4.3.5 Ambient Air Quality Impact (DAR-1) Analysis

An ambient air quality impact analysis was performed in accordance of NYSDEC DAR-1 guidelines for the control of toxic ambient air contaminants. Based upon calculations of annual air impact with and without carbon treatment, the facility requested approval to terminate use of activated carbon treatment as an air control. On February 18, 2016 NYSDEC's Division of Air Resources provided approval to discontinue use of activated carbon treatment for the SVES exhaust at the site. A copy of the DAR-1 analysis and the NYSDEC correspondence is provided in Appendix E.

4.3.6 Data Usability Summary Reports (DUSRs)

Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. These DUSRs are included in Appendix F, and associated raw is provided electronically in Appendix G.

Since contaminated soil, ground water and soil vapor remain beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.4 ENGINEERING CONTROLS

Since remaining contaminated ground water and soil vapor exist beneath the site, Engineering Controls (EC) are required to protect human health and the environment. The site has the following primary ECs, as described in the following subsections.

4.4.1 Soil Vapor Extraction System

In December 2012 a SVES was installed inside the dry cleaners. The layout of the SVES is provided in Figure 3. Pilot test results verifying the projected influence and sizing of the SVES are provided in Appendix H.

The SVES consists of two vertical 2-inch diameter by 10-foot long soil vapor extraction wells (VW-1 and VW-2) installed from the base of the slab on grade to within 1 foot of the water table. Riser pipes for the extraction wells are fitted with gate valves and sampling ports and connected to a 2-inch diameter overhead header pipe leading to a 3 Hp FPZ regenerative blower located in the boiler room. A cross-section of a typical extraction well is provided as Detail “A” in Figure 4.

The FPZ regenerative blower is equipped with a vacuum relief valve, in-line filter and moisture separator with a high-level liquid level shutoff switch. The switch will shut the blower down when the liquid level within the moisture separator rises above a preset level, triggering an alarm condition. An internal thermal overload switch inside the blower will shut the blower down if there is an overload. Analog pressure switches are installed on each vacuum well, the influent manifold and exhaust of the regenerative blower for continuous logging of vacuum maintained by the SVES. In the event vacuum falls below 1.0 in. w.c., email and text messages will be sent to the ACT project manager indicating that the SVES is off.

The air stream exiting the blower was treated with two 175-pound vapor phase granular activated carbon adsorbers in series located along the dry cleaner’s northern exterior wall. After treatment, the air stream was discharged through a 4-inch diameter exhaust pipe located 3 feet above the roof of the building. On February 18, 2016 the NYSDEC’s Division of Air Resources approved discontinuance of the use of activated carbon treatment. Both carbon adsorbers were taken offline and the air stream exiting the regenerative blower was reconfigured to discharge through a 2-inch diameter exhaust pipe located 3 feet above the roofline.

4.4.2 Expanded Soil Vapor Extraction System

To overcome boundary effects caused by the building’s central footing, the SVES was expanded in July 2014 along the eastern interior wall of the dry cleaner. Pilot test results verifying the projected influence and appropriate sizing of the expanded SVES are provided in Appendix H.

The expanded SVES includes two new vertical 3-inch diameter depressurization wells (VW-3 and VW-4) screened from 2 feet to 6 feet below the slab at the approximate locations indicated in Figure 3. Each depressurization well is fitted with a gate valve and

sampling port. Riser pipes from the depressurization wells are connected to dedicated 320 Watt HS5000 RadonAway vacuum blowers installed on the roof. Each blower has an electronic pressure switch, which is installed on the vacuum side of the blower. The blower is thermally protected and will shut off when the internal temperature rises above 104 degrees F. A cross-section of the SVES wells is provided as Detail “B” in Figure 4.

Analog pressure switches are installed on the vacuum side of each newly installed depressurization well for continuous logging of vacuum maintained by the SVES. In the event vacuum falls below 1.0 in. w.c., email and text messages will be sent to the ACT project manager indicating that the SVES is off.

4.4.3 Indoor Air Ventilation

The exhaust fan located inside the back portion of the dry cleaner had reportedly never been serviced, functioned erratically and was not always utilized. The air intake was also located only a few feet away, with the potential for roof exhaust to be drawn back into the building. In September 2014 the original exhaust fan inside the dry cleaner was replaced with a new 3,000 cfm Dayton centrifugal belt-drive upblast exhaust ventilator located next to the former exhaust fan, which was then sealed. Specifications for the new exhaust ventilator are provided in Appendix I.

A new fresh air intake was installed on the front roof to avoid drawing in fumes from nearby restaurant exhausts. The new air intake was ducted to the back of the building to keep the customer area in the front warm during the winter. A digital vacuum switch was installed to measure the presence of vacuum in the intake duct. In the event vacuum falls below 0.10 in. wc, email and text messages will be sent to the ACT project manager indicating that the exhaust ventilator is off.

4.4.4 Monitoring, Operation and Maintenance

Six 3/8 in. diameter by 6-inch long brass vacuum monitoring points are installed through the concrete floor slab to verify that the performance objectives of the IRM have been reached by demonstrating that the SVES is providing adequate depressurization coverage. Two vacuum points (VP-1 and VP-2) are installed inside the dry cleaner, while the other four vacuum points are installed inside the pizzeria (VP-3 and VP-5) and the salon (VP-4 and VP-6). Specifications of the vacuum monitoring points are provided in Detail “C” of Figure 3.

A wireless telemetry system was installed on the interior wall next to the boiler room to monitor pressures throughout the SVES and the overhead exhaust ventilator

located inside the dry cleaner. Data is continuously logged from analog pressure sensors, which provides 24/7/365 real-time proof of the SVES's operating conditions. In the event of an alarm condition, the ACT project manager will be instantaneously contacted by email and text alert so a emergency service call can be performed.

Procedures for operating, maintaining and monitoring the SVES are provided in the Operation and Maintenance Plan in Section 4 of the Site Management Plan (SMP). The SMP also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

4.5 INSTITUTIONAL CONTROLS

The site remedy requires that an environmental easement be placed on the property to implement, maintain and monitor the Engineering Controls.

The environmental easement for the site was executed by the Department on December 29, 2015, and filed with the Nassau County Clerk on April 11, 2016. The County Recording Identifier number for this filing is 2016-35119. A copy of the easement and proof of filing is provided in Appendix J.

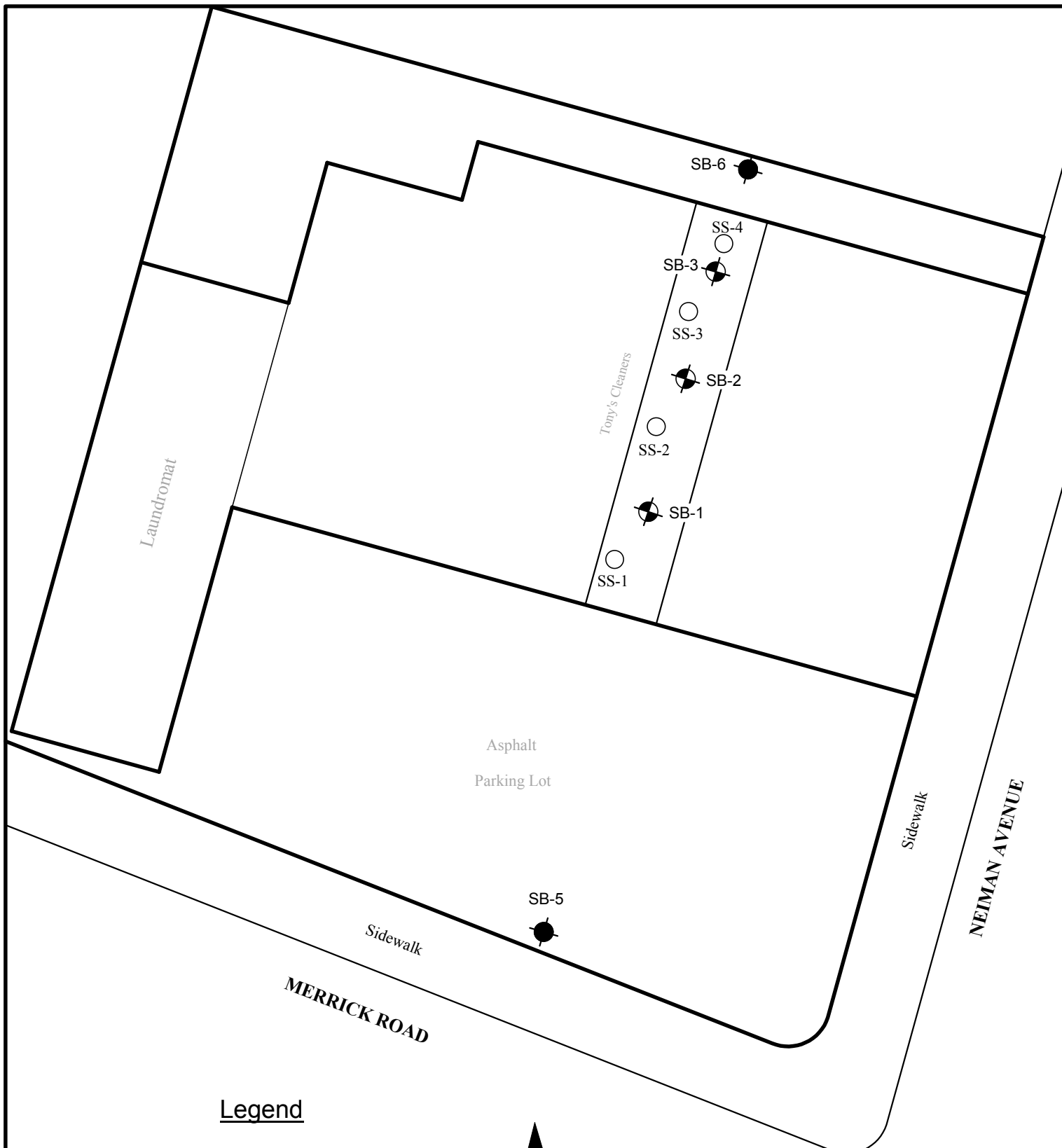
4.6 DEVIATIONS FROM THE IRM WORK PLAN

The approved IRM Work Plan called for the installation of SVES blowers in three of the remaining commercial units and vacuum monitoring points in each commercial unit. Following installation of the expanded SVES and exhaust ventilator inside the dry cleaners, indoor air sampling and vacuum measurements confirmed that the IRM was maintaining air quality inside the adjacent commercial units.

In light of the improved air quality inside the pizzeria and salon and significant vacuum being maintained beneath the dry cleaner and adjacent units, there does not appear to be a need to install SVES components beneath additional commercial units. Installing the remaining vacuum blowers and monitoring points would also be a significant inconvenience to commercial tenants and their guests. Therefore, the remaining SVES components and monitoring points were not installed as part of the IRM.

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Figures

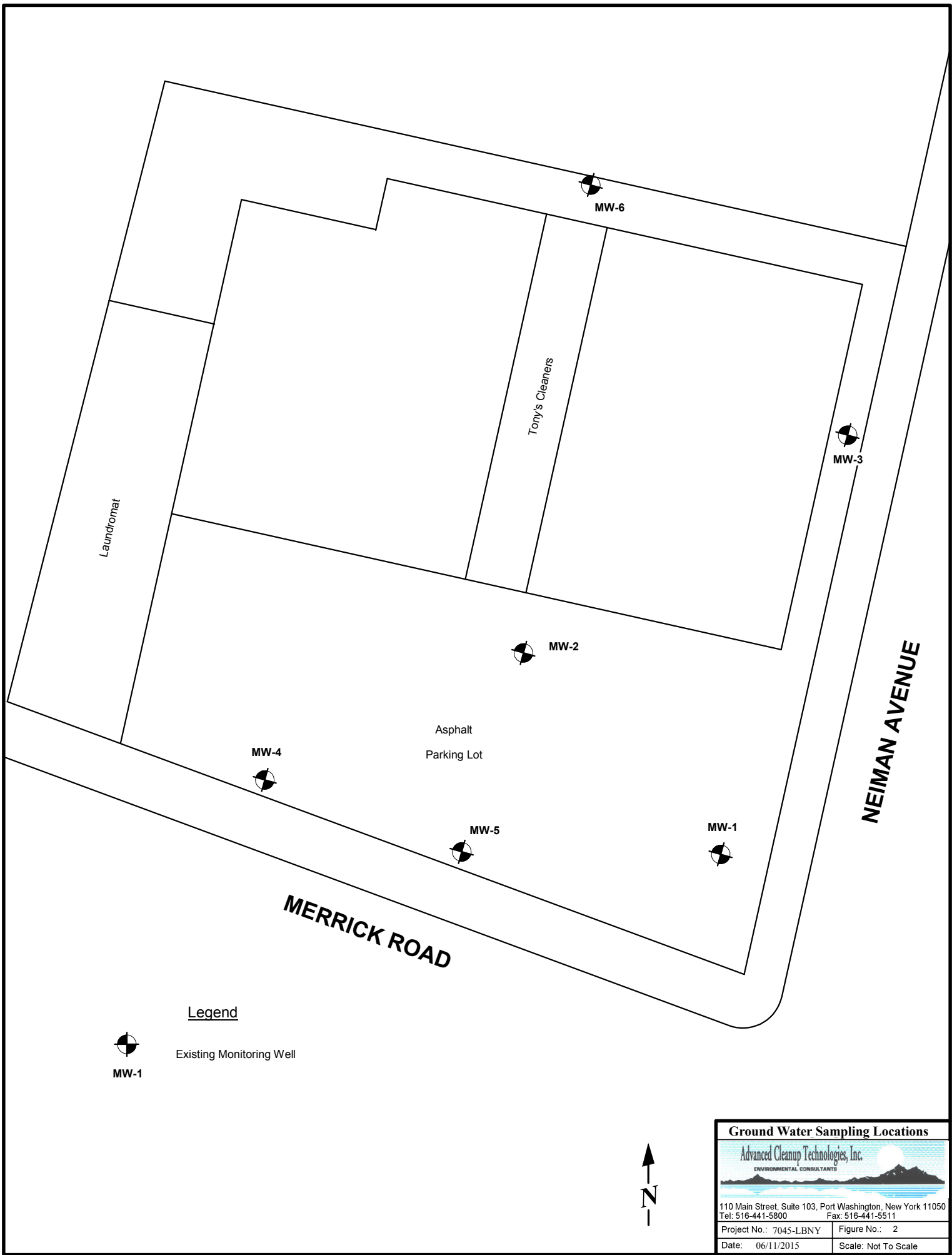


Legend

- SS-1 Soil Boring, Brockerhoff 2012
- ⊗ SB-1 Soil Boring, ACT 2012
- SB-5 Soil Boring, ACT 2014



Soil Sampling 	
960 S. Broadway, Suite 100, Hicksville, New York 11801 Tel: 516-933-0655 Fax: 516-933-0659	
Project No.: 7045-LBNY	Figure No.: 1
Date: 08/02/2016	Scale: Not To Scale



Legend



MW-1

Existing Monitoring Well

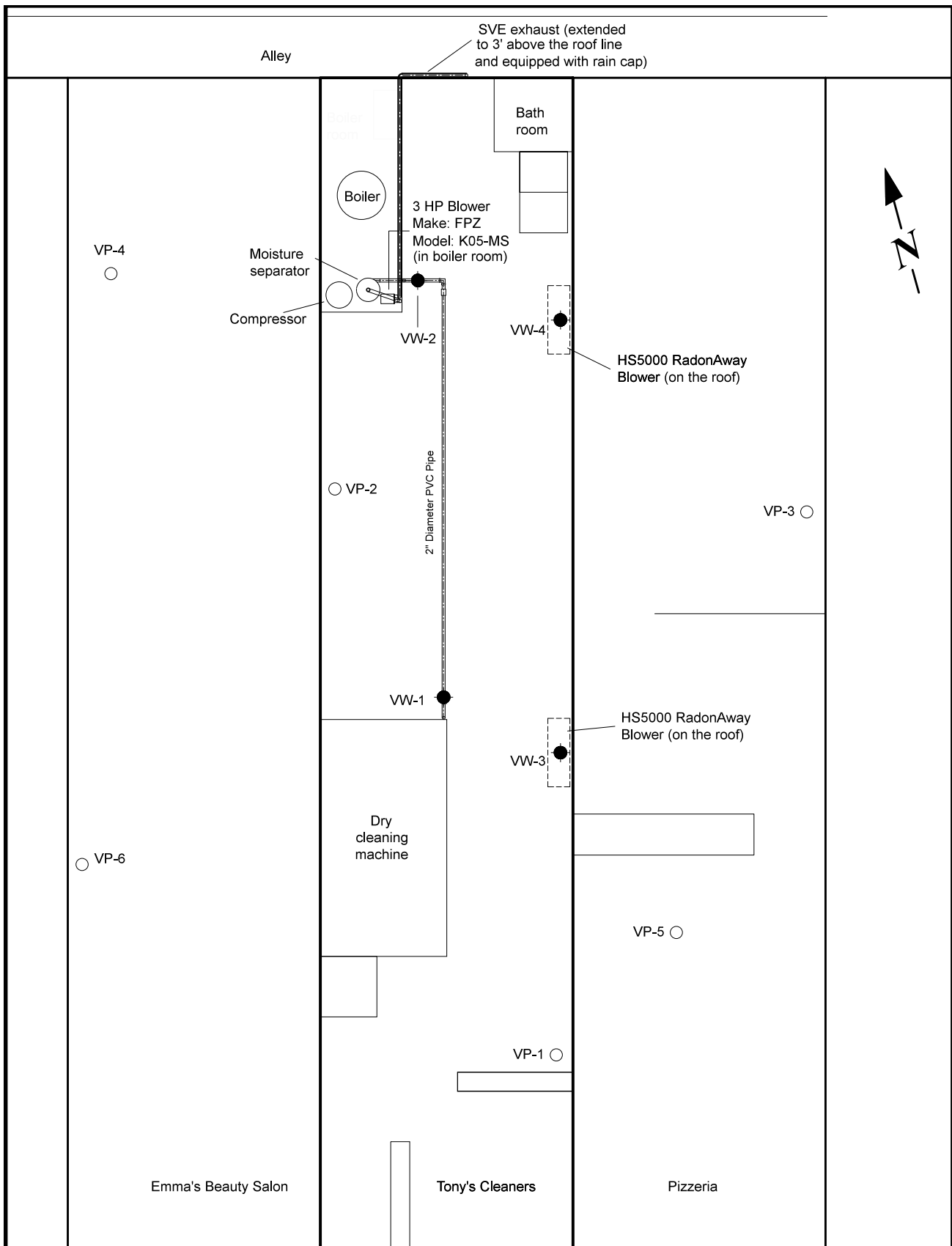
Ground Water Sampling Locations



110 Main Street, Suite 103, Port Washington, New York 11050
Tel: 516-441-5800 Fax: 516-441-5511

Project No.: 7045-LBNY Figure No.: 2

Date: 06/11/2015 Scale: Not To Scale



Parking Lot

LEGEND

VW

Vacuum Well

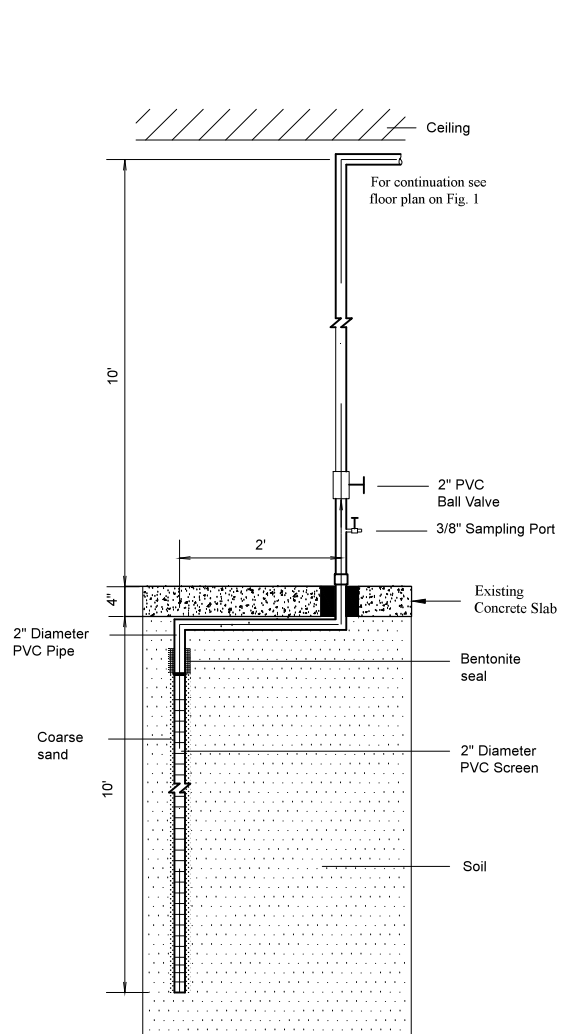
VP

Vacuum Point (typical of 6)

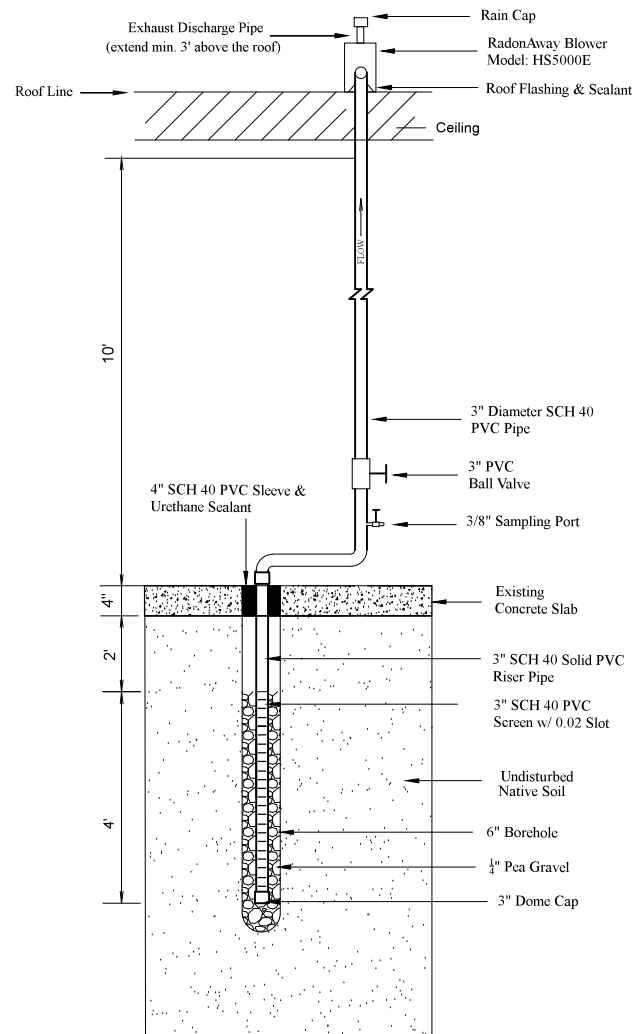
SSD/SVE SYSTEM LAYOUT

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS

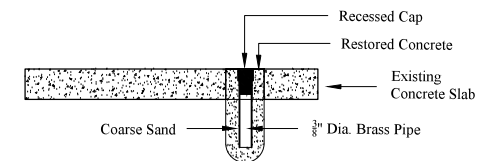
110 Main St., Suite 103, Port Washington, New York 11050	
Tel: 516-441-5800	Fax: 516-441-5511
Project No.: 7045-LBNY	Figure No.: 3
Date: 02/22/2016	Scale: 1" = 5.81'



Detail "A"
Typical Vacuum Well
Cross-Section
for VW-1 and VW-2



Detail "B"
Typical Expanded SSD Well
Cross-Section
for VW-3 and VW-4



Detail "C"
Typical Vacuum Point
Cross-Section



SSD/SVE CROSS-SECTIONS	
110 Main St., Suite 103, Port Washington, New York 11050 Tel: 516-441-5800 Fax: 516-441-5511	
Project No.: 7045-LBNY	Figure No.: 4
Date: 07/20/2015	Scale:

Tables

Table 1																
Volatile Organic Compounds in Soil (ug/kg)																
EPA Method 8260																
429 Merrick Road																
Lynbrook, NY 11563																
ACT Project No.: 7045-LBNY																
Sample ID	Standard			SS-1 (10-16')	SS-2 (10-16')	SS-3 (10-16')	SS-4 (10-16')	SB-1 (2-3')	SB-1 (9-10')	SB-2 (0-3')	SB-2 (9-11')	SB-3 (0-3')	SB-3 (9-11')	SB-5 (4-5')	SB-5 (11-12')	SB-6 (10-11')
Sample Date	UUSCO	RRSCO ²	CSCO ³	2/9/12	2/9/12	2/9/12	2/9/12	8/15/12	8/15/12	8/15/12	8/15/12	8/15/12	8/15/12	10/9/14	10/9/14	10/10/14
1,1,1,2-Tetrachloroethane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1,1-Trichloroethane	680	100,000	500,000	0.13U	6.2U	0.13U	6.5UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.093U	16U	0.09U	17UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1,2-Trichloroethane	NS	NS	NS	0.15U	19U	0.14U	20UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1-Dichloroethane	270	26,000	240,000	0.11U	13U	0.11U	14UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1-Dichloroethene	330	100,000	500,000	0.20U	8.8U	0.19U	9.3UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,1-Dichloropropene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
1,2,3-Trichlorobenzene	NS	NS	NS	0.17U	51U	0.16U	54UH*	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
1,2,3-Trichloropropane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
1,2,4,5-Tetramethylbenzene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
1,2,4-Trichlorobenzene	NS	NS	NS	0.20U	34U	0.19U	36UH*	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2,4-Trimethylbenzene	3,600	52,000	190,000	0.16U	13U	0.15U	13UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2-Dibromo-3-chloropropane	NS	NS	NS	0.46U	40U	0.44U	42UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2-Dibromoethane	NS	NS	NS	0.16U	27U	0.15U	29UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2-Dichlorobenzene	1,100	100,000	500,000	0.10U	20U	0.10U	22UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2-Dichloroethane	20	3,100	30,000	0.19U	19U	0.18U	20UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,2-Dichloropropane	NS	NS	NS	0.16U	8.6U	0.15U	9UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,3,5-Trimethylbenzene	8,400	52,000	190,000	0.12U	15U	0.12U	16UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,3-Dichlorobenzene	2,400	49,000	280,000	0.17U	13U	0.16U	14UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,3-dichloropropane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
1,4-Dichlorobenzene	1,800	13,000	130,000	0.11U	23U	0.11U	24UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
1,4-Dioxane	100	13,000	130,000	13U	3,600U*	13U	3,800UH*	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<49	<52	<54
2,2-Dichloropropane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
2-Butanone	120	100,000	500,000	0.65U	230U	0.63U	240UH	<5.3	<5.6	<5.5	<480	<5.2	<5.3	<2.5	<2.6	<2.7
2-Chloroethyl vinyl ether	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
2-Chlorotoluene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
2-Hexanone	NS	NS	NS	0.13U	50U	0.13U	52UH	<5.3	<5.6	<5.5	<480	<5.2	<5.3	<2.5	<2.6	<2.7
2-Propanol	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
4-Chlorotoluene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
4-Isopropyltoluene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
4-Methyl-2-pentanone	NS	NS	NS	0.21U	98U	0.20U	100UH	<5.3	<5.6	<5.5	<480	<5.2	<5.3	<2.5	<2.6	<2.7
Acetone	50	100,000	500,000	1.8U	270U	1.7U	280UH	<5.3	<5.6	<5.5	<480	<5.2	<5.3	<4.9	<5.2	<5.4
Acrolein	NS	NS	NS	NT	NT	NT	NT	<11	<11	<11	<950	<10	<11	<4.9	<5.2	<5.4
Acrylonitrile	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Benzene	60	4,800	44,000	0.16U	8.2U	0.15U	8.7UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Bromobenzene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Bromochloromethane	NS	NS	NS	0.11U	27U	0.11U	29UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Bromodichloromethane	NS	NS	NS	0.33U	12U	0.32U	13UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Bromoform	NS	NS	NS	0.18U	19U	0.17U	20UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Bromomethane	NS	NS	NS	0.45U	18U	0.43U	19UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Carbon disulfide	NS	NS	NS	0.16U	12U	0.15U	13UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Carbon tetrachloride	760	2,400	22,000	0.16U	5.7U	0.15U	6UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Chlorobenzene	1,100	100,000	500,000	0.19U	11U	0.18U	12UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Chlorodifluoromethane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Chloroethane	NS	NS	NS	0.34U	17U	0.33U	18UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Chloroform	370	49,000	350,000	0.25U	7.8U	0.24U	8.2UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Chloromethane	NS	NS	NS	0.17U	9.6U	0.16U	10UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
cis-1,2-Dichloroethene	250	100,000	500,000	1.5	380	1.7	49UH	<2.1	<2.2	0.85	<190	<2.1	<2.1	<2.5	<2.6	<2.7
cis-1,3-Dichloropropene	NS	NS	NS	0.15U	18U	0.14U	19UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Cyclohexane	NS	NS	NS	0.13U	16U	0.13U	17UH	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibromochloromethane	NS	NS	NS	0.10U	20U	0.10U	21UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Dibromomethane	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Dichlorodifluoromethane	NS	NS	NS	0.23U	21U	0.22U	23UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Diisopropyl ether	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Ethanol	NS	NS	NS	NT	NT	NT	NT	<5.3	<5.6	<5.5	<480	<5.2	<5.3	NT	NT	NT
Ethyl acetate	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Ethylbenzene	1,000	41,000	390,000	0.36U	9.5U	0.17U	10UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Freon-114 (Freon TF)	NS	NS	NS	0.11U	8.2U	0.11U	8.6UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Hexachlorobutadiene	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
Isopropyl acetate	NS	NS	NS	NT	NT	NT	NT	<2.1	<2.2	<2.2	<190	<2.1	<2.1	NT	NT	NT
Isopropylbenzene	NS	NS	NS	0.11U	7.6U	0.11U	8UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2.5	<2.6	<2.7
m,p-Xylene (p- & m- Xylenes)	NS	NS	NS	1.3J	24U	0.59U	26UH	<4.3	<4.5	<4.4	<380	<4.1	<4.2	<4.9	<5.2	<5.4
Methyl Acetate	NS	NS	NS	0.33U	33U	0.32U	35UH	<2.1	<2.2	<2.2	<190	<2.1	<2.1	<2		

Table 2

Historical Ground Water Data (2012-2016)

Tonys Cleaners Site
429 Merrick Road, Lynbrook, NY
NYSDEC Site No. 130217

	PCE	TCE	CIS-1,2-DCE
MW-1			
2/27/2012	12	2.3	0.28
7/13/2012	4	0.71	ND
9/10/2014	2.8	ND	ND
11/4/2014	1	ND	ND
12/28/2016	0.38	ND	
MW-2			
2/27/2012	160	37	20
7/13/2012	130	16	ND
9/10/2014	6	0.58	ND
11/4/2014	3.8	0.41	ND
12/28/2016	0.53	ND	ND
MW-3			
2/27/2012	ND	ND	ND
7/13/2012	0.98	ND	ND
9/10/2014	1	ND	ND
11/4/2014	1.5	ND	ND
12/28/2016	0.69	ND	ND
MW-4			
2/27/2012	NS	NS	NS
7/13/2012	7.5	1.2	ND
9/10/2014	33	5.5	2.9
11/4/2014	63	17	44
12/28/2016	ND	ND	ND
MW-5			
2/27/2012	NS	NS	NS
7/13/2012	NS	NS	NS
9/10/2014	NS	NS	NS
11/4/2014	30	3.8	1.4
12/28/2016	0.27	ND	ND
MW-6			
2/27/2012	NS	NS	NS
7/13/2012	NS	NS	NS
9/10/2014	NS	NS	NS
11/4/2014	0.53	ND	ND
12/28/2016	ND	ND	ND

NS = Not Sampled

ND = Not Detected above laboratory Detection Limits

Shaded = Detected above SCG of 5 ug/l

Table 3a

**Indoor Air Quality Data
429 Merrick Road
Lynbrook, NY**

Chemical	NYSDOH Air Guideline ¹	Pizzeria				Emma's Beauty Salon			
		3/13/14	6/3/14	1/23/15	3/5/15	3/13/14	6/3/14	1/23/15	3/18/15
PCE	30	331	47	170	8.5	106	14	120	ND
TCE	2	3.33	ND	1.7	0.38	0.75	ND	1.8	ND
cis-1,2-DCE	NG	<0.79	ND	ND	ND	<0.79	ND	ND	ND

[1] Table 3.1, Final Guidance for Evaluating Soil Vapor Intrusion in New York State, October 2006

ND = Not Detected

NG = No Guideline

Shaded value signifies exceedance of air guideline

Table 3b

**Sub-Slab Soil Vapor Quality Data
429 Merrick Road
Lynbrook, NY**

Chemical	Pizzeria (VP-3)				Emma's Beauty Salon (VP-4)			
	3/13/14	6/3/14	1/23/15	3/5/15	3/13/14	6/3/14	1/23/15	3/18/15
PCE	471	NA	NA	49	92.7	NA	NA	63
TCE	8.44	NA	NA	5.1	0.7	NA	NA	23
cis-1,2-DCE	2.34	NA	NA	2.2	<0.79	NA	NA	15

[2] Matrix 1 and Matrix 2, Final Guidance for Evaluating Soil Vapor Intrusion in New York State, October 2006

NS = No Screening Level

NA = Not Analyzed

Shaded value signifies exceedance of screening level

Table 4

Induced Vacuum at Vacuum Monitoring Points
(February 24-25, 2016)

Tony's Cleaners Site
429 Merrick Road, Lynbrook, Ny

NYSDEC Site No. 130217

Vacuum Point	Number	VP-1	VP-2	VP-3	VP-4	VP-5	VP-6
	Location	Dry Cleaner's front	Dry Cleaner's back	Pizzeria back	Beauty Salon back	Pizzeria front	Beauty Salon front
Vacuum (in. wc)		-0.145	-2.60	-0.274	-0.602	-1.62	-0.274

Table 5

Treatment System Sampling Data

Tony's Cleaners Site
429 Merrick Road, Lynbrook, Ny

NYSDEC Site No. 130217

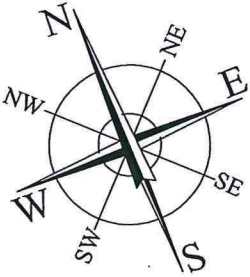
	Influent							Effluent						
Analyte \ Date	8/2/13	5/14/14	9/3/14	1/23/15*	4/27/15	6/11/15	7/28/15	8/2/13	5/14/14	9/3/14	1/23/15*	4/27/15	6/11/15	7/28/15
PCE	15100	713	2500	630	180	2200	2500	4.54	13	340	1400	410	1500	2200

* - Not in compliance with EPA TO-15 requirements

Appendix A

Survey Map

JOB NO.: 14-37622E



124.51' (DEED & CALC.)
124.30' +/- (TAX MAP)

N 22°26'00" E

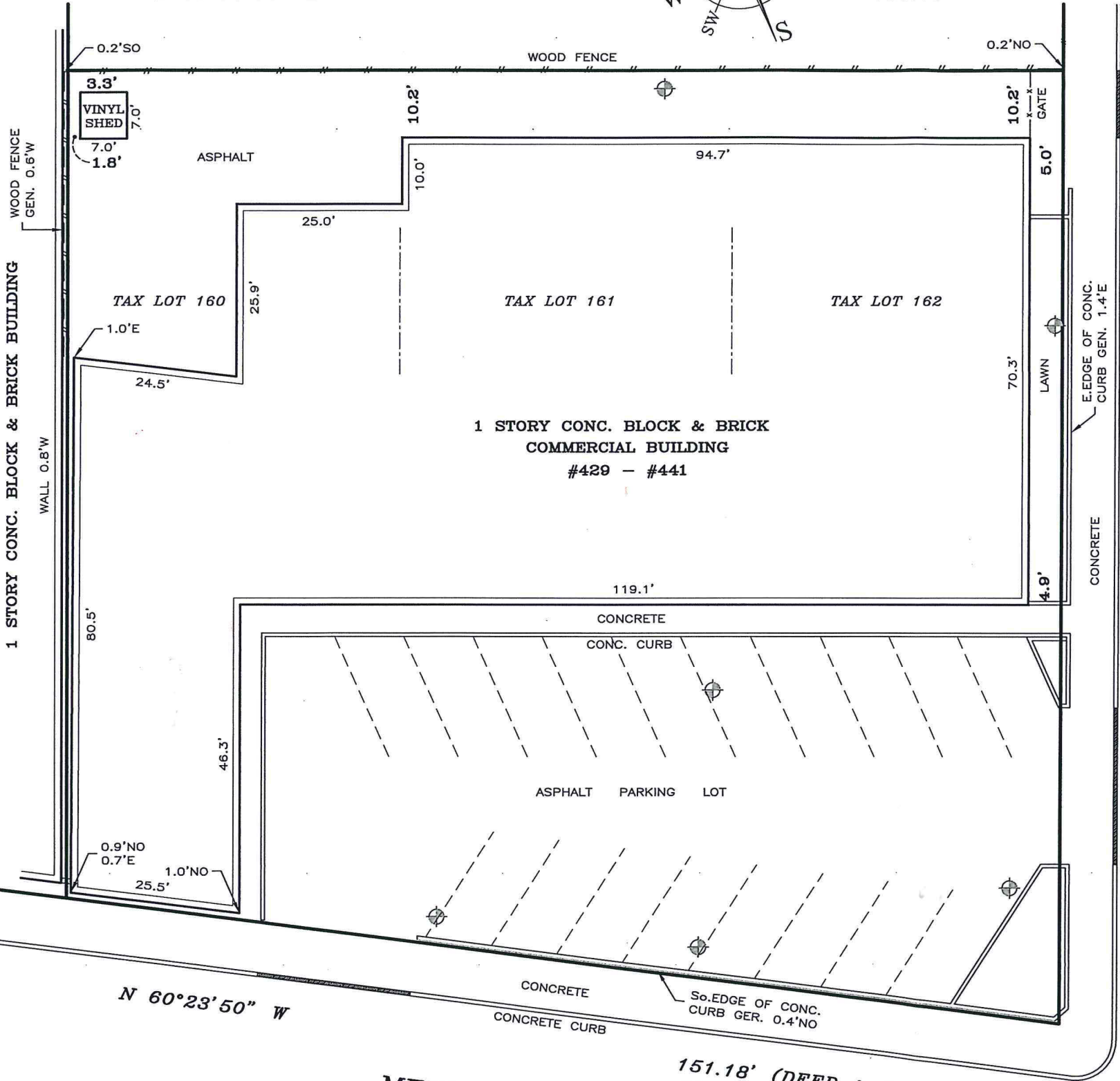
S 67°34'00" E

150.00'

143.38'

NIEMANN AVENUE

S 22°26'00" W



LEGEND:
MONITORING WELL

MERRICK ROAD

151.18' (DEED & CALC.)
151.162' (TAX MAP)

MAP of SURVEY

LOT 1-6
"MAP OF VALUABLE BUILDING SITES AT HIGHLAND PARK"
FILED ON 05/25/1905, AS MAP #260, CASE #1953

LOCATED AT:
INCORPORATED VILLAGE OF LYNBROOK,
TOWN OF HEMPSTEAD,
COUNTY OF NASSAU, STATE OF NEW YORK

TAX DESIGNATION:
SECTION: 37, BLOCK: 320, LOTS: 160-162

SURVEYED ON: OCTOBER 08, 2015

DRAWN BY: M.V. CHECKED BY: A.T.

ALEXANDER TSUKERMAN
N.Y.S. L.S. No. 050189



20 0 20 40 60
Scale 1" = 20'

THE EXISTENCE OF RIGHT OF WAYS AND/OR EASEMENTS
OF RECORD, IF ANY, NOT SHOWN ARE NOT CERTIFIED.

THE OFFSETS OR DIMENSIONS SHOWN FROM THE STRUCTURES TO THE PROPERTY LINES
ARE FOR A SPECIFIC PURPOSE AND USE AND THEREFORE ARE NOT INTENDED TO GUIDE
THE ERECTION OF FENCES, RETAINING WALLS, POOLS, PLANTING AREAS,
ADDITIONS TO STRUCTURES AND ANY OTHER CONSTRUCTION.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION
7209 OF THE NEW YORK STATE EDUCATION LAW.
COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL
OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

CERTIFICATION INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE
SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL
AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE
LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL
INSTITUTIONS OR SUBSEQUENT OWNERS.

LEONARD J. STRANDBERG AND ASSOCIATES,
CONSULTING ENGINEERS AND LAND SURVEYORS, P.C.
32 SMITH STREET, FREEPORT, NY 11520
516-378-2064 • 212-213-4090 • FAX 516-378-6649

SCHEDULE "A" PROPERTY DESCRIPTION

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected situate, lying and being in the Incorporated Village of Lynbrook, Town of Hempstead, County of Nassau and State of New York, being parts of Lots Nos. 1 thru 6 on a certain map entitled, "Map of Valuable Building Sites at Highland Park; situated at Lynbrook, in the Town of Hempstead, Nassau County, New York, owned by Fowler and Neimann, surveyed March 13, 1903, by D.S. Denton, East Rockaway, L.I." and filed in the Office of the Clerk of the County of Nassau on May 25, 1905 as Map No. 260, Case no. 1953, which said parts of Lots when taken together are more particularly bounded and described as follows:

BEGINNING AT the corner formed by the intersection of the northerly side of Merrick Road, (new line) and the westerly side of Nieman Avenue;

RUNNING THENCE North 60 degrees 23 minutes 50 seconds West 151.18 along the northerly side of Merrick Road (new line);

THENCE North 22 degrees 26 minutes 00 seconds East, 124.51 feet;

THENCE South 67 degrees 34 minutes 00 seconds East, 150.00 feet to the westerly side of Nieman Avenue;

THENCE South 22 degrees 26 minutes 00 seconds West, along the westerly side of Nieman Avenue 143.38 feet to the point or place of BEGINNING.

APPENDIX B

REGULATORY AGENCY CORRESPONDENCE

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region One
Stony Brook University
50 Circle Road, Stony Brook, New York 11790-3409
Phone: (631) 444-0240 • **Fax:** (631) 444-0248
Website: www.dec.ny.gov



Joe Martens
Commissioner

April 4, 2014

Mr. Paul Stewart
Advanced Cleanup Technologies, Inc.
960 South Broadway, Suite 100
Hicksville, NY 11801

Re: Tony's Cleaners Site #1-30-217
Draft Site Characterization Work Plan: March 2014

Dear Mr. Stewart,

The New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) have reviewed the referenced work plan and provide the following comments:

- Please include the units for the contaminant concentrations on Figure 3.
- Section 3.1: Are ten foot screens proposed for monitoring well construction? If so, three feet of screen should extend above the water table and seven feet below the water table, to allow for seasonal fluctuation.
- Have deeper groundwater samples been collected in a location downgradient of the contaminant source area? If not, perhaps a deeper sample can be collected at proposed location MW-5. A sample could be collected at a depth of twenty feet below the water table before the monitoring well is actually constructed and screened at the water table.
- Please collect water table elevation levels from the existing and newly constructed monitoring wells to confirm the site specific groundwater flow direction. Monitoring well casing elevations should be established by a New York State licensed surveyor.
- All drill cuttings and monitoring well purge water or development water should be containerized and characterized for off-site disposal at a permitted disposal facility.
- The newly constructed monitoring wells should be purged of at least three standing volumes and the turbidity measurement of groundwater should be below 50 nephelometric turbidity units.

- Based on the recent (March 2014) sub-slab soil gas, indoor and ambient air monitoring, an Interim Remedial Measure (IRM) work plan should be submitted which will provide the design parameters for any enhancements to the existing soil vapor extraction system. Consideration should be given to adding air sparging to the system to remediate groundwater and reduce a source of contamination which is affecting soil gas. The plan should include the previous radius of influence testing, baseline soil vapor concentrations, etc. You may want to consider an evaluation of the heating, ventilation and air conditioning (HVAC) systems to determine if fugitive PCE vapors are affecting indoor air quality and whether any modifications to the HVAC systems could improve the situation. The IRM work plan should be signed and sealed by a New York State licensed Professional Engineer.
- Please comply with DEC's Tenant Notification Law relating to the indoor air sampling results from the March 2014 vapor intrusion sampling at the site. DEC and DOH are available to review your draft correspondence and provide relevant fact sheets that would assist the public in understanding the issue.
- Please replace SV-1 with two additional soil vapor points, one east and one west (approximately 15 feet) of the proposed location of SV-1. The concern is that the proposed location of SV-1 is in such close proximity to the northern vapor extraction point, that its location may not provide meaningful data in the evaluation for potential off-site soil vapor contamination.
- Permanent vacuum measurement points should be constructed in each tenant space to confirm that negative pressure (to 0.004 inches water) exists beneath the entire strip mall. Based upon an evaluation of the preliminary vacuum data, DEC and DOH will determine the need for additional sub-slab soil gas and indoor air sampling within the tenant spaces.

Please revise the Site Characterization (SC) work plan and resubmit it for approval. You can develop and submit the IRM work plan concurrent with the SC work plan. Please submit both plans within thirty days of the date of this letter. If you should have any questions, please feel free to contact me at (631) 444-0246.

Sincerely,

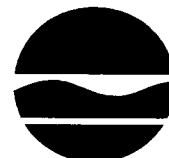


Jamie Ascher
Engineering Geologist 2

cc: J. Harrington, DEC
W. Parish, DEC
B. Boyd, DOH

cc: H. Zuckerman, Nu-Life Realty

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region One
Stony Brook University
50 Circle Road, Stony Brook, New York 11790-3409
Phone: (631) 444-0240 • **Fax:** (631) 444-0248
Website: www.dec.ny.gov



Joe Martens
Commissioner

September 22, 2014

Mr. Paul Stewart
Advanced Cleanup Technologies, Inc.
110 Main Street, Suite 103
Port Washington, NY 11050

Re: Tony's Cleaners Site #1-30-217
Revised Site Characterization Work Plan: August 2014

Dear Mr. Stewart,

The New York State Department of Environmental Conservation (DEC) has received a revised Site Characterization Work Plan dated August 28, 2014 and finds that it addresses the comments provided by DEC and the New York State Department of Health (DOH) on April 4, 2014. Therefore, the revised work plan is hereby approved. Please notify DEC five days prior to the start of field activities associated with the approved plan. If you should have any questions, please feel free to contact me at (631) 444-0246.

Sincerely,

Jamie Ascher
Engineering Geologist 2

cc: J. Harrington, DEC
W. Parish, DEC
B. Boyd, DOH

cc: H. Zuckerman, Nu-Life Realty

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region One
Stony Brook University
50 Circle Road, Stony Brook, New York 11790-3409
Phone: (631) 444-0240 • **Fax:** (631) 444-0248
Website: www.dec.ny.gov



Joe Martens
Commissioner

October 8, 2014

Mr. Paul Stewart
Advanced Cleanup Technologies, Inc.
110 Main Street, Suite 103
Port Washington, NY 11050

Re: Tony's Cleaners Site #1-30-217
Interim Remedial Measure Work Plan

Dear Mr. Stewart,

The New York State Department of Environmental Conservation (DEC) hereby approves the modifications to the existing soil vapor extraction system proposed in the referenced work plan. The construction criteria of the system with its modifications, as built drawings and monitoring data should be summarized in a Construction Completion Report (CCR), signed and sealed by a New York State licensed Professional Engineer, if preliminary testing demonstrates that the system is effectively mitigating soil vapor intrusion. The CCR should also include the modifications and improvements made to the heating, ventilation and air conditioning systems within the strip mall. If you should have any questions, please feel free to contact me at (631) 444-0246.

Sincerely,

Jamie Ascher
Engineering Geologist 2

cc: J. Harrington, DEC
W. Parish, DEC
B. Boyd, NYSDOH

cc: H. Zuckerman, Nu-Life Realty

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 1
SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790
P: (631) 444-0240 | F: (631) 444-0248
www.dec.ny.gov

December 21, 2015

Mr. Paul Stewart
Advanced Cleanup Technologies
110 Main Street, Suite 103
Port Washington, NY 11050

Re: Tony's Cleaners Site #1-30-217
Draft Construction Completion Report

Dear Mr. Stewart,

The New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) have reviewed the referenced Construction Completion Report (CCR) and offer the following revisions to be incorporated therein:

- Include the following statement in the Certification page:
I certify that the data submitted to the Department with this Construction Completion Report demonstrates that the remediation requirements set forth in the Interim Remedial Measure Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.
- In addition to the survey map included as Appendix A, please include a metes and bounds description which corresponds to the site boundaries.
- Complete the environmental easement information referenced in Section 4.5 when it becomes available.
- Section 2.1.1: Remove the fourth bullet from this section.
- Section 2.1.2: Remove the fourth bullet from this section.
- Section 2.2: Within bullet #3 please include the following description, "restrict land use to commercial and/or industrial use".
- Section 4.3.1: Soil quality data should be compared to the commercial use soil cleanup objectives identified in 6 NYCRR Part 375, Table 375-6.8(b).

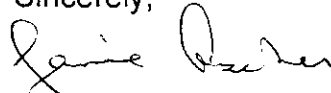


Department of
Environmental
Conservation

- Section 4.3.3: A vacuum measurement point should be installed in the southern section of the beauty salon and in the southern section of the pizzeria to ensure that negative pressure is being maintained beneath the entirety of the three tenant spaces (this includes the dry cleaners space). Please include the installation of the two additional vacuum measurement points in this section.
- Section 4.3.5: Please include in Appendix C the DEC's Division of Air Resources written response to the DAR-1 analysis and the request to suspend treatment of process exhaust with carbon.
- A copy of the filed environmental easement and the county clerk's recording page should be included as Appendix I of the CCR.

Please incorporate these revisions into the draft CCR and submit an electronic copy for DEC and DOH review prior to submitting signed and sealed hardcopies for approval. If you should have any questions regarding any of these comments, please feel free to contact me at 631-444-0246.

Sincerely,



Jamie Ascher
Engineering Geologist 2

cc: J. Harrington, DEC
W. Parish, DEC
B. Boyd, DOH
H. Zuckerman, Nu-Life Realty LLC

APPENDIX C

WASTE MANIFESTS

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CES06	2. Page 1 of 1	3. Emergency Response Phone (908) 354-0210	4. Manifest Tracking Number 010914196 JJK		
5. Generator's Name and Mailing Address NULIFE REALTY C/O Advanced 100 MAIN STREET SUITE 103 PORT WASHINGTON, NY 11050 Generator's Phone: (516) 441-5800				Generator's Site Address (if different than mailing address) 429 MERRICK ROAD LYNBROOK NY 11563			
6. Transporter 1 Company Name CLEAN VENTURE INC.				U.S. EPA ID Number NJ0000027193			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Cycle Chem Inc. 217 South First Street Elizabeth, NJ 07206 Facility's Phone: (908) 355-5800				U.S. EPA ID Number NJ0002200046			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
			No.	Type			
	RQ	NA3077 HAZARDOUS WASTE, SOLID, N.O.S. (F002) 9 PG III (RQ F002 10#) ERG# 171	X 2	DM	220	P	F002 B
	RQ	NA3077 HAZARDOUS WASTE, SOLID, N.O.S. (F002) 9 PG III (RQ F002 10#) ERG# 171	X 1	DM	300	P	F002 T
	3.						
	4.						
14. Special Handling Instructions and Additional Information 968943/968626/171897/317913 (1)R02-2 CARBON (2)STNL-3 SOIL AND GROUNDWATER 3x55							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offor's Printed/Typed Name Marina Shapiro, Authorized rep Nulife Realty							
Signature Marina Shapiro, Authorized rep Nulife Realty							
Month Day Year 01/30/15							
INTL	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:						
	Transporter signature (for exports only):						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name RICHARD JACKSON				Signature Richard Jackson		Month Day Year 01/30/15
	Transporter 2 Printed/Typed Name				Signature		Month Day Year
DESIGNATED FACILITY	18. Discrepancy						
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
	Manifest Reference Number:						
	18b. Alternate Facility (or Generator) U.S. EPA ID Number						
	Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)							
Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. H141		2. H141		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name Richard Gibson				Signature Richard Gibson		Month Day Year 01/30/15	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CESQG	2. Page 1 of 1	3. Emergency Response Phone (908) 354-8218	4. Manifest Tracking Number 015626186 JJK			
5. Generator's Name and Mailing Address NULIFE REALTY C/O Advanced C 100 MAIN STREET SUITE 103 PORT WASHINGTON, NY 11050 Generator's Phone: (516) 441-5800								
Generator's Site Address (if different than mailing address) 429 MERRICK ROAD LYNDBROOK NY 11563								
6. Transporter 1 Company Name CLEAN VENTURE INC.					U.S. EPA ID Number NJ0000027103			
7. Transporter 2 Company Name					U.S. EPA ID Number			
8. Designated Facility Name and Site Address Cycle Chem Inc. 217 South First Street Elizabeth, NJ 07206 Facility's Phone: (908) 355-5800					U.S. EPA ID Number NJD002200046			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	1	NA3077 HAZARDOUS WASTE, SOLID, N.O.S. (F002) 9 PG III (RQ F002 10#) ERG# 171	XX2 DM X220 P				F002	B
	2	NA3077 HAZARDOUS WASTE, SOLID, N.O.S. (F002) 9 PG III (RQ F002 10#) ERG# 171					F002	T
	3.							
	4.							
14. Special Handling Instructions and Additional Information LDR On File 968943/968626/188476/332664 (1)R02-2 CARBON LEAKING SOIL AND GROUNDWATER (C)								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name X Marina Shapiro, Nu-Life Realty Signature X Marina, Nu-Life Realty Month Day Year 04 11 16								
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____							
	17. Transporter Acknowledgment of Receipt of Materials							
TRANSPORTER	Transporter 1 Printed/Typed Name F. S. White		Signature F. S. White		Month Day Year 04 11 16			
	Transporter 2 Printed/Typed Name		Signature		Month Day Year			
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____							
	18b. Alternate Facility (or Generator)					U.S. EPA ID Number		
	Facility's Phone: _____							
	18c. Signature of Alternate Facility (or Generator)					Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H141		2. H141		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name R. Gibson					Signature R. Gibson		Month Day Year 04 11 16	

Appendix D

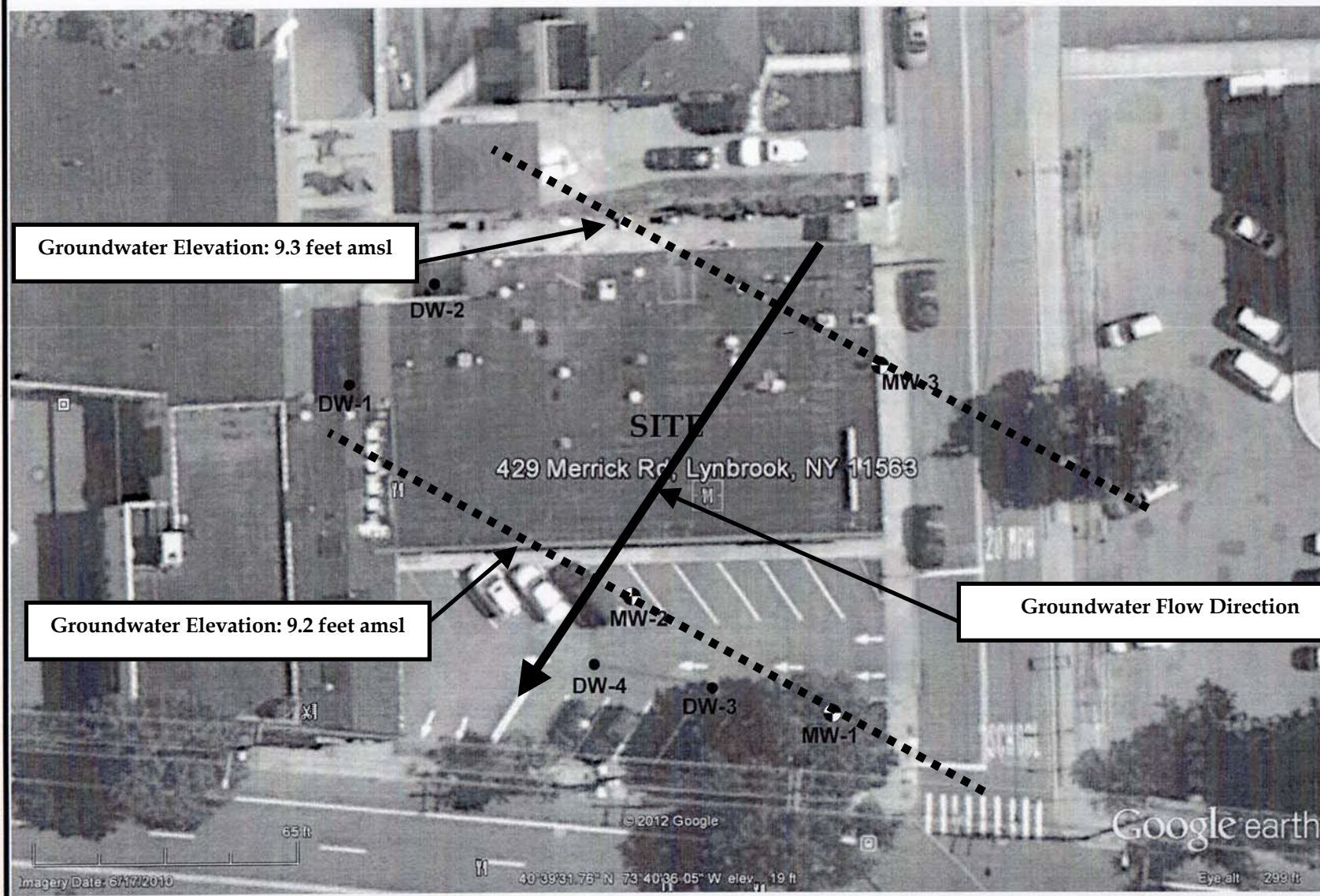
Historical Ground Water Flow Diagrams

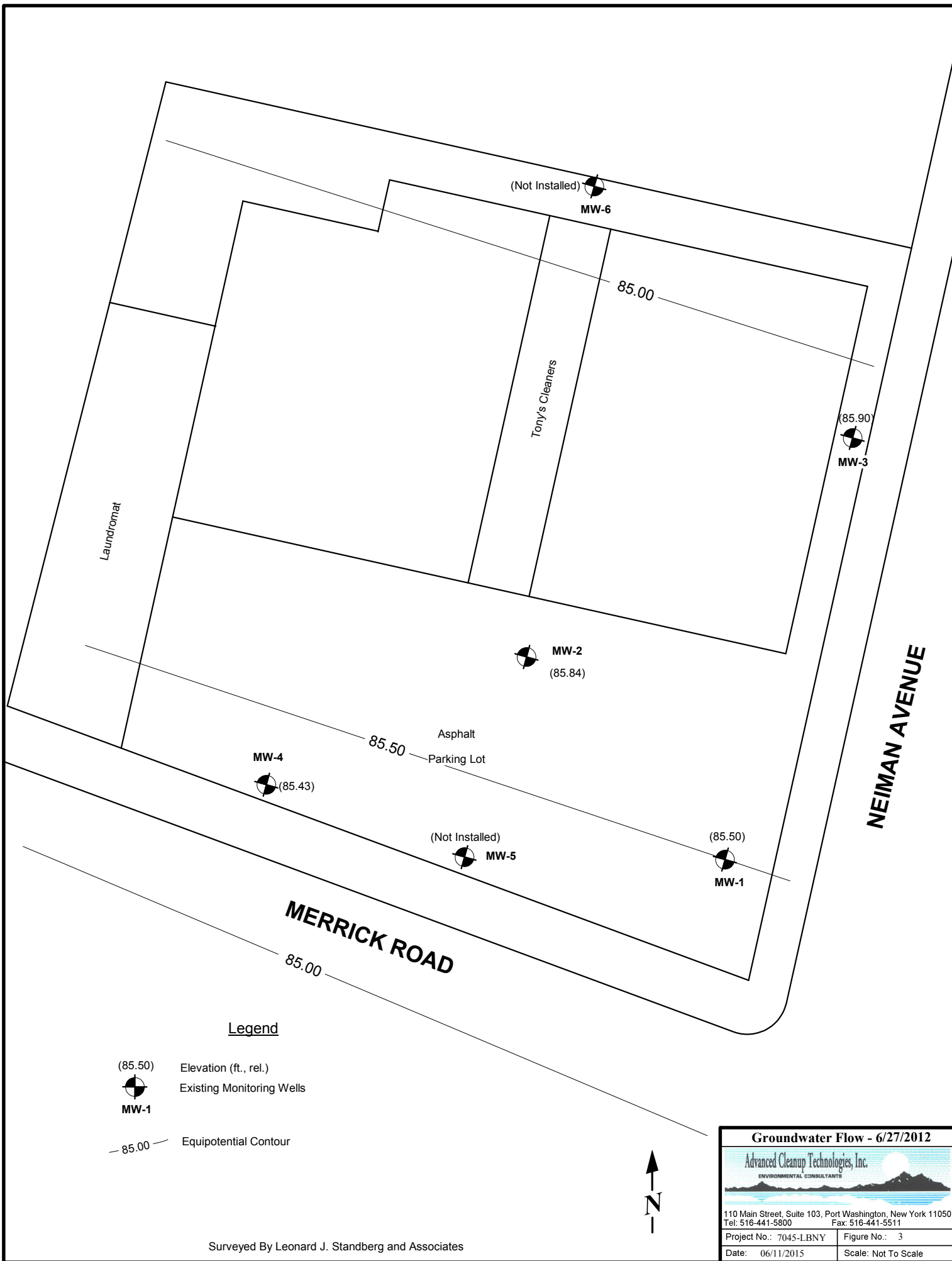


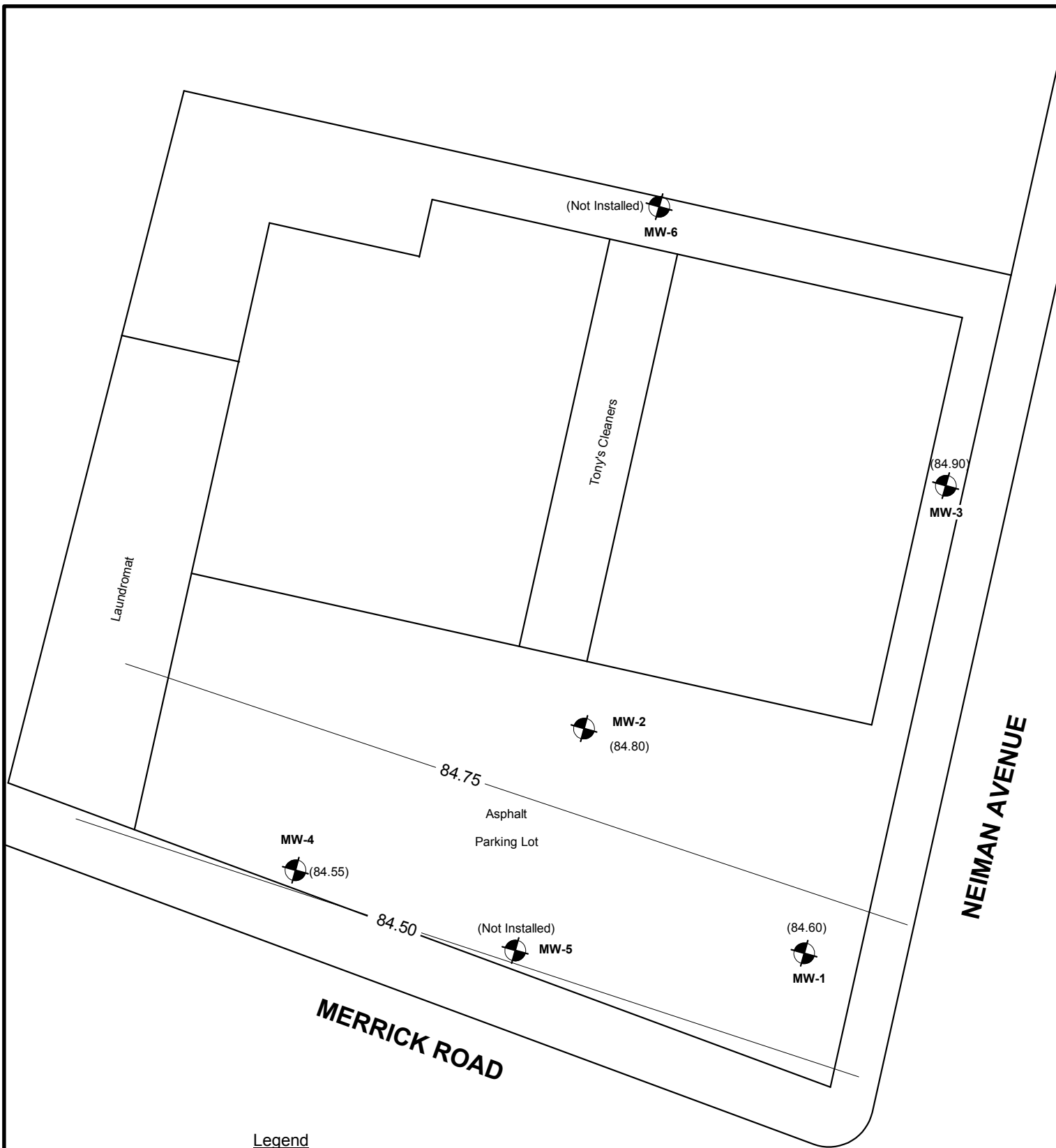
Sample Location Map

Brockerhoff Environmental Services LLC
Environmental Consulting and Remediation

37 Belvidere Avenue, Washington, NJ







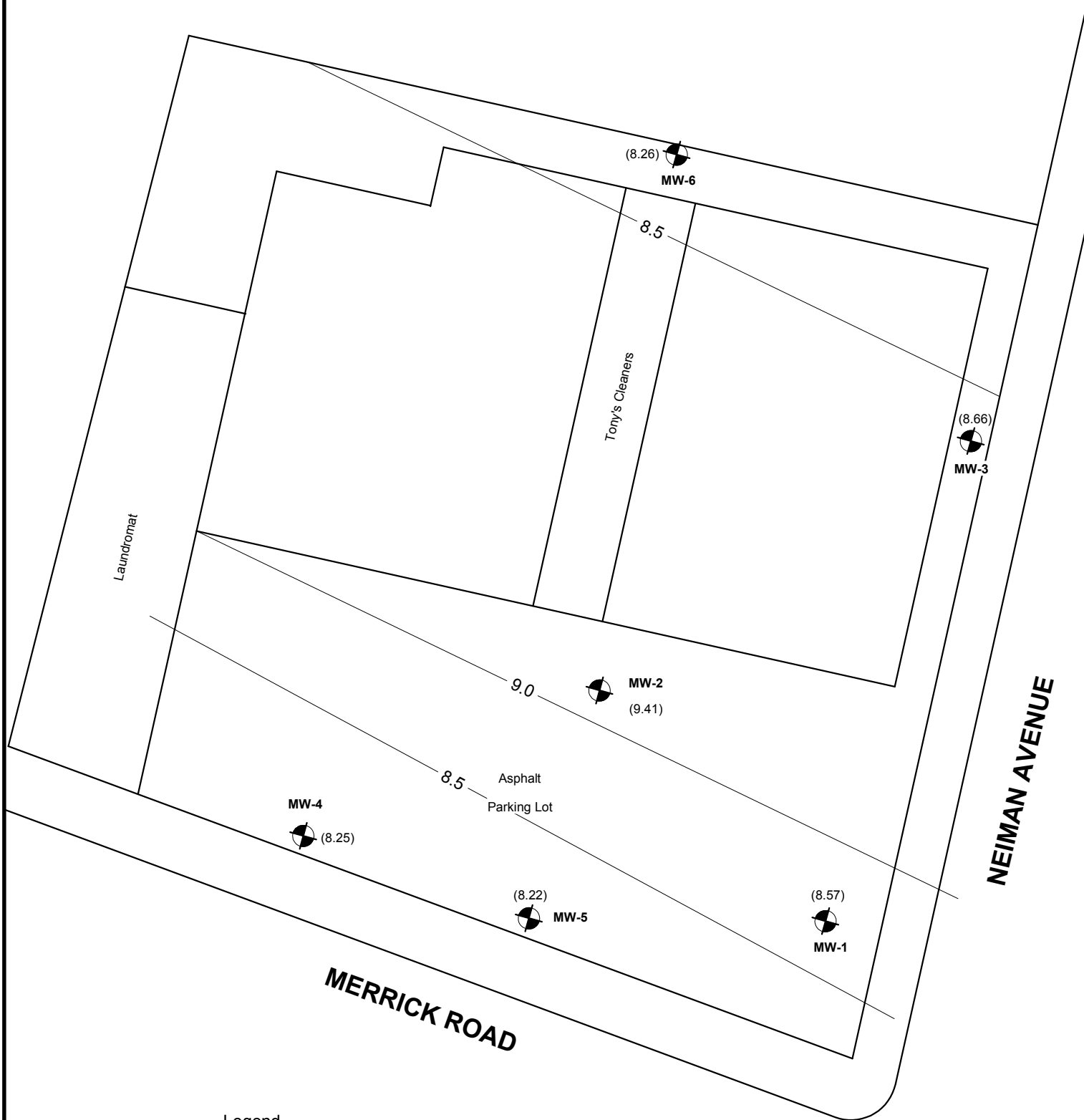
Legend

- (84.60) Elevation (ft., rel.)
-  Existing Monitoring Wells
- MW-1**
-  Equipotential Contour

Surveyed By Leonard J. Standberg and Associates



Groundwater Flow - 7/13/2012	
	
110 Main Street, Suite 103, Port Washington, New York 11050 Tel: 516-441-5800 Fax: 516-441-5511	
Project No.: 7045-LBNY	Figure No.: 3
Date: 06/11/2015	Scale: Not To Scale



Legend



(8.57)
MW-1

Elevation (ft., rel.)
Existing Monitoring Wells



8.0

Equipotential Contour



Surveyed By Leonard J. Standberg and Associates

Groundwater Flow - 11/4/2014

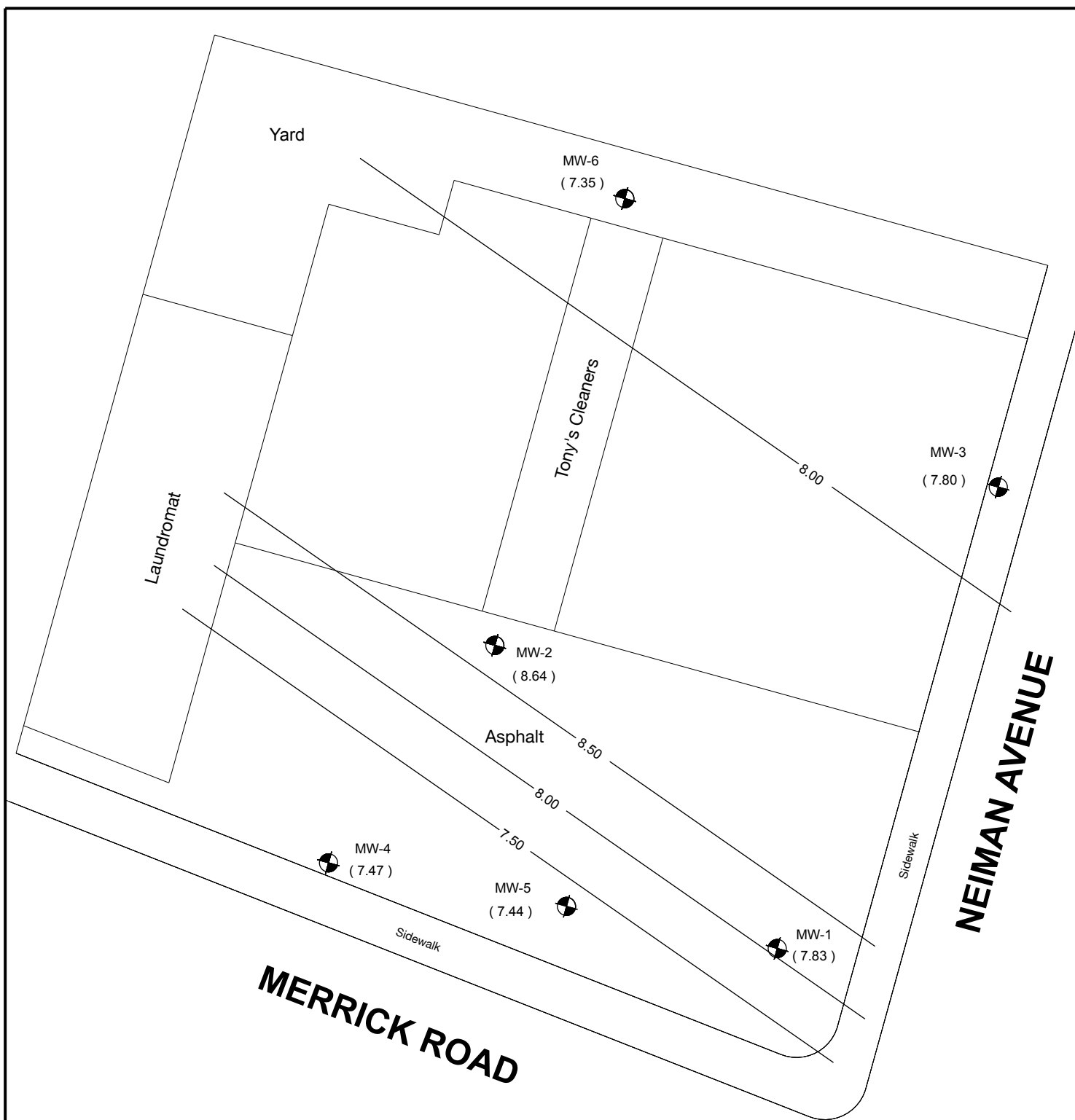
Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS

110 Main Street, Suite 103, Port Washington, New York 11050
Tel: 516-441-5800 Fax: 516-441-5511

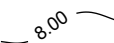
Project No.: 7045-LBNY Figure No.: 3

Date: 06/11/2015

Scale: Not To Scale



Legend

-  Monitoring Well
-  Elevation (ft., rel.)
-  Equipotential Contour



Surveyed By Leonard J. Standberg and Associates

Ground Water Flow - 12/28/2016	
Advanced Cleanup Technologies, Inc. ENVIRONMENTAL CONSULTANTS	
110 Main Street, Suite 103, Port Washington, New York 11050 Tel: 516-441-5800 Fax: 516-441-5511	
Project No.: 7045-LBNY	Figure No.: 2
Date: 01/11/2017	Scale: Not To Scale

Appendix E
Air Modeling Calculations

Ambient Air Quality Impact Analysis

Tonys Cleaners
429 Merrick Road
Lynbrook, New York
NYSDEC Site No. 130217

The following ambient air quality impact analysis was prepared with accordance of NYS DAR-1 guidelines for the control of toxic ambient air contaminants.

SSDS Performance Over the Time

	Influent ($\mu\text{g}/\text{m}^3$)						Effluent ($\mu\text{g}/\text{m}^3$)					
Date Analyte	8/02/13	5/14/14	9/03/14	1/23/15	4/27/15	6/11/15	8/02/13	5/14/14	9/03/14	1/23/15*	4/27/15	6/11/15
PCE	15,100	713	2,500	630	180	2,200	4.54	13	340	1,400	410	1,500

System Performance Calculations

Analyte	Date	4/25/13	8/02/13	5/14/14	9/03/14	1/23/15	4/27/15	6/11/15
PCE	Influent Conc. ($\mu\text{g}/\text{m}^3$)	15,100	15,100	713	2,500	630	180	2,200
	Flow Rate (ft^3/min)	212	212	212	212	212	180	180
	Est. Mass Per Day (g/day)	130.53*	130.53	6.16	21.61	5.45	1.32	16.15
	Est. Mass Per Day (kg/day)	0.131*	0.131	0.006	0.022	0.005	0.001	0.016
	Est. Mass Per Day (lb/day)	0.287*	0.287	0.014	0.048	0.012	0.003	0.036

Conversions:

$$1\text{m}^3 = 35.32 \text{ ft}^3$$

$$1 \text{ g} = 1,000,000 \mu\text{g}$$

$$1 \text{ kg} = 1,000 \text{ g}$$

$$1\text{kg} = 2.2 \text{ lb}$$

Notes:

* - Estimated values based on 8/12/13 results. Actual value could be higher.

** - Calculations made based on flow rate measurements taken on 1/9/15 and 4/27/15

Estimated Mass Removal

Time Period	4/25/13-8/02/13	8/02/13-5/14/14	5/14/14-9/03/14	9/03/14-1/23/15	1/23/15-4/27/15	4/27/15-6/11/15
Days operating	100	285	112	142	94	45
Est. Mass Removed, August 2, 2013-June 11, 2015 (lb)	29.60	44.18	3.47	4.26	0.71	0.88
Est. Total Mass Removed, August 2, 2013-June 11, 2015 (lb)	83.10					

Notes:

1. The estimated mass removed for PCE is based on the system operational runtime from the system start-up on 4/25/13 to the most recent sampling event on 06/11/15.

Estimated Carbon Treatment Efficiency

Date		8/2/13	5/14/14	9/3/14	1/23/15/	4/27/15	6/11/15
PCE Concentration ($\mu\text{g}/\text{m}^3$)	Influent	15,100	713	2,500	630	180	2,200
	Effluent	4.54	13	340	1,400	410	1,500
Percentage Adsorbed by Both Carbons (%)		100	98	86	-122	-128	32

Estimated Annual Impact Percentage of Annual DAR-1 Guidance Concentrations (with carbon treatment)

Analyte		8/2/13	5/14/14	9/3/14	1/23/15	4/27/15	6/11/15
PCE	AGC ($\mu\text{g}/\text{m}^3$)	4	4	4	4	4	4
	Maximum Effluent PCE Concentration ($\mu\text{g}/\text{m}^3$)	4.54	13	340	1,400	410	1,500
	Maximum Emission Rate (lb/day)	8.63E-05	2.47E-04	6.47E-03	2.66E-02	6.62E-03	2.42E-02
	Maximum Emission Rate Q_a (lb/year)	3.15E-02	9.02E-02	2.36	9.72	2.42	8.84
	Maximum Emission Rate Q (lb/hr)	3.60E-06	1.03E-05	2.70E-04	1.11E-03	2.88E-04	1.01E-03
	Estimated Annual Impact C_c ($\mu\text{g}/\text{m}^3$)	2.12E-04	6.06E-04	0.02	0.07	0.02	0.06
	Estimated Annual Impact Percentage of AGC (%)	5.3E-03	1.52E-02	0.40	1.63	0.41	1.48
	Actual Annual Impact C_a ($\mu\text{g}/\text{m}^3$)	2.23E-04	6.40E-04	0.02	0.07	0.02	0.06
	Maximum Potential Annual Impact C_p ($\mu\text{g}/\text{m}^3$)	2.23E-04	6.39E-04	0.02	0.07	0.02	0.06

Notes:

1. AGC (annual guidance concentration) values obtained from DAR-1 AGC/SGC tables dated 02-28-2014.
2. The concentrations used were collected from 08/02/13, 05/14/14, 09/03/14, 01/23/15 sampling events.
3. Maximum emission rate calculated using the effluent flow rate 212 cfm recorded on 1/9/15.

4. Actual annual impact calculating by following procedures for Basic Cavity Impact Method described in NYSDEC DAR-1 Guidelines for the Control of Toxic Ambient Air Contaminants (NYSDEC 1991) Appendix B.

The worst case Annual Cavity Impact C_C is define from equation:

$$C_C (\mu\text{g}/\text{m}^3) = (1.72 * Q_a) / (h_b)^2$$

Where Q_a is the annual emission rate in lbs/year
 h_b is the building height, in feet ($h_b = 16'$)

The standard point source method was used for assessment of the ambient air quality beyond the cavity region. Since the stack height (h_s) to building height (h_b) ratio (h_s / h_b) is $20' / 16' = 1.25$ is less than 1.5, we can assume that no plume rise exists and $h_e = h_s$, where h_e is the effective stack height.

The Actual Annual Impact C_a from the point source using the effective stack height h_e and the annual emission rate, Q_a can be calculating from equation:

$$C_a (\mu\text{g}/\text{m}^3) = (6.0 * Q_a) / h_e^{2.25}$$

The Maximum Potential Annual Impact C_p can be calculating from equation:

$$C_p (\mu\text{g}/\text{m}^3) = 52500 * Q / h_e^{2.25}$$

The Maximum Potential Annual Impact C_p assumes continuous operation of the source.

All annual impact analyses C_C (estimated), C_a (actual) and C_p (maximum potential) showed results lower than AGC for each time period of SSD system performance with carbon treatment based on carbon system effluent concentration of PCE:

$$C_C < \text{AGC}, C_a < \text{AGC} \text{ and } C_p < \text{AGC}.$$

Estimated Annual Impact Percentage of Annual DAR-1 Guidance Concentrations (without carbon treatment)

Analyte		8/2/13	5/14/14	9/3/14	1/23/15	4/27/15	6/11/15
PCE	AGC ($\mu\text{g}/\text{m}^3$)	4	4	4	4	4	4
	Maximum Effluent PCE Concentration ($\mu\text{g}/\text{m}^3$)	15,100	713	2,500	630	180	2,200
	Maximum Emission Rate (lb/day)	0.287	1.36E-02	4.75E-02	1.20E-02	2.91E-03	3.55E-02
	Maximum Emission Rate Q_a (lb/year)	104.82	4.95	17.35	4.37	1.06	12.97
	Maximum Emission Rate Q (lb/hr)	1.20E-02	5.65E-04	1.98E-03	5.0E-03	1.21E-04	1.48E-03
	Estimated Annual Impact C_C ($\mu\text{g}/\text{m}^3$)	0.70	0.03	0.12	0.03	0.01	0.09
	Estimated Annual Impact Percentage of AGC (%)	17.50	0.83	2.91	0.73	0.18	2.18
	Actual Annual Impact C_a ($\mu\text{g}/\text{m}^3$)	0.74	0.04	0.12	0.03	0.01	0.09
	Maximum Potential Annual Impact C_p ($\mu\text{g}/\text{m}^3$)	0.74	0.04	0.12	0.03	0.01	0.09

All annual impact analyses C_c (estimated), C_a (actual) and C_p (maximum potential) showed results lower than AGC for each time period of SSD system performance without carbon treatment based on carbon system influent concentration of PCE:
 $C_c < AGC$, $C_a < AGC$ and $C_p < AGC$

Based on our calculations of annual air impact analysis with and without carbon treatment, the facility will be requesting to stop of use of additional air controls (carbon canisters).



Paul Stewart <pauls@act.earth>

Fwd: Tony's Cleaners - Air Division DEC ID 1-2820-02822

2 messages

Marina Shapiro <marinas@actenvirons.com>
To: Paul Stewart <pauls@actenvirons.com>

Thu, Feb 18, 2016 at 10:40 AM

Paul,

This is the DEC answer. I asked for the letter during our conversation but Valeria said that she'll send an e-mail.

Marina

----- Forwarded message -----

From: **Wu Zhao, Valeria X (DEC)** <Valeria.WuZhao@dec.ny.gov>
Date: Thu, Feb 18, 2016 at 10:22 AM
Subject: Tony's Cleaners - Air Division DEC ID 1-2820-02822
To: "marinas@actenvirons.com" <marinas@actenvirons.com>

Good morning Marina,

This is in response to the e-mail below. I have reviewed the calculations for the estimated annual impact percentage of Annual DAR-1 Guidance Concentrations without carbon treatment and they look fine. The calculated cavity values are below the ACG value. You can discontinue the use of activated carbon treatment.

Do not hesitate to contact me if you have any questions.

Valeria Wu Zhao

Environmental Engineer, Division of Air Resources, Region 1

New York State Department of Environmental Conservation

50 Circle Road, Stony Brook, NY 11790

P: 631-444-0212 | F: 631-444-0209 | Valeria.WuZhao@dec.ny.gov

www.dec.ny.gov |  | 

From: Marina Shapiro [<mailto:marinas@actenvirons.com>]
Sent: Wednesday, January 27, 2016 3:11 PM
To: Genece, Merlange (DEC)
Cc: Paul Stewart

Appendix F
Data Usability Summary Reports

Data Usability Summary Report

The laboratory analyses performed during implementation of the IRM Work Plan are contained in five data packages:

1. March 14, 2014 Air Data – Pace Analytical Laboratories, Inc. (Pace Project No. 1403948) dated April 2, 2014
2. June 3, 2014 Air Data – York Analytical Laboratories, Inc. (York Project No. 14F0171) June 10, 2014
3. January 23, 2015 Air Data – York Analytical Laboratories, Inc. (York Project No. 15A0795) February 2, 2015
4. March 5, 2015 Air Data – York Analytical Laboratories, Inc. (York Project No. 15C0195) March 11, 2015
5. November 4, 2014 Water Data – York Analytical Laboratories, Inc. (York Project No. 14K0342) November 17, 2014

The narratives for each data package are provided below.

1. Pace Project No. 1403948

Two (2) indoor air, one (1) outdoor air and two (2) soil vapor air samples were analyzed for Volatile Organic Compounds (VOCs). All samples were received in proper condition for analysis with proper documentation. All required holding times were met. Examination of the raw data confirms the results in the summary tables. The correct data qualifiers were used. Samples were prepared and analyzed by method EPA TO-15. Surrogate recoveries met requirements.

2. York Project No. 14F0171

Three (3) indoor air samples were analyzed for Volatile Organic Compounds (VOCs). All samples were received in proper condition for analysis with proper documentation. All required holding times were met. Examination of the raw data confirms the results in the summary tables. The correct data qualifiers were used. Samples were prepared and analyzed by method EPA TO-15. Surrogate recoveries met requirements.

3. York Project No. 15A0795

Two (2) indoor air samples were analyzed for Volatile Organic Compounds (VOCs). All samples were received in proper condition for analysis with proper documentation. All required holding times were met. Examination of the raw data confirms the results in the summary tables. The correct data qualifiers were used. Samples were prepared and analyzed by method EPA TO15. Surrogate recoveries met requirements.

4. York Project No. 15C0195

One (1) indoor air sample and one (1) soil vapor sample were analyzed for Volatile Organic Compounds (VOCs) All samples were received in proper condition for analysis with proper documentation. All required holding times were met. Examination of the raw data confirms the results in the summary tables. The correct data qualifiers were used. Samples were prepared by method EPA TO-15. Surrogate recoveries met requirements.

5. York Project No. 15C0568

One (1) indoor air sample and one (1) soil vapor sample were analyzed for Volatile Organic Compounds (VOCs) All samples were received in proper condition for analysis with proper documentation. All required holding times were met. Examination of the raw data confirms the results in the summary tables. The correct data qualifiers were used. Samples were prepared by method EPA 5030B. Surrogate recoveries met requirements.

Appendix G
Laboratory Analytical Reports

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:40:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-001

Client Sample ID: SV-3

Sample Information:

Type : Air

Origin:

Method: ETO-15 :							
Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 6:13 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m ³	03/29/2014 6:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.10	ppbv		1	< 0.77	µg/m ³	03/29/2014 6:13 AM
1,1,2-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 6:13 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 6:13 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 6:13 AM
1,2,4-Trichlorobenzene	< 0.20	ppbv		1	< 1.48	µg/m ³	03/29/2014 6:13 AM
1,2,4-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 6:13 AM
1,2-Dibromoethane	< 0.20	ppbv		1	< 1.54	µg/m ³	03/29/2014 6:13 AM
1,2-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 6:13 AM
1,2-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 6:13 AM
1,2-Dichloroethene (cis)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 6:13 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 6:13 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 6:13 AM
1,2-Dichlorotetrafluoroethane	< 0.20	ppbv		1	< 1.40	µg/m ³	03/29/2014 6:13 AM
1,3,5-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 6:13 AM
1,3-Butadiene	< 0.20	ppbv		1	< 0.44	µg/m ³	03/29/2014 6:13 AM
1,3-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 6:13 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 6:13 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 6:13 AM
1,3-Hexachlorobutadiene	< 0.20	ppbv		1	< 2.13	µg/m ³	03/29/2014 6:13 AM
1,4-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 6:13 AM
1,4-Dioxane	< 0.20	ppbv		1	< 0.72	µg/m ³	03/29/2014 6:13 AM
2,2,4-Trimethylpentane	< 0.20	ppbv		1	< 0.93	µg/m ³	03/29/2014 6:13 AM
4-Ethyltoluene	< 0.20	ppbv	+	1	< 0.98	µg/m ³	03/29/2014 6:13 AM
Acetone	2.68	ppbv		1	6.37	µg/m ³	03/29/2014 6:13 AM
Benzene	0.22	ppbv		1	0.70	µg/m ³	03/29/2014 6:13 AM
Bromodichloromethane	< 0.20	ppbv		1	< 1.34	µg/m ³	03/29/2014 6:13 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m ³	03/29/2014 6:13 AM
Bromomethane	< 0.20	ppbv		1	< 0.78	µg/m ³	03/29/2014 6:13 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m ³	03/29/2014 6:13 AM
Carbon tetrachloride	< 0.20	ppbv		1	< 1.26	µg/m ³	03/29/2014 6:13 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 6:13 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m ³	03/29/2014 6:13 AM
Chloroform	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 6:13 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for this analyte
r = Reporting limit > MDL and < LOQ, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound



Client Services Manager

Test results meet the requirements of NELAC unless otherwise noted.

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:40:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-001

Client Sample ID: SV-3

Sample Information:

Type : Air

Origin:

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Chloromethane	0.62	ppbv		1	1.28	µg/m³	03/29/2014 6:13 AM
Cyclohexane	< 0.20	ppbv		1	< 0.69	µg/m³	03/29/2014 6:13 AM
Dibromochloromethane	< 0.20	ppbv		1	< 1.70	µg/m³	03/29/2014 6:13 AM
Dichlorodifluoromethane	0.52	ppbv		1	2.57	µg/m³	03/29/2014 6:13 AM
Ethanol	176	ppbv	D +	20	331	µg/m³	03/29/2014 6:57 AM
Ethyl acetate	< 0.20	ppbv	+	1	< 0.72	µg/m³	03/29/2014 6:13 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 6:13 AM
Isopropanol	4.82	ppbv		1	11.8	µg/m³	03/29/2014 6:13 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/29/2014 6:13 AM
Methyl ethyl ketone	0.34	ppbv		1	1.00	µg/m³	03/29/2014 6:13 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/29/2014 6:13 AM
Methyl tert-butyl ether	< 0.20	ppbv		1	< 0.72	µg/m³	03/29/2014 6:13 AM
Methylene chloride	0.39	ppbv		1	1.51	µg/m³	03/29/2014 6:13 AM
n-Heptane	< 0.20	ppbv		1	< 0.82	µg/m³	03/29/2014 6:13 AM
n-Hexane	< 0.20	ppbv		1	< 0.70	µg/m³	03/29/2014 6:13 AM
Propylene	0.81	ppbv	+	1	1.39	µg/m³	03/29/2014 6:13 AM
Styrene	< 0.20	ppbv		1	< 0.85	µg/m³	03/29/2014 6:13 AM
tert-Butyl Alcohol	< 0.20	ppbv		1	< 0.61	µg/m³	03/29/2014 6:13 AM
Tetrachloroethene	13.7	ppbv		1	92.7	µg/m³	03/29/2014 6:13 AM
Tetrahydrofuran	< 0.20	ppbv	+	1	< 0.59	µg/m³	03/29/2014 6:13 AM
Toluene	0.30	ppbv		1	1.13	µg/m³	03/29/2014 6:13 AM
Trichloroethene	0.13	ppbv		1	0.70	µg/m³	03/29/2014 6:13 AM
Trichlorofluoromethane	0.26	ppbv		1	1.46	µg/m³	03/29/2014 6:13 AM
Vinyl acetate	< 0.20	ppbv		1	< 0.70	µg/m³	03/29/2014 6:13 AM
Vinyl bromide	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 6:13 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/29/2014 6:13 AM
Xylenes (m&p)	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 6:13 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 6:13 AM
Surr: 4-Bromofluorobenzene	103	%REC	Limit	70-130	No M.W. Data		03/29/2014 6:13 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
 H = Received/analyzed outside of analytical holding time
 + = ELAP / NELAC does not offer certification for this analyte
 c = Calibration acceptability criteria exceeded for this analyte
 r = Reporting limit > MDL and < LOQ, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound



Client Services Manager

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Lab No. : 1403948-002

Client Sample ID: IA-1

Sample Information:

Type : Air

Origin:

Collected : 3/13/2014 2:37:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Method: ETO-15 :							
Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 4:48 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m ³	03/29/2014 4:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.10	ppbv		1	< 0.77	µg/m ³	03/29/2014 4:48 AM
1,1,2-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 4:48 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 4:48 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 4:48 AM
1,2,4-Trichlorobenzene	< 0.20	ppbv		1	< 1.48	µg/m ³	03/29/2014 4:48 AM
1,2,4-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 4:48 AM
1,2-Dibromoethane	< 0.20	ppbv		1	< 1.54	µg/m ³	03/29/2014 4:48 AM
1,2-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 4:48 AM
1,2-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 4:48 AM
1,2-Dichloroethene (cis)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 4:48 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 4:48 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 4:48 AM
1,2-Dichlorotetrafluoroethane	< 0.20	ppbv		1	< 1.40	µg/m ³	03/29/2014 4:48 AM
1,3,5-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 4:48 AM
1,3-Butadiene	< 0.20	ppbv		1	< 0.44	µg/m ³	03/29/2014 4:48 AM
1,3-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 4:48 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 4:48 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 4:48 AM
1,3-Hexachlorobutadiene	< 0.20	ppbv		1	< 2.13	µg/m ³	03/29/2014 4:48 AM
1,4-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 4:48 AM
1,4-Dioxane	< 0.20	ppbv		1	< 0.72	µg/m ³	03/29/2014 4:48 AM
2,2,4-Trimethylpentane	< 0.20	ppbv		1	< 0.93	µg/m ³	03/29/2014 4:48 AM
4-Ethyltoluene	< 0.20	ppbv	+	1	< 0.98	µg/m ³	03/29/2014 4:48 AM
Acetone	3.45	ppbv		1	8.20	µg/m ³	03/29/2014 4:48 AM
Benzene	0.24	ppbv		1	0.77	µg/m ³	03/29/2014 4:48 AM
Bromodichloromethane	< 0.20	ppbv		1	< 1.34	µg/m ³	03/29/2014 4:48 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m ³	03/29/2014 4:48 AM
Bromomethane	< 0.20	ppbv		1	< 0.78	µg/m ³	03/29/2014 4:48 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m ³	03/29/2014 4:48 AM
Carbon tetrachloride	< 0.20	ppbv		1	< 1.26	µg/m ³	03/29/2014 4:48 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 4:48 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m ³	03/29/2014 4:48 AM
Chloroform	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 4:48 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
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 S = Recovery exceeded control limits for this analyte
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Client Services Manager

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LABORATORY RESULTS

Results for the samples and analytes requested

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Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:37:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-002

Client Sample ID: IA-1

Sample Information:

Type : Air

Origin:

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Chloromethane	0.61	ppbv		1	1.26	µg/m³	03/29/2014 4:48 AM
Cyclohexane	0.21	ppbv		1	0.72	µg/m³	03/29/2014 4:48 AM
Dibromochloromethane	< 0.20	ppbv		1	< 1.70	µg/m³	03/29/2014 4:48 AM
Dichlorodifluoromethane	0.51	ppbv		1	2.52	µg/m³	03/29/2014 4:48 AM
Ethanol	384	ppbv	D +	10	723	µg/m³	03/29/2014 4:05 AM
Ethyl acetate	< 0.20	ppbv	+	1	< 0.72	µg/m³	03/29/2014 4:48 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 4:48 AM
Isopropanol	9.60	ppbv		1	23.6	µg/m³	03/29/2014 4:48 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/29/2014 4:48 AM
Methyl ethyl ketone	0.39	ppbv		1	1.15	µg/m³	03/29/2014 4:48 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/29/2014 4:48 AM
Methyl tert-butyl ether	< 0.20	ppbv		1	< 0.72	µg/m³	03/29/2014 4:48 AM
Methylene chloride	0.88	ppbv		1	3.42	µg/m³	03/29/2014 4:48 AM
n-Heptane	0.27	ppbv		1	1.11	µg/m³	03/29/2014 4:48 AM
n-Hexane	0.90	ppbv		1	3.17	µg/m³	03/29/2014 4:48 AM
Propylene	0.73	ppbv	+	1	1.26	µg/m³	03/29/2014 4:48 AM
Styrene	< 0.20	ppbv		1	< 0.85	µg/m³	03/29/2014 4:48 AM
tert-Butyl Alcohol	< 0.20	ppbv		1	< 0.61	µg/m³	03/29/2014 4:48 AM
Tetrachloroethene	15.7	ppbv		1	106	µg/m³	03/29/2014 4:48 AM
Tetrahydrofuran	< 0.20	ppbv	+	1	< 0.59	µg/m³	03/29/2014 4:48 AM
Toluene	0.24	ppbv		1	0.90	µg/m³	03/29/2014 4:48 AM
Trichloroethene	0.14	ppbv		1	0.75	µg/m³	03/29/2014 4:48 AM
Trichlorofluoromethane	0.25	ppbv		1	1.40	µg/m³	03/29/2014 4:48 AM
Vinyl acetate	< 0.20	ppbv		1	< 0.70	µg/m³	03/29/2014 4:48 AM
Vinyl bromide	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 4:48 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/29/2014 4:48 AM
Xylenes (m&p)	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 4:48 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 4:48 AM
Surr: 4-Bromofluorobenzene	103	%REC	Limit	70-130	No M.W. Data		03/29/2014 4:48 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
 H = Received/analyzed outside of analytical holding time
 + = ELAP / NELAC does not offer certification for this analyte
 c = Calibration acceptability criteria exceeded for this analyte
 r = Reporting limit > MDL and < LOQ, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound



Client Services Manager

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LABORATORY RESULTS

Results for the samples and analytes requested

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Advanced Cleanup Technologies

960 South Broadway, Suite 100
Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:43:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-003

Client Sample ID: SV-4

Sample Information:

Type : Air

Origin:

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/27/2014 5:49 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	03/27/2014 5:49 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.10	ppbv		1	< 0.77	µg/m³	03/27/2014 5:49 AM
1,1,2-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/27/2014 5:49 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/27/2014 5:49 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	03/27/2014 5:49 AM
1,2,4-Trichlorobenzene	< 0.20	ppbv		1	< 1.48	µg/m³	03/27/2014 5:49 AM
1,2,4-Trimethylbenzene	0.66	ppbv		1	3.24	µg/m³	03/27/2014 5:49 AM
1,2-Dibromoethane	< 0.20	ppbv		1	< 1.54	µg/m³	03/27/2014 5:49 AM
1,2-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 5:49 AM
1,2-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/27/2014 5:49 AM
1,2-Dichloroethene (cis)	0.59	ppbv		1	2.34	µg/m³	03/27/2014 5:49 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	03/27/2014 5:49 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	03/27/2014 5:49 AM
1,2-Dichlorotetrafluoroethane	< 0.20	ppbv		1	< 1.40	µg/m³	03/27/2014 5:49 AM
1,3,5-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m³	03/27/2014 5:49 AM
1,3-Butadiene	< 0.20	ppbv		1	< 0.44	µg/m³	03/27/2014 5:49 AM
1,3-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 5:49 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	03/27/2014 5:49 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	03/27/2014 5:49 AM
1,3-Hexachlorobutadiene	< 0.20	ppbv	c	1	< 2.13	µg/m³	03/27/2014 5:49 AM
1,4-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 5:49 AM
1,4-Dioxane	< 0.20	ppbv		1	< 0.72	µg/m³	03/27/2014 5:49 AM
2,2,4-Trimethylpentane	< 0.20	ppbv		1	< 0.93	µg/m³	03/27/2014 5:49 AM
4-Ethyltoluene	0.29	ppbv	+	1	1.43	µg/m³	03/27/2014 5:49 AM
Acetone	14.4	ppbv		1	34.1	µg/m³	03/27/2014 5:49 AM
Benzene	0.89	ppbv		1	2.84	µg/m³	03/27/2014 5:49 AM
Bromodichloromethane	< 0.20	ppbv		1	< 1.34	µg/m³	03/27/2014 5:49 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	03/27/2014 5:49 AM
Bromomethane	< 0.20	ppbv		1	< 0.78	µg/m³	03/27/2014 5:49 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	03/27/2014 5:49 AM
Carbon tetrachloride	< 0.20	ppbv		1	< 1.26	µg/m³	03/27/2014 5:49 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	03/27/2014 5:49 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	03/27/2014 5:49 AM
Chloroform	0.84	ppbv		1	4.10	µg/m³	03/27/2014 5:49 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for this analyte
r = Reporting limit > MDL and < LOQ, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound



Client Services Manager

Test results meet the requirements of NELAC unless otherwise noted.

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:43:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-003

Client Sample ID: SV-4

Sample Information:

Type : Air

Origin:

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Chloromethane	0.47	ppbv		1	0.97	µg/m³	03/27/2014 5:49 AM
Cyclohexane	< 0.20	ppbv		1	< 0.69	µg/m³	03/27/2014 5:49 AM
Dibromochloromethane	< 0.20	ppbv		1	< 1.70	µg/m³	03/27/2014 5:49 AM
Dichlorodifluoromethane	0.40	ppbv		1	1.98	µg/m³	03/27/2014 5:49 AM
Ethanol	779	ppbv	D +	20	1470	µg/m³	03/29/2014 5:31 AM
Ethyl acetate	< 0.20	ppbv	+	1	< 0.72	µg/m³	03/27/2014 5:49 AM
Ethylbenzene	0.87	ppbv		1	3.78	µg/m³	03/27/2014 5:49 AM
Isopropanol	0.90	ppbv		1	2.21	µg/m³	03/27/2014 5:49 AM
Methyl butyl ketone	0.32	ppbv	+	1	1.31	µg/m³	03/27/2014 5:49 AM
Methyl ethyl ketone	1.11	ppbv		1	3.27	µg/m³	03/27/2014 5:49 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/27/2014 5:49 AM
Methyl tert-butyl ether	< 0.20	ppbv		1	< 0.72	µg/m³	03/27/2014 5:49 AM
Methylene chloride	0.29	ppbv		1	1.13	µg/m³	03/27/2014 5:49 AM
n-Heptane	2.25	ppbv		1	9.22	µg/m³	03/27/2014 5:49 AM
n-Hexane	1.19	ppbv		1	4.19	µg/m³	03/27/2014 5:49 AM
Propylene	1.34	ppbv	+	1	2.31	µg/m³	03/27/2014 5:49 AM
Styrene	< 0.20	ppbv		1	< 0.85	µg/m³	03/27/2014 5:49 AM
tert-Butyl Alcohol	0.27	ppbv		1	0.82	µg/m³	03/27/2014 5:49 AM
Tetrachloroethene	69.4	ppbv	D	20	471	µg/m³	03/29/2014 5:31 AM
Tetrahydrofuran	< 0.20	ppbv	+	1	< 0.59	µg/m³	03/27/2014 5:49 AM
Toluene	5.01	ppbv		1	18.9	µg/m³	03/27/2014 5:49 AM
Trichloroethene	1.57	ppbv		1	8.44	µg/m³	03/27/2014 5:49 AM
Trichlorofluoromethane	< 0.20	ppbv		1	< 1.12	µg/m³	03/27/2014 5:49 AM
Vinyl acetate	< 0.20	ppbv		1	< 0.70	µg/m³	03/27/2014 5:49 AM
Vinyl bromide	< 0.20	ppbv		1	< 0.87	µg/m³	03/27/2014 5:49 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/27/2014 5:49 AM
Xylenes (m&p)	3.39	ppbv		1	14.7	µg/m³	03/27/2014 5:49 AM
Xylenes (o)	0.92	ppbv		1	4.00	µg/m³	03/27/2014 5:49 AM
Surr: 4-Bromofluorobenzene	98.3	%REC	Limit	70-130	No M.W. Data		03/27/2014 5:49 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
 H = Received/analyzed outside of analytical holding time
 + = ELAP / NELAC does not offer certification for this analyte
 c = Calibration acceptability criteria exceeded for this analyte
 r = Reporting limit > MDL and < LOQ, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound



Client Services Manager

Test results meet the requirements of NELAC unless otherwise noted.

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
Hicksville, NY 11801

Attn To : Paul Stewart

Collected : 3/13/2014 2:49:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Lab No. : 1403948-004

Client Sample ID: IA-2

Sample Information:

Type : Air

Origin:

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 2:40 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m ³	03/29/2014 2:40 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.10	ppbv		1	< 0.77	µg/m ³	03/29/2014 2:40 AM
1,1,2-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m ³	03/29/2014 2:40 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 2:40 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 2:40 AM
1,2,4-Trichlorobenzene	< 0.20	ppbv		1	< 1.48	µg/m ³	03/29/2014 2:40 AM
1,2,4-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 2:40 AM
1,2-Dibromoethane	< 0.20	ppbv		1	< 1.54	µg/m ³	03/29/2014 2:40 AM
1,2-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 2:40 AM
1,2-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m ³	03/29/2014 2:40 AM
1,2-Dichloroethene (cis)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 2:40 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m ³	03/29/2014 2:40 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 2:40 AM
1,2-Dichlorotetrafluoroethane	< 0.20	ppbv		1	< 1.40	µg/m ³	03/29/2014 2:40 AM
1,3,5-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m ³	03/29/2014 2:40 AM
1,3-Butadiene	< 0.20	ppbv		1	< 0.44	µg/m ³	03/29/2014 2:40 AM
1,3-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 2:40 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 2:40 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m ³	03/29/2014 2:40 AM
1,3-Hexachlorobutadiene	< 0.20	ppbv		1	< 2.13	µg/m ³	03/29/2014 2:40 AM
1,4-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m ³	03/29/2014 2:40 AM
1,4-Dioxane	< 0.20	ppbv		1	< 0.72	µg/m ³	03/29/2014 2:40 AM
2,2,4-Trimethylpentane	< 0.20	ppbv		1	< 0.93	µg/m ³	03/29/2014 2:40 AM
4-Ethyltoluene	< 0.20	ppbv	+	1	< 0.98	µg/m ³	03/29/2014 2:40 AM
Acetone	12.6	ppbv		1	30.0	µg/m ³	03/29/2014 2:40 AM
Benzene	0.59	ppbv		1	1.88	µg/m ³	03/29/2014 2:40 AM
Bromodichloromethane	< 0.20	ppbv		1	< 1.34	µg/m ³	03/29/2014 2:40 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m ³	03/29/2014 2:40 AM
Bromomethane	< 0.20	ppbv		1	< 0.78	µg/m ³	03/29/2014 2:40 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m ³	03/29/2014 2:40 AM
Carbon tetrachloride	< 0.20	ppbv		1	< 1.26	µg/m ³	03/29/2014 2:40 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m ³	03/29/2014 2:40 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m ³	03/29/2014 2:40 AM
Chloroform	1.86	ppbv		1	9.08	µg/m ³	03/29/2014 2:40 AM

Qualifiers: E = Value above quantitation range, Value estimated.
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+ = ELAP / NELAC does not offer certification for this analyte
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r = Reporting limit > MDL and < LOQ, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound



Client Services Manager

Test results meet the requirements of NELAC unless otherwise noted.

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Lab No. : 1403948-004

Client Sample ID: IA-2

Sample Information:

Type : Air

Origin:

Collected : 3/13/2014 2:49:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Chloromethane	0.76	ppbv		1	1.57	µg/m³	03/29/2014 2:40 AM
Cyclohexane	1.52	ppbv		1	5.23	µg/m³	03/29/2014 2:40 AM
Dibromochloromethane	< 0.20	ppbv		1	< 1.70	µg/m³	03/29/2014 2:40 AM
Dichlorodifluoromethane	0.55	ppbv		1	2.72	µg/m³	03/29/2014 2:40 AM
Ethanol	911	ppbv	D +	40	1720	µg/m³	03/31/2014 8:23 PM
Ethyl acetate	< 0.20	ppbv	+	1	< 0.72	µg/m³	03/29/2014 2:40 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 2:40 AM
Isopropanol	1.15	ppbv		1	2.83	µg/m³	03/29/2014 2:40 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/29/2014 2:40 AM
Methyl ethyl ketone	1.01	ppbv		1	2.98	µg/m³	03/29/2014 2:40 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/29/2014 2:40 AM
Methyl tert-butyl ether	< 0.20	ppbv		1	< 0.72	µg/m³	03/29/2014 2:40 AM
Methylene chloride	0.68	ppbv		1	2.64	µg/m³	03/29/2014 2:40 AM
n-Heptane	5.37	ppbv		1	22.0	µg/m³	03/29/2014 2:40 AM
n-Hexane	6.84	ppbv		1	24.1	µg/m³	03/29/2014 2:40 AM
Propylene	2.36	ppbv	+	1	4.06	µg/m³	03/29/2014 2:40 AM
Styrene	< 0.20	ppbv		1	< 0.85	µg/m³	03/29/2014 2:40 AM
tert-Butyl Alcohol	< 0.20	ppbv		1	< 0.61	µg/m³	03/29/2014 2:40 AM
Tetrachloroethene	48.8	ppbv	D	40	331	µg/m³	03/31/2014 8:23 PM
Tetrahydrofuran	0.48	ppbv	+	1	1.42	µg/m³	03/29/2014 2:40 AM
Toluene	0.57	ppbv		1	2.15	µg/m³	03/29/2014 2:40 AM
Trichloroethene	0.62	ppbv		1	3.33	µg/m³	03/29/2014 2:40 AM
Trichlorofluoromethane	0.27	ppbv		1	1.52	µg/m³	03/29/2014 2:40 AM
Vinyl acetate	< 0.20	ppbv		1	< 0.70	µg/m³	03/29/2014 2:40 AM
Vinyl bromide	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 2:40 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/29/2014 2:40 AM
Xylenes (m&p)	0.41	ppbv		1	1.78	µg/m³	03/29/2014 2:40 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	03/29/2014 2:40 AM
Surr: 4-Bromofluorobenzene	106	%REC	Limit	70-130	No M.W. Data		03/29/2014 2:40 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
 H = Received/analyzed outside of analytical holding time
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Client Services Manager

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LABORATORY RESULTS

Results for the samples and analytes requested

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Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Lab No. : 1403948-005

Client Sample ID: OA-1

Sample Information:

Type : Air

Origin:

Collected : 3/13/2014 2:45:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Method: ETO-15 :							
Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/27/2014 3:43 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	03/27/2014 3:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.10	ppbv		1	< 0.77	µg/m³	03/27/2014 3:43 AM
1,1,2-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/27/2014 3:43 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/27/2014 3:43 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	03/27/2014 3:43 AM
1,2,4-Trichlorobenzene	< 0.20	ppbv		1	< 1.48	µg/m³	03/27/2014 3:43 AM
1,2,4-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m³	03/27/2014 3:43 AM
1,2-Dibromoethane	< 0.20	ppbv		1	< 1.54	µg/m³	03/27/2014 3:43 AM
1,2-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 3:43 AM
1,2-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/27/2014 3:43 AM
1,2-Dichloroethene (cis)	< 0.20	ppbv		1	< 0.79	µg/m³	03/27/2014 3:43 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	03/27/2014 3:43 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	03/27/2014 3:43 AM
1,2-Dichlorotetrafluoroethane	< 0.20	ppbv		1	< 1.40	µg/m³	03/27/2014 3:43 AM
1,3,5-Trimethylbenzene	< 0.20	ppbv		1	< 0.98	µg/m³	03/27/2014 3:43 AM
1,3-Butadiene	< 0.20	ppbv		1	< 0.44	µg/m³	03/27/2014 3:43 AM
1,3-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 3:43 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	03/27/2014 3:43 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	03/27/2014 3:43 AM
1,3-Hexachlorobutadiene	< 0.20	ppbv	c	1	< 2.13	µg/m³	03/27/2014 3:43 AM
1,4-Dichlorobenzene	< 0.20	ppbv		1	< 1.20	µg/m³	03/27/2014 3:43 AM
1,4-Dioxane	< 0.20	ppbv		1	< 0.72	µg/m³	03/27/2014 3:43 AM
2,2,4-Trimethylpentane	< 0.20	ppbv		1	< 0.93	µg/m³	03/27/2014 3:43 AM
4-Ethyltoluene	< 0.20	ppbv	+	1	< 0.98	µg/m³	03/27/2014 3:43 AM
Acetone	1.07	ppbv		1	2.54	µg/m³	03/27/2014 3:43 AM
Benzene	< 0.20	ppbv		1	< 0.64	µg/m³	03/27/2014 3:43 AM
Bromodichloromethane	< 0.20	ppbv		1	< 1.34	µg/m³	03/27/2014 3:43 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	03/27/2014 3:43 AM
Bromomethane	< 0.20	ppbv		1	< 0.78	µg/m³	03/27/2014 3:43 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	03/27/2014 3:43 AM
Carbon tetrachloride	< 0.20	ppbv		1	< 1.26	µg/m³	03/27/2014 3:43 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	03/27/2014 3:43 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	03/27/2014 3:43 AM
Chloroform	< 0.20	ppbv		1	< 0.98	µg/m³	03/27/2014 3:43 AM

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

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Client Services Manager

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LABORATORY RESULTS

Results for the samples and analytes requested

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Advanced Cleanup Technologies

960 South Broadway, Suite 100
 Hicksville, NY 11801

Attn To : Paul Stewart

Lab No. : 1403948-005

Client Sample ID: OA-1

Sample Information:

Type : Air

Origin:

Collected : 3/13/2014 2:45:00 PM

Received : 3/13/2014 3:46:00 PM 7045-LBNY

Collected By JD99

Method: ETO-15 : Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
Chloromethane	0.49	ppbv		1	1.01	µg/m³	03/27/2014 3:43 AM
Cyclohexane	< 0.20	ppbv		1	< 0.69	µg/m³	03/27/2014 3:43 AM
Dibromochloromethane	< 0.20	ppbv		1	< 1.70	µg/m³	03/27/2014 3:43 AM
Dichlorodifluoromethane	0.43	ppbv		1	2.13	µg/m³	03/27/2014 3:43 AM
Ethanol	1.39	ppbv	+	1	2.62	µg/m³	03/27/2014 3:43 AM
Ethyl acetate	< 0.20	ppbv	+	1	< 0.72	µg/m³	03/27/2014 3:43 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	03/27/2014 3:43 AM
Isopropanol	< 0.20	ppbv		1	< 0.49	µg/m³	03/27/2014 3:43 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/27/2014 3:43 AM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	03/27/2014 3:43 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/27/2014 3:43 AM
Methyl tert-butyl ether	< 0.20	ppbv		1	< 0.72	µg/m³	03/27/2014 3:43 AM
Methylene chloride	1.09	ppbv		1	4.23	µg/m³	03/27/2014 3:43 AM
n-Heptane	< 0.20	ppbv		1	< 0.82	µg/m³	03/27/2014 3:43 AM
n-Hexane	0.20	ppbv		1	0.70	µg/m³	03/27/2014 3:43 AM
Propylene	< 0.20	ppbv	+	1	< 0.34	µg/m³	03/27/2014 3:43 AM
Styrene	< 0.20	ppbv		1	< 0.85	µg/m³	03/27/2014 3:43 AM
tert-Butyl Alcohol	< 0.20	ppbv		1	< 0.61	µg/m³	03/27/2014 3:43 AM
Tetrachloroethene	0.25	ppbv		1	1.70	µg/m³	03/27/2014 3:43 AM
Tetrahydrofuran	< 0.20	ppbv	+	1	< 0.59	µg/m³	03/27/2014 3:43 AM
Toluene	< 0.20	ppbv		1	< 0.75	µg/m³	03/27/2014 3:43 AM
Trichloroethene	< 0.05	ppbv		1	< 0.25	µg/m³	03/27/2014 3:43 AM
Trichlorofluoromethane	0.21	ppbv		1	1.18	µg/m³	03/27/2014 3:43 AM
Vinyl acetate	< 0.20	ppbv		1	< 0.70	µg/m³	03/27/2014 3:43 AM
Vinyl bromide	< 0.20	ppbv		1	< 0.87	µg/m³	03/27/2014 3:43 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/27/2014 3:43 AM
Xylenes (m&p)	< 0.20	ppbv		1	< 0.87	µg/m³	03/27/2014 3:43 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	03/27/2014 3:43 AM
Surr: 4-Bromofluorobenzene	91.0	%REC	Limit	70-130	No M.W. Data		03/27/2014 3:43 AM

Qualifiers: E = Value above quantitation range, Value estimated.
 B = Found in Blank
 D.F. = Dilution Factor D = Results for Dilution
 H = Received/analyzed outside of analytical holding time
 + = ELAP / NELAC does not offer certification for this analyte
 c = Calibration acceptability criteria exceeded for this analyte
 r = Reporting limit > MDL and < LOQ, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound



Client Services Manager

Test results meet the requirements of NELAC unless otherwise noted.

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PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ACT-ECO**

Date and Time Received: **3/13/2014 3:46:00 PM**

Work Order Number: **1403948**

RcptNo: **1**

Received by: **Jamie Spero**

Completed by:

Reviewed by:

Completed Date: 3/13/2014 4:27:20 PM

Reviewed Date: 3/15/2014 8:53:18 PM

Carrier name: Client

Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☒	No ☐		
Is it clear what analyses were requested?	Yes ☒	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒	
Samples in proper container/bottle?	Yes ☒	No ☐		
Were correct preservatives used and noted?	Yes ☒	No ☐	NA ☐	
Preservative added to bottles:				
Sample Condition?	Intact ☒	Broken ☐	Leaking ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA ☒	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA ☒	
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☒	To °	
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☒	
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☒	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water ☒	
Are Samples considered acceptable?	Yes ☒	No ☐		
Custody Seals present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☒	
Airbill No:				

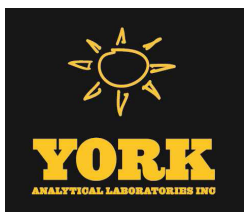
Case Number:

SDG:

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☒ NA Person Contacted:
Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:
Client Instructions:
Date Contacted: Contacted By:
Regarding:
Comments:
sample is air
CorrectiveAction:



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.

110 Main Street

Port Washington NY, 11050

Attention: Joseph Okelarin

Report Date: 06/10/2014

Client Project ID: 7045-LBNY

York Project (SDG) No.: 14F0171

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 06/10/2014
Client Project ID: 7045-LBNY
York Project (SDG) No.: 14F0171

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Joseph Okelarin

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 04, 2014 and listed below. The project was identified as your project: **7045-LBNY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
14F0171-01	IA-1	Indoor Ambient Air	06/03/2014	06/04/2014
14F0171-02	IA-2	Indoor Ambient Air	06/03/2014	06/04/2014
14F0171-03	IA-3	Indoor Ambient Air	06/03/2014	06/04/2014

General Notes for York Project (SDG) No.: 14F0171

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 06/10/2014





Sample Information

Client Sample ID: IA-1

York Sample ID: 14F0171-01

York Project (SDG) No.

14F0171

Client Project ID

7045-LBNY

Matrix

Indoor Ambient Air

Collection Date/Time

June 3, 2014 3:00 pm

Date Received

06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.26	0.26	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.35	0.35	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
79-01-6	Trichloroethylene	7.5		ug/m ³	0.13	0.13	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.45	0.45	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.40	0.40	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
108-88-3	Toluene	2.8		ug/m ³	0.38	0.38	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.29	0.29	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
127-18-4	Tetrachloroethylene	90		ug/m ³	0.68	0.68	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
100-42-5	Styrene	ND		ug/m ³	0.43	0.43	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
115-07-1	* Propylene	ND		ug/m ³	0.17	0.17	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
622-96-8	* p-Ethyltoluene	0.59		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
179601-23-1	p- & m- Xylenes	0.96		ug/m ³	0.87	0.87	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
95-47-6	o-Xylene	0.48		ug/m ³	0.43	0.43	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
110-54-3	n-Hexane	1.2		ug/m ³	0.35	0.35	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
142-82-5	n-Heptane	0.74		ug/m ³	0.41	0.41	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-09-2	Methylene chloride	1.3		ug/m ³	0.69	0.69	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.36	0.36	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
108-10-1	4-Methyl-2-pentanone	0.45		ug/m ³	0.41	0.41	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
67-63-0	Isopropanol	ND		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.1	1.1	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
100-41-4	Ethyl Benzene	ND		ug/m ³	0.43	0.43	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
141-78-6	* Ethyl acetate	ND		ug/m ³	0.72	0.72	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
110-82-7	Cyclohexane	ND		ug/m ³	0.34	0.34	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.45	0.45	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
156-59-2	cis-1,2-Dichloroethylene	1.9		ug/m ³	0.40	0.40	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
74-87-3	Chloromethane	ND		ug/m ³	0.21	0.21	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
67-66-3	Chloroform	ND		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.26	0.26	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.16	0.16	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.31	0.31	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.39	0.39	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-25-2	Bromoform	ND		ug/m ³	1.0	1.0	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.62	0.62	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.52	0.52	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
71-43-2	Benzene	0.61		ug/m ³	0.32	0.32	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
67-64-1	Acetone	35		ug/m ³	0.24	0.24	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	0.82	0.82	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
78-93-3	2-Butanone	3.6		ug/m ³	0.29	0.29	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD



Sample Information

Client Sample ID: IA-1

York Sample ID: 14F0171-01

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/m ³	0.36	0.36	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.60	0.60	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.60	0.60	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
106-99-0	1,3-Butadiene	ND		ug/m ³	0.43	0.43	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.70	0.70	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.46	0.46	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.40	0.40	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.60	0.60	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
95-63-6	1,2,4-Trimethylbenzene	0.74		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.74	0.74	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.40	0.40	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.40	0.40	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.56	0.56	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.77	0.77	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.69	0.69	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
75-71-8	Dichlorodifluoromethane	1.7		ug/m ³	0.49	0.49	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.77	0.77	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.80	0.80	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.41	0.41	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.46	0.46	1	EPA TO-15	06/06/2014 08:12	06/09/2014 13:19	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	90.3 %	72-118								

Sample Information

Client Sample ID: IA-2

York Sample ID: 14F0171-02

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.30	0.30	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.41	0.41	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD



Sample Information

Client Sample ID: IA-2

York Sample ID: 14F0171-02

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
79-01-6	Trichloroethylene	ND		ug/m ³	0.16	0.16	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.53	0.53	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
108-88-3	Toluene	3.9		ug/m ³	0.44	0.44	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.34	0.34	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
127-18-4	Tetrachloroethylene	47		ug/m ³	0.79	0.79	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
100-42-5	Styrene	ND		ug/m ³	0.50	0.50	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
115-07-1	* Propylene	ND		ug/m ³	0.20	0.20	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
622-96-8	* p-Ethyltoluene	0.98		ug/m ³	0.57	0.57	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
179601-23-1	p- & m- Xylenes	1.5		ug/m ³	1.0	1.0	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
95-47-6	o-Xylene	0.71		ug/m ³	0.51	0.51	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
110-54-3	n-Hexane	3.1		ug/m ³	0.41	0.41	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
142-82-5	n-Heptane	3.5		ug/m ³	0.48	0.48	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-09-2	Methylene chloride	2.5		ug/m ³	0.81	0.81	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.42	0.42	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.48	0.48	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
67-63-0	Isopropanol	ND		ug/m ³	0.57	0.57	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.2	1.2	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
100-41-4	Ethyl Benzene	0.51		ug/m ³	0.51	0.51	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
141-78-6	* Ethyl acetate	ND		ug/m ³	0.84	0.84	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
110-82-7	Cyclohexane	0.44		ug/m ³	0.40	0.40	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.53	0.53	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
74-87-3	Chloromethane	ND		ug/m ³	0.24	0.24	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
67-66-3	Chloroform	ND		ug/m ³	0.57	0.57	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.31	0.31	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.18	0.18	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.36	0.36	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.45	0.45	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-25-2	Bromoform	ND		ug/m ³	1.2	1.2	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.73	0.73	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.60	0.60	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
71-43-2	Benzene	0.93		ug/m ³	0.37	0.37	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
67-64-1	Acetone	56		ug/m ³	0.28	0.28	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
591-78-6	* 2-Hexanone	1.7		ug/m ³	0.96	0.96	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
78-93-3	2-Butanone	21		ug/m ³	0.34	0.34	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	0.42	0.42	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD



Sample Information

Client Sample ID: IA-2

York Sample ID: 14F0171-02

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-99-0	1,3-Butadiene	ND		ug/m ³	0.51	0.51	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.57	0.57	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.82	0.82	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.54	0.54	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.47	0.47	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
95-63-6	1,2,4-Trimethylbenzene	1.3		ug/m ³	0.57	0.57	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.87	0.87	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.47	0.47	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	0.66	0.66	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.64	0.64	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.90	0.90	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.80	0.80	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.64	0.64	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
75-71-8	Dichlorodifluoromethane	1.6		ug/m ³	0.58	0.58	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.90	0.90	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.94	0.94	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.48	0.48	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.54	0.54	1.168	EPA TO-15	06/06/2014 08:12	06/09/2014 15:24	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	89.3 %	72-118								

Sample Information

Client Sample ID: IA-3

York Sample ID: 14F0171-03

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.27	0.27	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.37	0.37	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
79-01-6	Trichloroethylene	ND		ug/m ³	0.14	0.14	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.48	0.48	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.42	0.42	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD



Sample Information

Client Sample ID: IA-3

York Sample ID: 14F0171-03

York Project (SDG) No.
14F0171

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	2.9		ug/m ³	0.40	0.40	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.31	0.31	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
127-18-4	Tetrachloroethylene	14		ug/m ³	0.71	0.71	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
100-42-5	Styrene	ND		ug/m ³	0.45	0.45	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
115-07-1	* Propylene	ND		ug/m ³	0.18	0.18	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
622-96-8	* p-Ethyltoluene	0.78		ug/m ³	0.52	0.52	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
179601-23-1	p- & m- Xylenes	1.0		ug/m ³	0.92	0.92	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
95-47-6	o-Xylene	ND		ug/m ³	0.46	0.46	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
110-54-3	n-Hexane	1.4		ug/m ³	0.37	0.37	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
142-82-5	n-Heptane	0.65		ug/m ³	0.43	0.43	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-09-2	Methylene chloride	2.2		ug/m ³	0.73	0.73	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.38	0.38	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.43	0.43	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
67-63-0	Isopropanol	ND		ug/m ³	0.52	0.52	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.1	1.1	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
100-41-4	Ethyl Benzene	ND		ug/m ³	0.46	0.46	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
141-78-6	* Ethyl acetate	ND		ug/m ³	0.76	0.76	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
110-82-7	Cyclohexane	ND		ug/m ³	0.36	0.36	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.48	0.48	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.42	0.42	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
74-87-3	Chloromethane	ND		ug/m ³	0.22	0.22	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
67-66-3	Chloroform	ND		ug/m ³	0.51	0.51	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.28	0.28	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.17	0.17	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.33	0.33	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.41	0.41	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-25-2	Bromoform	ND		ug/m ³	1.1	1.1	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.65	0.65	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.55	0.55	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
71-43-2	Benzene	0.61		ug/m ³	0.34	0.34	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
67-64-1	Acetone	26		ug/m ³	0.25	0.25	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	0.86	0.86	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
78-93-3	2-Butanone	2.6		ug/m ³	0.31	0.31	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	0.38	0.38	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.63	0.63	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.63	0.63	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
106-99-0	1,3-Butadiene	ND		ug/m ³	0.46	0.46	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.52	0.52	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.74	0.74	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD



Sample Information

Client Sample ID: IA-3

York Sample ID: 14F0171-03

York Project (SDG) No.
14F0171

Client Project ID
7045-LBNY

Matrix
Indoor Ambient Air

Collection Date/Time
June 3, 2014 3:00 pm

Date Received
06/04/2014

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.49	0.49	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.43	0.43	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.63	0.63	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
95-63-6	1,2,4-Trimethylbenzene	0.93		ug/m ³	0.52	0.52	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.78	0.78	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.42	0.42	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.43	0.43	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.59	0.59	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.58	0.58	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.81	0.81	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.72	0.72	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.58	0.58	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
75-71-8	Dichlorodifluoromethane	1.4		ug/m ³	0.52	0.52	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.81	0.81	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.85	0.85	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.43	0.43	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.49	0.49	1.054	EPA TO-15	06/06/2014 08:12	06/09/2014 16:27	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	83.9 %	72-118								



Notes and Definitions

QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615
(203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record - AIR

Page 1 of 1

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 14F017

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type/Deliverables	
Company: <u>ADVANCED Cleanup TECH</u>		Company: <u>SAFC</u>		Company: <u>SAFC</u>		<u>7045-6844</u>		RUSH - Same Day ☐		Summary Report ☒	
Address: <u>110 MAIN ST.</u>		Address: <u>SAFC</u>		Address: <u>SAFC</u>		<u>Purchase Order No.</u>		RUSH - Next Day ☐		Summary w/ QA Summary ☐	
Phone No. <u>941-5800</u>		Phone No. <u>SAFC</u>		Phone No. <u>SAFC</u>				RUSH - Two Day ☐		CT RCP Package ☐	
Contact Person: <u>JOSEPH OKELIN</u>		Attention: <u>JOSEPH OKELIN</u>		Attention: <u>KAREN FRIEDMAN</u>				RUSH - Three Day ☐		NY ASP A Package ☐	
E-Mail Address: <u>JOSEPH.ATKINS@YORKLABS.COM</u>		E-Mail Address: <u>JOSEPH.ATKINS@YORKLABS.COM</u>		E-Mail Address: <u>JOSEPH.ATKINS@YORKLABS.COM</u>				RUSH - Four Day ☐		NY ASP B/CLP Pkg ☐	
								Standard (5-7 Days) ☒		NJDEP Reduced ☐	
										Electronic Deliverables: ☐	
										EDD (Specify Type) ☐	
										Standard Excel ☐	
										Regulatory Comparison Excel ☐	

Print Clearly and Legibly: All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

TO15 Volatiles and Other Gas Analyses
EPA TO-15 List
NYSDEC VI list
Tentatively Identified Compounds

Detection Limits Required
 $\leq 1 \mu\text{g}/\text{m}^3$
NYSDEC VI Limits ☒
(VI = vapor interference)
NJDEP low level
Routine Survey
Other

Special Instructions

Air Matrix Codes
AI - INDOOR Ambient Air
AO - OUTDOOR Amb. Air
AE - Vapor Extraction Well/
Process Gas/Effluent
AS - SOIL Vapor/Sub-Slab

NYSDEC STARS List
Air VPH
Project Specific List by TO-15 Helium
NJDEP Target List
Methane
CTDEP RCP Target List
OTHER

Choose Analyses Needed from the Menu Above and Enter Below

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Sampling Media
IA-1	6/3/14	AZ	-27"	-4"	6 Liter Summa canister ☒ Tedlar Bag
IA-2	6/3/14	AZ	-30"	-7"	6 Liter Summa canister ☒ Tedlar Bag
IA-3	6/3/14	AZ	-30"	-6"	6 Liter Summa canister ☒ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag
					6 Liter Summa canister ☐ Tedlar Bag

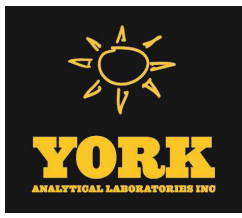
Comments

Samples Relinquished By Joseph Atkins Date/Time 6/4/14 11:10 AM

Samples Received By Joe Baker Date/Time 6/4/14 11AM

Samples Relinquished By Joe Baker Date/Time 6-4-14 1745

Samples Received in LAB by Joe Baker Date/Time 6-4-14 1745



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Theresa Burkard

Report Date: 02/02/2015
Client Project ID: 7045-LBNY
York Project (SDG) No.: 15A0795

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 02/02/2015
Client Project ID: 7045-LBNY
York Project (SDG) No.: 15A0795

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Theresa Burkard

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 26, 2015 and listed below. The project was identified as your project: **7045-LBNY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15A0795-01	IA-1	Indoor Ambient Air	01/23/2015	01/26/2015
15A0795-02	IA-2	Indoor Ambient Air	01/23/2015	01/26/2015

General Notes for York Project (SDG) No.: 15A0795

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 02/02/2015





Sample Information

Client Sample ID: IA-1

York Sample ID: 15A0795-01

York Project (SDG) No.

15A0795

Client Project ID

7045-LBNY

Matrix

Indoor Ambient Air

Collection Date/Time

January 23, 2015 3:00 pm

Date Received

01/26/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.073	0.073	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.40	0.40	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
79-01-6	Trichloroethylene	1.8		ug/m ³	0.15	0.15	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.52	0.52	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.45	0.45	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
108-88-3	Toluene	4.3		ug/m ³	0.43	0.43	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.34	0.34	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
127-18-4	Tetrachloroethylene	120		ug/m ³	0.19	0.19	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
100-42-5	Styrene	ND		ug/m ³	0.49	0.49	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
115-07-1	* Propylene	ND		ug/m ³	0.20	0.20	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
622-96-8	* p-Ethyltoluene	1.3		ug/m ³	0.56	0.56	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
179601-23-1	p- & m- Xylenes	2.5		ug/m ³	0.99	0.99	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
95-47-6	o-Xylene	0.89		ug/m ³	0.50	0.50	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
110-54-3	n-Hexane	3.8		ug/m ³	0.40	0.40	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
142-82-5	n-Heptane	ND		ug/m ³	0.47	0.47	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-09-2	Methylene chloride	4.1		ug/m ³	0.79	0.79	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.41	0.41	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.47	0.47	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
67-63-0	Isopropanol	6.3		ug/m ³	0.56	0.56	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.2	1.2	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
100-41-4	Ethyl Benzene	0.75		ug/m ³	0.50	0.50	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
141-78-6	* Ethyl acetate	2.5		ug/m ³	0.82	0.82	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
110-82-7	Cyclohexane	0.51		ug/m ³	0.39	0.39	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.52	0.52	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.45	0.45	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
74-87-3	Chloromethane	1.2		ug/m ³	0.24	0.24	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
67-66-3	Chloroform	ND		ug/m ³	0.56	0.56	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.30	0.30	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
56-23-5	Carbon tetrachloride	0.43		ug/m ³	0.18	0.18	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.36	0.36	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.44	0.44	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-25-2	Bromoform	ND		ug/m ³	1.2	1.2	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.71	0.71	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.59	0.59	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
71-43-2	Benzene	1.9		ug/m ³	0.37	0.37	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
67-64-1	Acetone	96		ug/m ³	0.27	0.27	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	0.94	0.94	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
78-93-3	2-Butanone	1.5		ug/m ³	0.34	0.34	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD



Sample Information

Client Sample ID: IA-1

York Sample ID: 15A0795-01

York Project (SDG) No.
15A0795

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
January 23, 2015 3:00 pm

Date Received
01/26/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/m ³	0.41	0.41	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.69	0.69	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.69	0.69	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
106-99-0	1,3-Butadiene	ND		ug/m ³	0.50	0.50	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.56	0.56	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.80	0.80	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.53	0.53	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.46	0.46	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.69	0.69	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
95-63-6	1,2,4-Trimethylbenzene	1.5		ug/m ³	0.56	0.56	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.85	0.85	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.45	0.45	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.46	0.46	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.64	0.64	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.62	0.62	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.88	0.88	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.79	0.79	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.62	0.62	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
75-71-8	Dichlorodifluoromethane	3.2		ug/m ³	0.57	0.57	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.88	0.88	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.92	0.92	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.47	0.47	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.53	0.53	1.144	EPA TO-15	01/29/2015 07:29	01/29/2015 15:50	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	94.6 %	72-118								

Sample Information

Client Sample ID: IA-2

York Sample ID: 15A0795-02

York Project (SDG) No.
15A0795

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
January 23, 2015 3:00 pm

Date Received
01/26/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.069	0.069	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.38	0.38	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD



Sample Information

Client Sample ID: IA-2

York Sample ID: 15A0795-02

York Project (SDG) No.
15A0795

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
January 23, 2015 3:00 pm

Date Received
01/26/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	1.7		ug/m ³	0.14	0.14	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.49	0.49	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.43	0.43	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
108-88-3	Toluene	4.1		ug/m ³	0.41	0.41	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.32	0.32	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
127-18-4	Tetrachloroethylene	170		ug/m ³	0.18	0.18	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
100-42-5	Styrene	ND		ug/m ³	0.46	0.46	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
115-07-1	* Propylene	ND		ug/m ³	0.19	0.19	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
622-96-8	* p-Ethyltoluene	1.2		ug/m ³	0.53	0.53	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
179601-23-1	p- & m- Xylenes	1.9		ug/m ³	0.93	0.93	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
95-47-6	o-Xylene	0.75		ug/m ³	0.47	0.47	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
110-54-3	n-Hexane	4.7		ug/m ³	0.38	0.38	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
142-82-5	n-Heptane	4.0		ug/m ³	0.44	0.44	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-09-2	Methylene chloride	13		ug/m ³	0.75	0.75	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.39	0.39	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.44	0.44	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
67-63-0	Isopropanol	22		ug/m ³	0.53	0.53	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.1	1.1	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
100-41-4	Ethyl Benzene	0.65		ug/m ³	0.47	0.47	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
141-78-6	* Ethyl acetate	5.3		ug/m ³	0.77	0.77	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
110-82-7	Cyclohexane	0.63		ug/m ³	0.37	0.37	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.49	0.49	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.43	0.43	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
74-87-3	Chloromethane	1.2		ug/m ³	0.22	0.22	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
67-66-3	Chloroform	ND		ug/m ³	0.52	0.52	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.28	0.28	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
56-23-5	Carbon tetrachloride	0.41		ug/m ³	0.17	0.17	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.33	0.33	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.42	0.42	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-25-2	Bromoform	ND		ug/m ³	1.1	1.1	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.67	0.67	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.56	0.56	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
71-43-2	Benzene	3.3		ug/m ³	0.34	0.34	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
67-64-1	Acetone	23		ug/m ³	0.26	0.26	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	0.88	0.88	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
78-93-3	2-Butanone	2.4		ug/m ³	0.32	0.32	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	0.39	0.39	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.65	0.65	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.65	0.65	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD



Sample Information

Client Sample ID: IA-2

York Sample ID: 15A0795-02

York Project (SDG) No.
15A0795

Client Project ID
7045-LBNY

Matrix
Indoor Ambient Air

Collection Date/Time
January 23, 2015 3:00 pm

Date Received
01/26/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
106-99-0	1,3-Butadiene	ND		ug/m ³	0.47	0.47	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.53	0.53	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.75	0.75	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.50	0.50	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.44	0.44	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.65	0.65	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
95-63-6	1,2,4-Trimethylbenzene	1.1		ug/m ³	0.53	0.53	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.80	0.80	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.43	0.43	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.44	0.44	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m ³	0.60	0.60	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.59	0.59	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.82	0.82	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.74	0.74	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.59	0.59	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.53	0.53	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.83	0.83	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.86	0.86	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
80-62-6	Methyl Methacrylate	2.0		ug/m ³	0.44	0.44	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.49	0.49	1.075	EPA TO-15	01/29/2015 07:29	01/29/2015 17:56	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	95.1 %	72-118								



Notes and Definitions

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.

For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

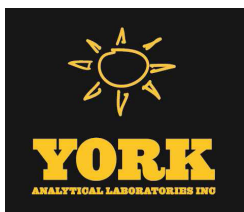


Page of

York Project No. 15A0795

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract

Page 8 of 8



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.

110 Main Street

Port Washington NY, 11050

Attention: Marina Shapiro

Report Date: 03/11/2015

Client Project ID: 7045-LBNY

York Project (SDG) No.: 15C0195

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 03/11/2015
Client Project ID: 7045-LBNY
York Project (SDG) No.: 15C0195

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Marina Shapiro

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 09, 2015 and listed below. The project was identified as your project: **7045-LBNY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15C0195-01	IA-1	Indoor Ambient Air	03/05/2015	03/09/2015
15C0195-02	SS-1	Soil Vapor	03/05/2015	03/09/2015

General Notes for York Project (SDG) No.: 15C0195

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

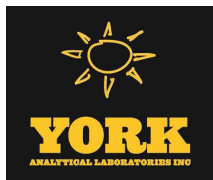
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 03/11/2015





Sample Information

Client Sample ID: IA-1

York Sample ID: 15C0195-01

York Project (SDG) No.

15C0195

Client Project ID

7045-LBNY

Matrix

Indoor Ambient Air

Collection Date/Time

March 5, 2015 3:00 pm

Date Received

03/09/2015

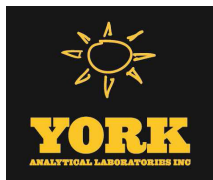
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.075	0.075	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.41	0.41	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
79-01-6	Trichloroethylene	0.38		ug/m ³	0.16	0.16	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.53	0.53	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
108-88-3	Toluene	2.4		ug/m ³	0.44	0.44	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.34	0.34	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
127-18-4	Tetrachloroethylene	8.5		ug/m ³	0.20	0.20	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
100-42-5	Styrene	ND		ug/m ³	0.50	0.50	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
115-07-1	* Propylene	ND		ug/m ³	0.20	0.20	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.57	0.57	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
179601-23-1	p- & m- Xylenes	1.1		ug/m ³	1.0	1.0	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
95-47-6	o-Xylene	ND		ug/m ³	0.51	0.51	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
110-54-3	n-Hexane	4.1		ug/m ³	0.41	0.41	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
142-82-5	n-Heptane	8.1		ug/m ³	0.48	0.48	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-09-2	Methylene chloride	4.4		ug/m ³	0.81	0.81	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.42	0.42	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.48	0.48	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
67-63-0	Isopropanol	4.4		ug/m ³	0.57	0.57	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.2	1.2	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
100-41-4	Ethyl Benzene	0.51		ug/m ³	0.51	0.51	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
141-78-6	* Ethyl acetate	3.5		ug/m ³	0.84	0.84	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
110-82-7	Cyclohexane	0.40		ug/m ³	0.40	0.40	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.53	0.53	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
74-87-3	Chloromethane	1.4		ug/m ³	0.24	0.24	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
67-66-3	Chloroform	ND		ug/m ³	0.57	0.57	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.31	0.31	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
56-23-5	Carbon tetrachloride	0.37		ug/m ³	0.18	0.18	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.36	0.36	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.45	0.45	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-25-2	Bromoform	ND		ug/m ³	1.2	1.2	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.73	0.73	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.61	0.61	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
71-43-2	Benzene	10		ug/m ³	0.37	0.37	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
67-64-1	Acetone	16		ug/m ³	0.28	0.28	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
591-78-6	* 2-Hexanone	1.1		ug/m ³	0.96	0.96	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
78-93-3	2-Butanone	2.6		ug/m ³	0.34	0.34	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD



Sample Information

Client Sample ID: IA-1

York Sample ID: 15C0195-01

York Project (SDG) No.
15C0195

Client Project ID
7045-LB NY

Matrix
Indoor Ambient Air

Collection Date/Time
March 5, 2015 3:00 pm

Date Received
03/09/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/m ³	0.42	0.42	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
106-99-0	1,3-Butadiene	2.4		ug/m ³	0.51	0.51	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.57	0.57	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.82	0.82	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.54	0.54	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.47	0.47	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.70	0.70	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.57	0.57	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.87	0.87	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.46	0.46	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.47	0.47	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.66	0.66	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.64	0.64	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.90	0.90	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.80	0.80	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.64	0.64	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
75-71-8	Dichlorodifluoromethane	1.8		ug/m ³	0.58	0.58	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.90	0.90	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.94	0.94	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.48	0.48	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.54	0.54	1.169	EPA TO-15	03/10/2015 11:19	03/11/2015 01:20	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	105 %	72-118								

Sample Information

Client Sample ID: SS-1

York Sample ID: 15C0195-02

York Project (SDG) No.
15C0195

Client Project ID
7045-LB NY

Matrix
Soil Vapor

Collection Date/Time
March 5, 2015 3:00 pm

Date Received
03/09/2015

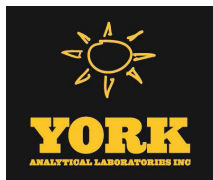
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m ³	0.32	0.32	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	1.8	1.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD



Sample Information

Client Sample ID: SS-1

York Sample ID: 15C0195-02

York Project (SDG) No.
15C0195

Client Project ID
7045-LBNY

Matrix
Soil Vapor

Collection Date/Time
March 5, 2015 3:00 pm

Date Received
03/09/2015

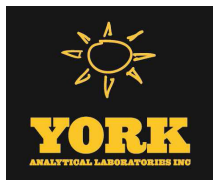
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	5.1		ug/m ³	0.68	0.68	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	2.3	2.3	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
108-88-3	Toluene	16		ug/m ³	1.9	1.9	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
109-99-9	* Tetrahydrofuran	1.8		ug/m ³	1.5	1.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
127-18-4	Tetrachloroethylene	49		ug/m ³	0.85	0.85	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
100-42-5	Styrene	ND		ug/m ³	2.1	2.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
115-07-1	* Propylene	ND		ug/m ³	0.87	0.87	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
622-96-8	* p-Ethyltoluene	7.4		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
179601-23-1	p- & m- Xylenes	19		ug/m ³	4.4	4.4	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
95-47-6	o-Xylene	6.6		ug/m ³	2.2	2.2	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
110-54-3	n-Hexane	4.8		ug/m ³	1.8	1.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
142-82-5	n-Heptane	9.3		ug/m ³	2.1	2.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-09-2	Methylene chloride	ND		ug/m ³	3.5	3.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	1.8	1.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	2.1	2.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
67-63-0	Isopropanol	7.4		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	5.4	5.4	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
100-41-4	Ethyl Benzene	4.8		ug/m ³	2.2	2.2	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
141-78-6	* Ethyl acetate	ND		ug/m ³	3.6	3.6	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
110-82-7	Cyclohexane	ND		ug/m ³	1.7	1.7	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	2.3	2.3	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
156-59-2	cis-1,2-Dichloroethylene	2.2		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
74-87-3	Chloromethane	2.1		ug/m ³	1.0	1.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
67-66-3	Chloroform	ND		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-00-3	Chloroethane	ND		ug/m ³	1.3	1.3	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.79	0.79	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-15-0	Carbon disulfide	8.2		ug/m ³	1.6	1.6	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
74-83-9	Bromomethane	ND		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-25-2	Bromoform	ND		ug/m ³	5.2	5.2	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	3.1	3.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	2.6	2.6	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
71-43-2	Benzene	6.6		ug/m ³	1.6	1.6	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
67-64-1	Acetone	310		ug/m ³	1.2	1.2	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
591-78-6	* 2-Hexanone	19		ug/m ³	4.1	4.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
78-93-3	2-Butanone	32		ug/m ³	1.5	1.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	1.8	1.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	3.0	3.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	3.0	3.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD



Sample Information

Client Sample ID: SS-1

York Sample ID: 15C0195-02

York Project (SDG) No.
15C0195

Client Project ID
7045-LBNY

Matrix
Soil Vapor

Collection Date/Time
March 5, 2015 3:00 pm

Date Received
03/09/2015

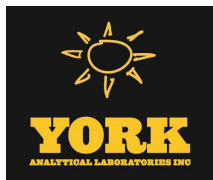
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
106-99-0	1,3-Butadiene	ND		ug/m ³	2.2	2.2	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	3.5	3.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	2.3	2.3	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	3.0	3.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
95-63-6	1,2,4-Trimethylbenzene	7.7		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	3.7	3.7	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	2.0	2.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	2.8	2.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	2.8	2.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	3.9	3.9	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	3.5	3.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	2.8	2.8	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
75-71-8	Dichlorodifluoromethane	2.7		ug/m ³	2.5	2.5	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	3.9	3.9	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	4.0	4.0	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	2.1	2.1	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	2.3	2.3	5.04	EPA TO-15	03/10/2015 11:19	03/11/2015 11:18	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	110 %	72-118								



Notes and Definitions

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.

For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



YORK
ANALYTICAL SERVICES, INC.

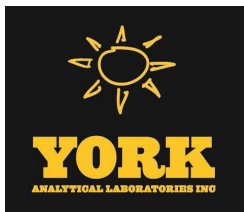
Field Chain-of-Custody Record - AIR

Page of

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 15C0195

YOUR Information Company: <u>ACT</u> Address: <u>110 Main St, #103</u> <u>Port Washington, NY 11050</u> Phone No. <u>516-441-5800</u>		Report To: Company: <u>ACT</u> Address: <u>110 Main St, #103</u> <u>Port Washington, NY 11050</u> Phone No. <u>516-441-5800</u>		Invoice To: Company: <u>ACT</u> Address: <u>110 Main St, #103</u> <u>Port Washington, NY 11050</u> Phone No. <u>516-441-5800</u>		YOUR Project ID <u>7045-LBNY</u> Purchase Order No. <u>516-441-5800</u>		Turn-Around Time RUSH - Same Day ☐ RUSH - Next Day ☐ RUSH - Two Day ☐ RUSH - Three Day ☒ RUSH - Four Day ☐ Standard (5-7 Days) ☒		Report Type/Deliverables Summary Report ☒ Summary w/ QA Summary ☐ CT RCP Package ☐ NY ASP A Package ☐ NY ASP B/CLP Pkg ☐ NJDEP Reduced ☐ Electronic Deliverables: ☐ EDD (Specify Type) ☐ Standard Excel ☐ Regulatory Comparison Excel ☐			
Contact Person: <u>Marina Shapiro</u> E-Mail Address: <u>marinas@actenviro.com</u> Print Clearly and Legibly. All Information must be complete.		Additional Notes: Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.		Detection Limits Required ≤ 1 ug/m ³ NYDEC VI Limits ☐ (VI - vapor instruction) NJDEP low level ☐ Routine Survey ☐ Other ☐		Special Instructions							
Please enter the following Field Data													
Air Matrix Codes AI - INDOOR Ambient Air AO - OUTDOOR Amb. Air AE - Vapor Extraction Well/ Process Gas/Effluent AS - SOIL Vapor/Sub-Slab		AIR Matrix <u>ambient</u> <u>soil vapor</u>		Canister Vacuum Before Sampling (in. Hg) <u>-30</u> After Sampling (in. Hg) <u>-9</u>		Canister ID <u>16156</u> <u>16696</u>		Flow Cont. ID <u>Y23</u> <u>Y45</u>		ANALYSES REQUESTED <u>T0-15</u> <u>T0-15</u>		Sampling Media 6 Liter canister ☒ Tedlar Bag ☐ 6 Liter canister ☒ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐ 6 Liter canister ☐ Tedlar Bag ☐	
Comments <u>Li-Yef</u> <u>3/9/15</u> <u>930</u> Samples Relinquished By <u>Li-Yef</u> Date/Time <u>3/9/15</u> Samples Relinquished By <u>Li-Yef</u> Date/Time <u>3/9/15</u> Samples Received By <u>Li-Yef</u> Date/Time <u>3/9/15</u> Samples Received in LAB by <u>Li-Yef</u> Date/Time <u>3/9/15</u>													



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.

110 Main Street

Port Washington NY, 11050

Attention: Marina Shapiro

Report Date: 03/23/2015

Client Project ID: 7045- LBNY

York Project (SDG) No.: 15C0568

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 03/23/2015
Client Project ID: 7045- LBNY
York Project (SDG) No.: 15C0568

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Marina Shapiro

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 19, 2015 and listed below. The project was identified as your project: **7045- LBNY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15C0568-01	IA-2	Indoor Ambient Air	03/18/2015	03/19/2015
15C0568-02	SS-2	Soil Vapor	03/18/2015	03/19/2015

General Notes for York Project (SDG) No.: 15C0568

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 03/23/2015





Sample Information

Client Sample ID: IA-2

York Sample ID: 15C0568-01

York Project (SDG) No.

15C0568

Client Project ID

7045- LBNY

Matrix

Indoor Ambient Air

Collection Date/Time

March 18, 2015 3:00 pm

Date Received

03/19/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.35	0.71	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.56	0.56	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.71	0.71	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.79	0.79	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.56	0.56	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.42	0.42	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.41	0.41	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.77	0.77	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.51	0.51	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.79	0.79	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.62	0.62	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.42	0.42	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.48	0.48	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.72	0.72	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.51	0.51	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
106-99-0	1,3-Butadiene	ND		ug/m ³	0.45	0.45	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.62	0.62	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.48	0.48	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.62	0.62	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	0.37	0.37	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
78-93-3	2-Butanone	0.88		ug/m ³	0.30	0.30	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	0.85	0.85	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
107-05-1	* 3-Chloropropene	ND		ug/m ³	0.32	0.32	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.42	0.42	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
67-64-1	Acetone	25		ug/m ³	0.25	0.25	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
107-13-1	* Acrylonitrile	ND		ug/m ³	0.22	0.22	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
71-43-2	Benzene	1.0		ug/m ³	0.33	0.33	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	0.54	0.54	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	0.64	0.64	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-25-2	Bromoform	ND		ug/m ³	1.1	1.1	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
74-83-9	Bromomethane	ND		ug/m ³	0.40	0.40	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	0.32	0.32	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
56-23-5	Carbon tetrachloride	0.52		ug/m ³	0.16	0.16	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	0.48	0.48	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-00-3	Chloroethane	ND		ug/m ³	0.27	0.27	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
67-66-3	Chloroform	ND		ug/m ³	0.50	0.50	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
74-87-3	Chloromethane	1.6		ug/m ³	0.21	0.21	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD



Sample Information

Client Sample ID: IA-2

York Sample ID: 15C0568-01

York Project (SDG) No.
15C0568

Client Project ID
7045- LBNY

Matrix
Indoor Ambient Air

Collection Date/Time
March 18, 2015 3:00 pm

Date Received
03/19/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.41	0.41	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.47	0.47	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
110-82-7	Cyclohexane	ND		ug/m ³	0.36	0.36	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	0.83	0.83	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-71-8	Dichlorodifluoromethane	2.4		ug/m ³	0.51	0.51	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
141-78-6	* Ethyl acetate	1.5		ug/m ³	0.74	0.74	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
100-41-4	Ethyl Benzene	ND		ug/m ³	0.45	0.45	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.1	1.1	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
67-63-0	Isopropanol	3.9		ug/m ³	0.51	0.51	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
80-62-6	Methyl Methacrylate	0.59		ug/m ³	0.42	0.42	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.37	0.37	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-09-2	Methylene chloride	4.0		ug/m ³	0.72	0.72	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
142-82-5	n-Heptane	ND		ug/m ³	0.42	0.42	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
110-54-3	n-Hexane	1.1		ug/m ³	0.36	0.36	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
95-47-6	o-Xylene	ND		ug/m ³	0.45	0.45	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
179601-23-1	p- & m- Xylenes	ND		ug/m ³	0.90	0.90	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.51	0.51	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
115-07-1	* Propylene	ND		ug/m ³	0.18	0.18	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
100-42-5	Styrene	ND		ug/m ³	0.44	0.44	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.18	0.18	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.30	0.30	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
108-88-3	Toluene	4.6		ug/m ³	0.39	0.39	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.41	0.41	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.47	0.47	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
79-01-6	Trichloroethylene	ND		ug/m ³	0.14	0.14	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.58	0.58	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	0.36	0.36	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
593-60-2	Vinyl bromide	ND		ug/m ³	0.45	0.45	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
75-01-4	Vinyl Chloride	ND		ug/m ³	0.066	0.066	1.0336	EPA TO-15	03/21/2015 08:56	03/21/2015 20:49	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	99.2 %	72-118								

Sample Information

Client Sample ID: SS-2

York Sample ID: 15C0568-02

York Project (SDG) No.
15C0568

Client Project ID
7045- LBNY

Matrix
Soil Vapor

Collection Date/Time
March 18, 2015 3:00 pm

Date Received
03/19/2015



Sample Information

Client Sample ID: SS-2

York Sample ID: 15C0568-02

York Project (SDG) No.
15C0568

Client Project ID
7045- LBNY

Matrix
Soil Vapor

Collection Date/Time
March 18, 2015 3:00 pm

Date Received
03/19/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	1.5	3.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	2.4	2.4	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	3.0	3.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	3.3	3.3	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	2.4	2.4	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-34-3	1,1-Dichloroethane	ND		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	1.7	1.7	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	3.2	3.2	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
95-63-6	1,2,4-Trimethylbenzene	8.9		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m ³	3.3	3.3	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	2.6	2.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m ³	2.0	2.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	3.0	3.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
108-67-8	1,3,5-Trimethylbenzene	2.1		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
106-99-0	1,3-Butadiene	ND		ug/m ³	1.9	1.9	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	2.6	2.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	2.0	2.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	2.6	2.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
123-91-1	1,4-Dioxane	ND		ug/m ³	1.6	1.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
78-93-3	2-Butanone	11		ug/m ³	1.3	1.3	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
591-78-6	* 2-Hexanone	ND		ug/m ³	3.5	3.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
107-05-1	* 3-Chloropropene	ND		ug/m ³	1.4	1.4	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
67-64-1	Acetone	95		ug/m ³	1.0	1.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
107-13-1	* Acrylonitrile	ND		ug/m ³	0.94	0.94	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
71-43-2	Benzene	2.8		ug/m ³	1.4	1.4	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
100-44-7	Benzyl chloride	ND		ug/m ³	2.2	2.2	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-27-4	Bromodichloromethane	ND		ug/m ³	2.7	2.7	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-25-2	Bromoform	ND		ug/m ³	4.5	4.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
74-83-9	Bromomethane	ND		ug/m ³	1.7	1.7	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-15-0	Carbon disulfide	ND		ug/m ³	1.3	1.3	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.68	0.68	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
108-90-7	Chlorobenzene	ND		ug/m ³	2.0	2.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-00-3	Chloroethane	ND		ug/m ³	1.1	1.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
67-66-3	Chloroform	ND		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
74-87-3	Chloromethane	ND		ug/m ³	0.89	0.89	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
156-59-2	cis-1,2-Dichloroethylene	15		ug/m ³	1.7	1.7	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	2.0	2.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD



Sample Information

Client Sample ID: SS-2

York Sample ID: 15C0568-02

York Project (SDG) No.
15C0568

Client Project ID
7045- LBNY

Matrix
Soil Vapor

Collection Date/Time
March 18, 2015 3:00 pm

Date Received
03/19/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD/MDL	LOQ					
110-82-7	Cyclohexane	ND		ug/m ³	1.5	1.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
124-48-1	Dibromochloromethane	ND		ug/m ³	3.5	3.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-71-8	Dichlorodifluoromethane	2.8		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
141-78-6	* Ethyl acetate	ND		ug/m ³	3.1	3.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
100-41-4	Ethyl Benzene	6.6		ug/m ³	1.9	1.9	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
87-68-3	Hexachlorobutadiene	ND		ug/m ³	4.6	4.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
67-63-0	Isopropanol	7.4		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
80-62-6	Methyl Methacrylate	ND		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	1.6	1.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-09-2	Methylene chloride	ND		ug/m ³	3.0	3.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
142-82-5	n-Heptane	2.3		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
110-54-3	n-Hexane	ND		ug/m ³	1.5	1.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
95-47-6	o-Xylene	7.7		ug/m ³	1.9	1.9	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
179601-23-1	p- & m- Xylenes	32		ug/m ³	3.8	3.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
622-96-8	* p-Ethyltoluene	8.9		ug/m ³	2.1	2.1	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
115-07-1	* Propylene	ND		ug/m ³	0.74	0.74	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
100-42-5	Styrene	ND		ug/m ³	1.8	1.8	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
127-18-4	Tetrachloroethylene	63		ug/m ³	0.73	0.73	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
109-99-9	* Tetrahydrofuran	ND		ug/m ³	1.3	1.3	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
108-88-3	Toluene	30		ug/m ³	1.6	1.6	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	1.7	1.7	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	2.0	2.0	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
79-01-6	Trichloroethylene	23		ug/m ³	0.58	0.58	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	2.4	2.4	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
108-05-4	Vinyl acetate	ND		ug/m ³	1.5	1.5	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
593-60-2	Vinyl bromide	ND		ug/m ³	1.9	1.9	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
75-01-4	Vinyl Chloride	ND		ug/m ³	0.28	0.28	4.328	EPA TO-15	03/21/2015 08:56	03/22/2015 15:11	ALD
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	97.3 %	72-118								



Notes and Definitions

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.

For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

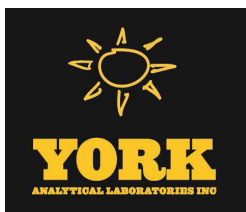


Page 1 of 1

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 15C0568

Page 8 of 8



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Mark Gelband

Report Date: 01/06/2017
Client Project ID: 7045-LBNY
York Project (SDG) No.: 16L1118

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 01/06/2017
Client Project ID: 7045-LBNY
York Project (SDG) No.: 16L1118

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Mark Gelband

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 29, 2016 and listed below. The project was identified as your project: **7045-LBNY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
16L1118-01	MW-1	Water	12/28/2016	12/29/2016
16L1118-02	MW-2	Water	12/28/2016	12/29/2016
16L1118-03	MW-3	Water	12/28/2016	12/29/2016
16L1118-04	MW-4	Water	12/28/2016	12/29/2016
16L1118-05	MW-5	Water	12/28/2016	12/29/2016
16L1118-06	MW-6	Water	12/28/2016	12/29/2016

General Notes for York Project (SDG) No.: 16L1118

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
9. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/06/2017





Sample Information

Client Sample ID: MW-1

York Sample ID: 16L1118-01

York Project (SDG) No.

16L1118

Client Project ID

7045-LBNY

Matrix

Water

Collection Date/Time

December 28, 2016 11:50 am

Date Received

12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS



Sample Information

Client Sample ID: MW-1

York Sample ID: 16L1118-01

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 11:50 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS



Sample Information

Client Sample ID: MW-1

York Sample ID: 16L1118-01

York Project (SDG) No.

16L1118

Client Project ID

7045-LB NY

Matrix

Water

Collection Date/Time

December 28, 2016 11:50 am

Date Received

12/29/2016

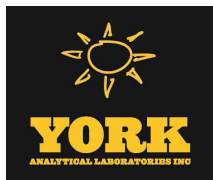
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 03:54	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 03:54	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
127-18-4	Tetrachloroethylene	0.38	CCV-E , J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS



Sample Information

Client Sample ID: MW-1

York Sample ID: 16L1118-01

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 11:50 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 03:54	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.0 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	99.1 %	79-122								

Sample Information

Client Sample ID: MW-2

York Sample ID: 16L1118-02

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 10:00 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS



Sample Information

Client Sample ID: MW-2

York Sample ID: 16L1118-02

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 10:00 am

Date Received
12/29/2016

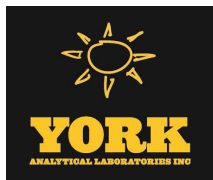
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS



Sample Information

Client Sample ID: MW-2

York Sample ID: 16L1118-02

York Project (SDG) No.

16L1118

Client Project ID

7045-LB NY

Matrix

Water

Collection Date/Time

December 28, 2016 10:00 am

Date Received

12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
67-66-3	Chloroform	1.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS



Sample Information

Client Sample ID: MW-2

York Sample ID: 16L1118-02

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 10:00 am

Date Received
12/29/2016

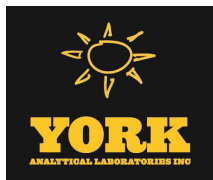
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 04:34	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 04:34	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
127-18-4	Tetrachloroethylene	0.53	CCV-E	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 04:34	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.4 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	96.4 %	79-122								



Sample Information

Client Sample ID: MW-3

York Sample ID: 16L1118-03

York Project (SDG) No.

16L1118

Client Project ID

7045-LBNY

Matrix

Water

Collection Date/Time

December 28, 2016 12:35 pm

Date Received

12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS



Sample Information

Client Sample ID: MW-3

York Sample ID: 16L1118-03

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 12:35 pm

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS



Sample Information

Client Sample ID: MW-3

York Sample ID: 16L1118-03

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 12:35 pm

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 05:14	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 05:14	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
127-18-4	Tetrachloroethylene	0.69	CCV-E	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS



Sample Information

Client Sample ID: MW-3

York Sample ID: 16L1118-03

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 12:35 pm

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 05:14	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.3 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	98.0 %	79-122								

Sample Information

Client Sample ID: MW-4

York Sample ID: 16L1118-04

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 9:00 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS



Sample Information

Client Sample ID: MW-4

York Sample ID: 16L1118-04

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 9:00 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS



Sample Information

Client Sample ID: MW-4

York Sample ID: 16L1118-04

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 9:00 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS



Sample Information

Client Sample ID: MW-4

York Sample ID: 16L1118-04

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 9:00 am

Date Received
12/29/2016

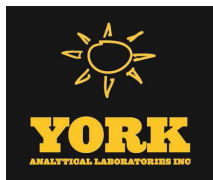
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 05:54	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 05:54	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 05:54	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	99.1 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.4 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	98.4 %	79-122								



Sample Information

Client Sample ID: MW-5

York Sample ID: 16L1118-05

York Project (SDG) No.

16L1118

Client Project ID

7045-LBNY

Matrix

Water

Collection Date/Time

December 28, 2016 10:50 am

Date Received

12/29/2016

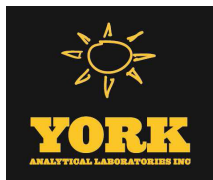
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS



Sample Information

Client Sample ID: MW-5

York Sample ID: 16L1118-05

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 10:50 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS



Sample Information

Client Sample ID: MW-5

York Sample ID: 16L1118-05

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 10:50 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 06:34	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 06:34	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
127-18-4	Tetrachloroethylene	0.27	CCV-E , J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS



Sample Information

Client Sample ID: MW-5

York Sample ID: 16L1118-05

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 10:50 am

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 06:34	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	105 %	69-130								
2037-26-5	Surrogate: Toluene-d8	101 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	90.4 %	79-122								

Sample Information

Client Sample ID: MW-6

York Sample ID: 16L1118-06

York Project (SDG) No.
16L1118

Client Project ID
7045-LB NY

Matrix
Water

Collection Date/Time
December 28, 2016 1:30 pm

Date Received
12/29/2016

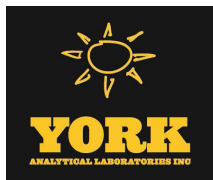
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS



Sample Information

Client Sample ID: MW-6

York Sample ID: 16L1118-06

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 1:30 pm

Date Received
12/29/2016

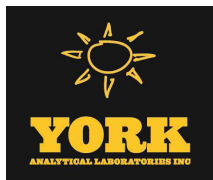
Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
78-93-3	2-Butanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS



Sample Information

Client Sample ID: MW-6

York Sample ID: 16L1118-06

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 1:30 pm

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS



Sample Information

Client Sample ID: MW-6

York Sample ID: 16L1118-06

York Project (SDG) No.
16L1118

Client Project ID
7045-LBNY

Matrix
Water

Collection Date/Time
December 28, 2016 1:30 pm

Date Received
12/29/2016

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 07:14	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	01/05/2017 18:58	01/06/2017 07:14	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	01/05/2017 18:58	01/06/2017 07:14	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.8 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	99.1 %	79-122								



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
16L1118-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16L1118-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16L1118-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16L1118-04	MW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16L1118-05	MW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16L1118-06	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Notes and Definitions

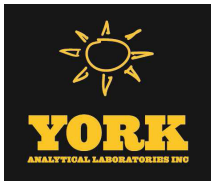
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.



Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

Page ____ of ____

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested. signature binds you to York's Std. Terms & Conditions.

York Project No. 16L118

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: Advanced Cleanup Tech	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT	Company: ACT
Address: 110 Main St.	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT	Address: ACT
Phone No: 516-441-5800	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT	Phone No: ACT
Contact Person: Tim Young	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband	Contact Person: Mark Gelband
E-Mail Address: tim.young@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com	E-Mail Address: Mark.Gelband@act-ent.com
Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved. Samples Collected/Authorized By (Signature) <i>Tim Young</i> Name (printed) <i>Tim Young</i>											
Choose Analyses Needed from the Menu Above and Enter Below											
Sample Identification	Date/Time Sampled	Sample Matrix									
MW-1	12/28 1150	GL									
MW-2	" 1000	"									
MW-3	" 1235	"									
MW-4	" 0900	"									
MW-5	" 1050	"									
MW-6	" 1330	"									
Comments											
4°C _____ Frozen _____ HCl _____ MeOH _____ HNO₃ _____ NaOH _____ _____ ZnAc _____ Ascorbic Acid _____ Other _____ Preservation Check those Applicable Special Instructions Field Filtered ☐ Lab to Filter ☐											
Samples Relinquished By <i>Tim Young</i> Date/Time <i>12/29/16 9AM</i> Samples Relinquished By <i>Mark Gelband</i> Date/Time <i>12/29/16 1835</i> Samples Received By <i>Mark Gelband</i> Date/Time <i>12/29/16 9AM</i> Samples Received By <i>Tim Young</i> Date/Time <i>12/29/16 1835</i>											
Temperature on Receipt <i>2.4 °C</i>											

Appendix H

Pilot Test Results

Pilot Test Data (9/19/2012)
429 Merrick Road
Lynbrook, NY

ACT Project No.: 7045-LBNY

Vacuum (in. H₂O): 25.5

Flow (acfm): 43.0

Distance (ft)	Vacuum Response (in. H ₂ O)
5	0.11
10	0.41
15	0.32
20	0.19
25	0.16

Vacuum (in. H₂O): 20

Flow (acfm): 33.5

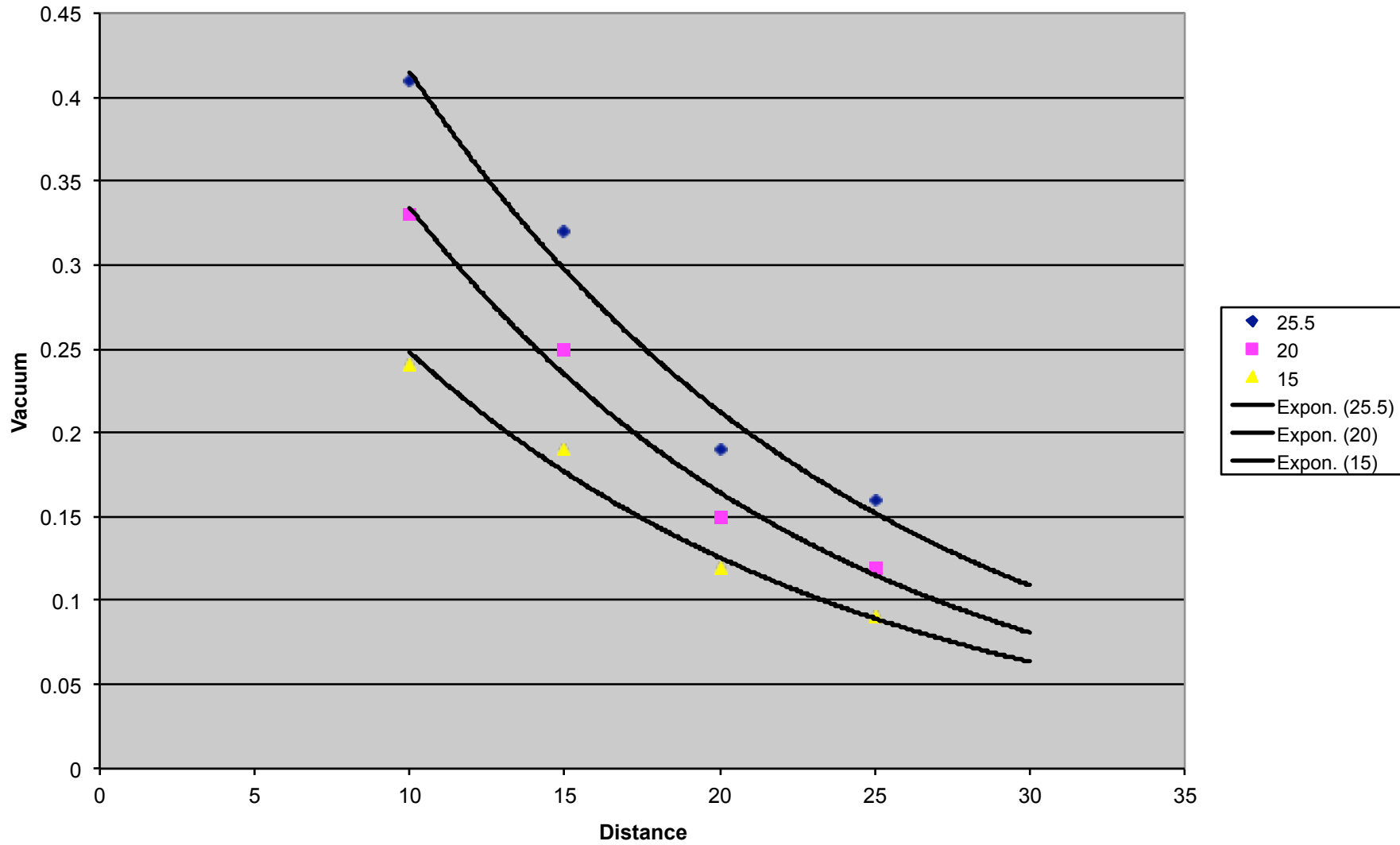
Distance (ft)	Vacuum Response (in. H ₂ O)
5	0.08
10	0.33
15	0.25
20	0.15
25	0.12

Vacuum (in. H₂O): 15

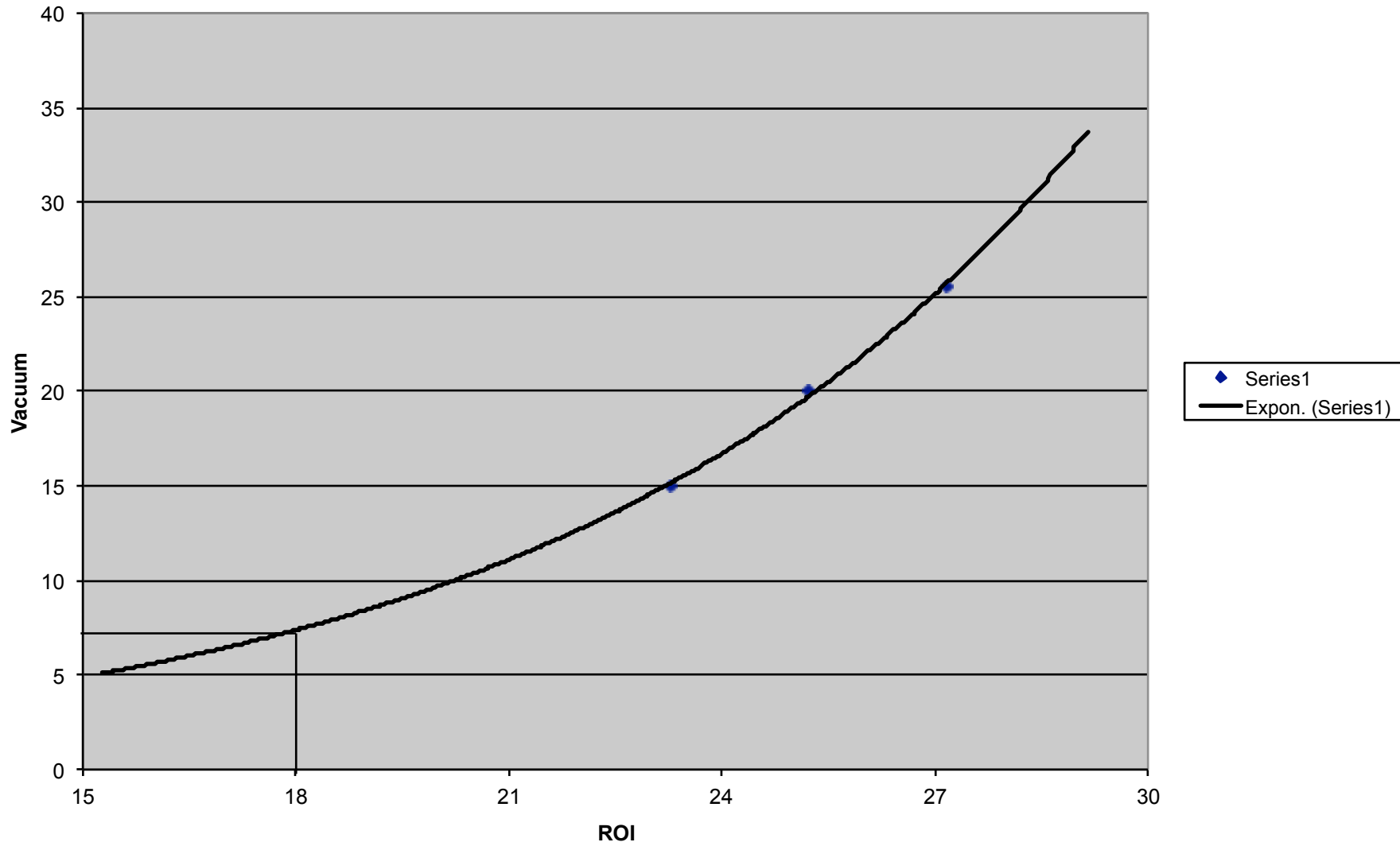
Flow (acfm): 22.8

Distance (ft)	Vacuum Response (in. H ₂ O)
5	0.06
10	0.24
15	0.19
20	0.12
25	0.09

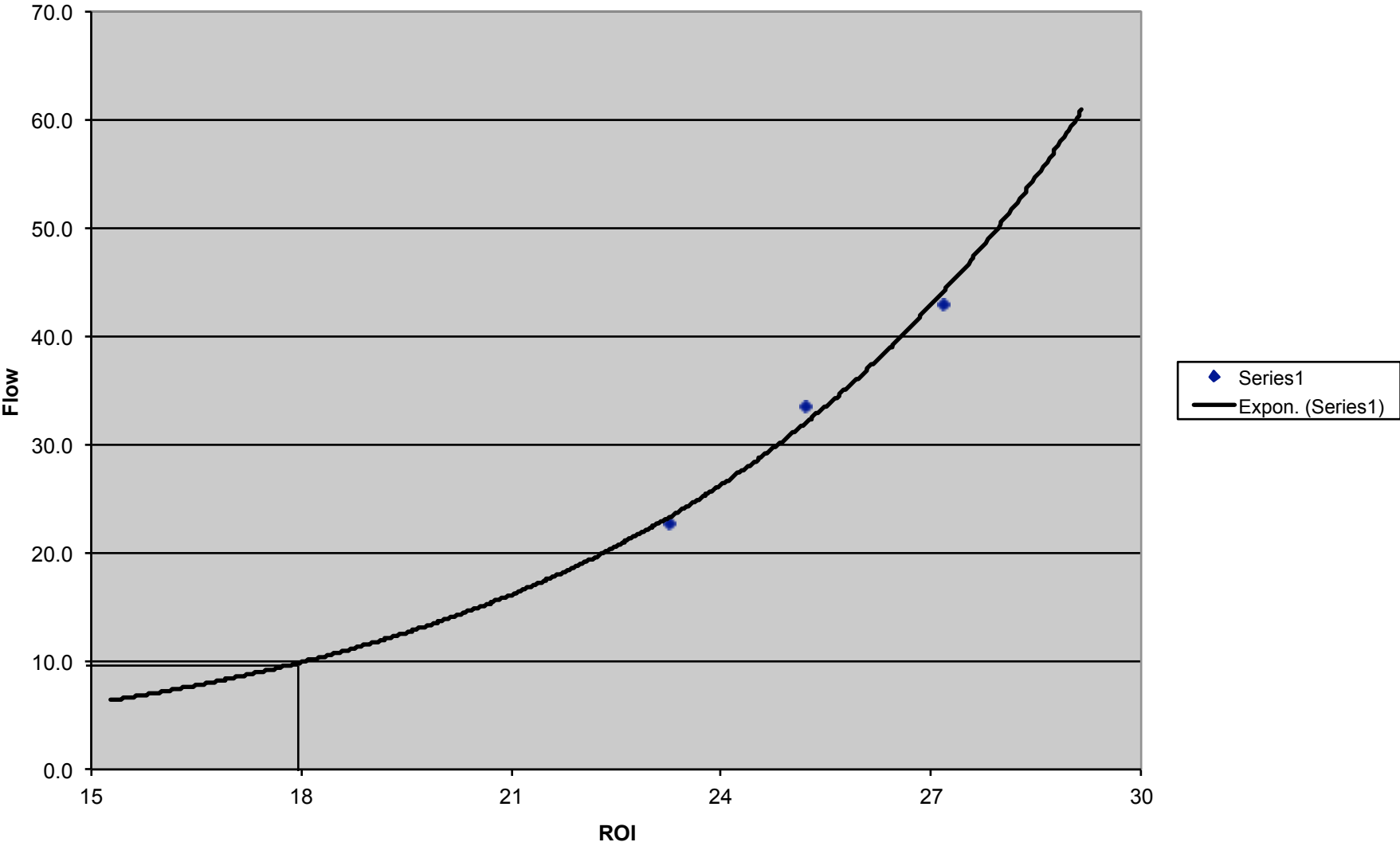
Distance Vs. Vacuum 9/19/12



ROI Vs. Vacuum 9/19/12



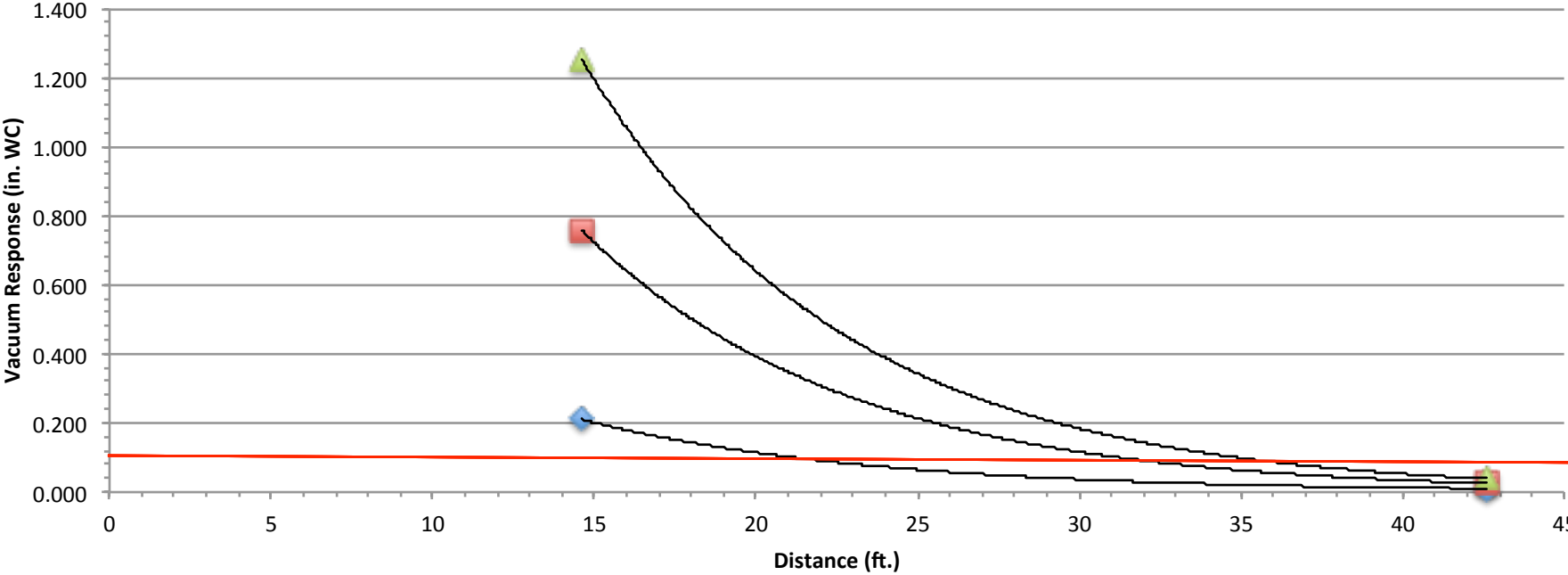
ROI Vs. Flow 9/19/12



Vapor Mitigation Pilot Test Data (4/4/2014)		
429 Merrick Road, Lynbrook, NY		
Vacuum (in. H2O) vs. Distance (ft.)		
Applied Vacuum (At Well Head)	Induced Vacuum VP-2 (14.6')	Induced Vacuum VP 1 (42.6')
4.48	0.158	0.006
6.16	0.21	0.009
10.51	0.55	0.017
15.00	0.758	0.025
20.00	0.985	0.031
23.50	1.185	0.035
27.00	1.255	0.038

Vacuum (in. H2O) vs. Flow (ACFM)	
Vacuum	Flow
5	31
10	55
15	90
20	120
25	145

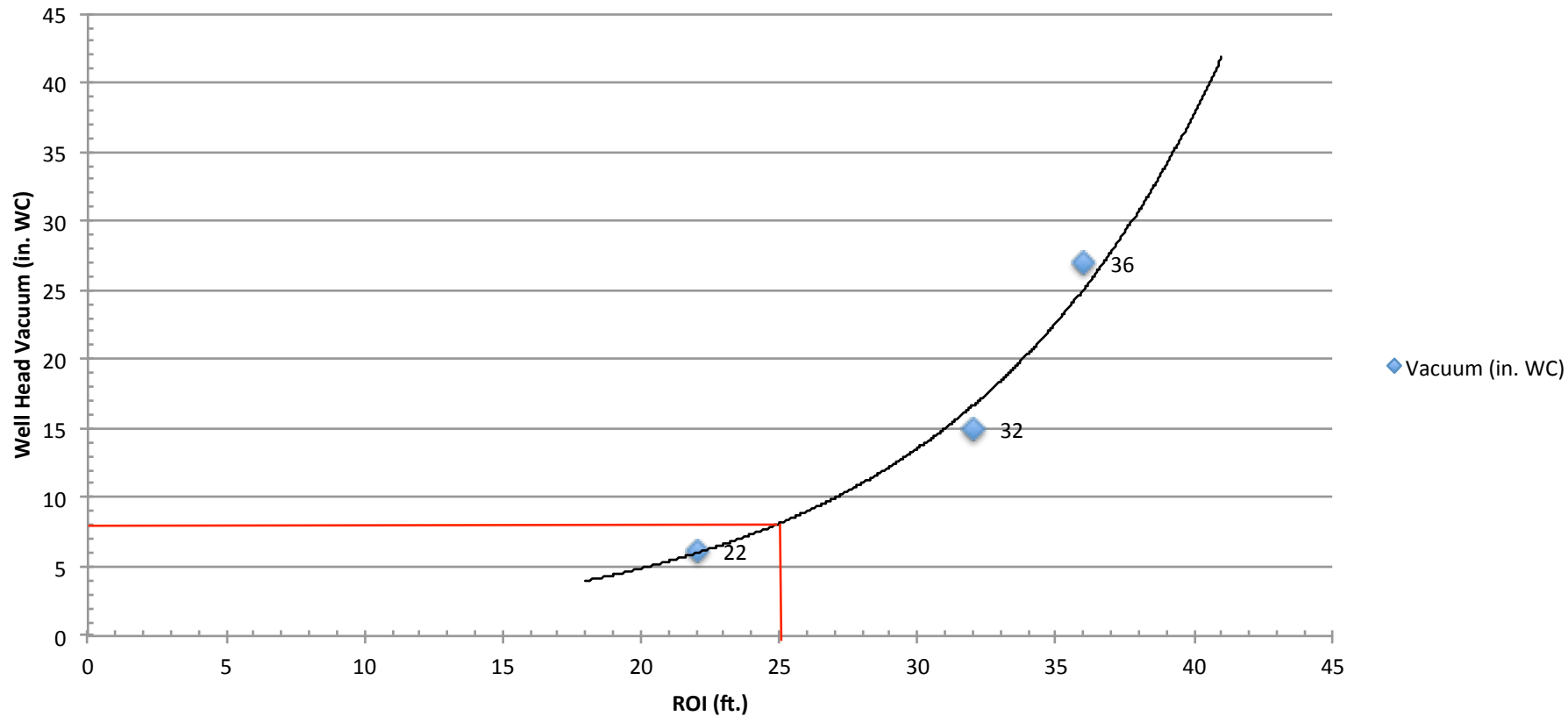
Distance Vs. Vacuum Response



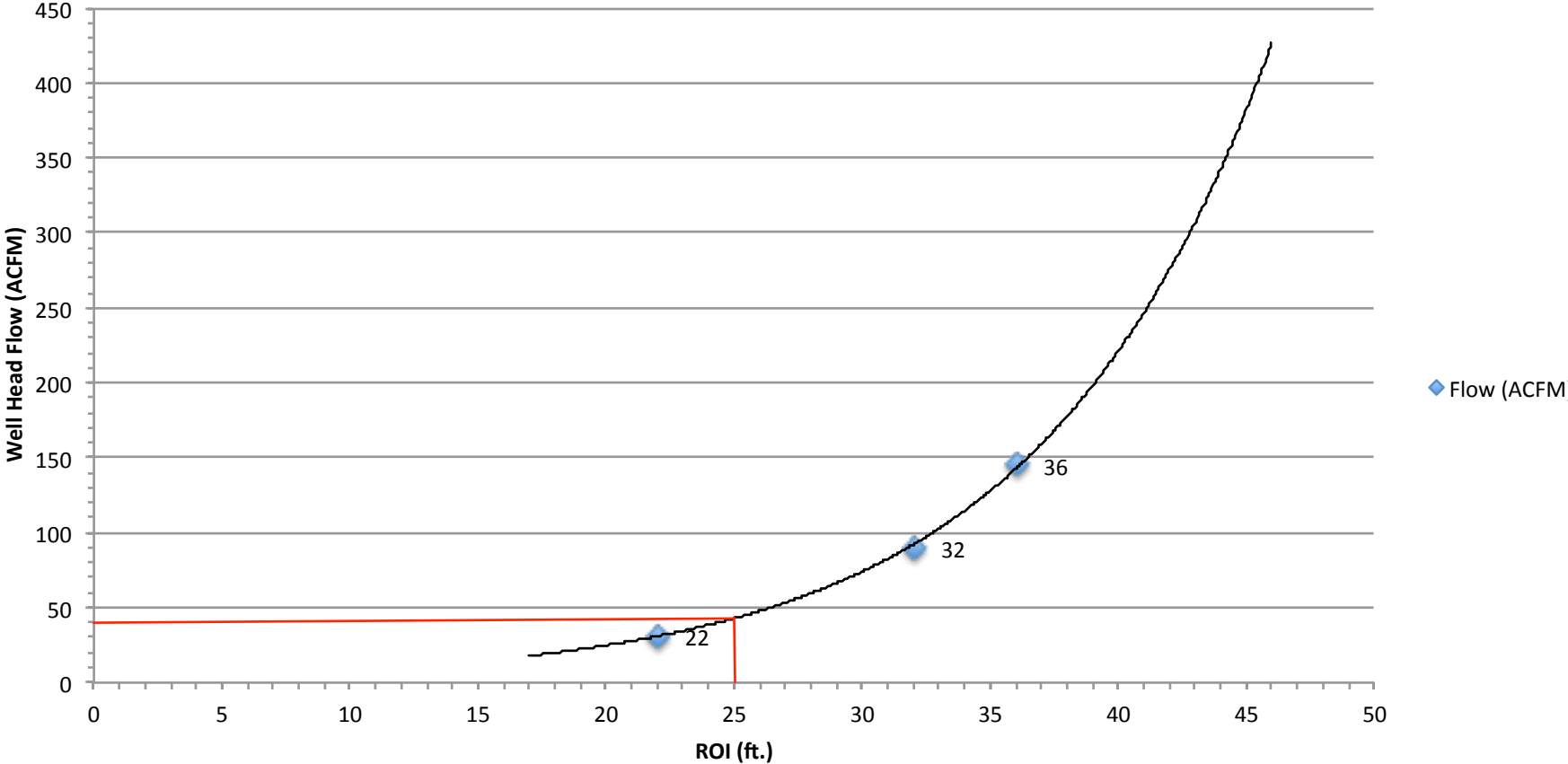
◆ Well Head Vac = 5" ■ Well Head Vac = 15" ▲ Well Head Vac = 30"

— Expon. (Well Head Vac = 5") — Expon. (Well Head Vac = 15") — Expon. (Well Head Vac = 30")

ROI Vs. Well Head Vacuum



ROI Vs. Well Head Flow



Appendix I

Equipment Specifications



FPZ, Inc
 150 N. Progress Drive
 Saukville, WI 53080 - U.S.A.
 Tel. (262) 268-0180
 Fax (262) 268-0415
 E-mail usa@fpz.com

REGENERATIVE BLOWERS - VACUUM SCL K03 / K04 / K05 / K06

MS SERIES
 SN 1879-8 1/2

TECHNICAL CHARACTERISTICS

- Aluminium alloy construction
- Smooth operation
- High efficiency impeller
- Maintenance free
- Mountable in any position
- Recognized TEFC - cURus motor

OPTIONS

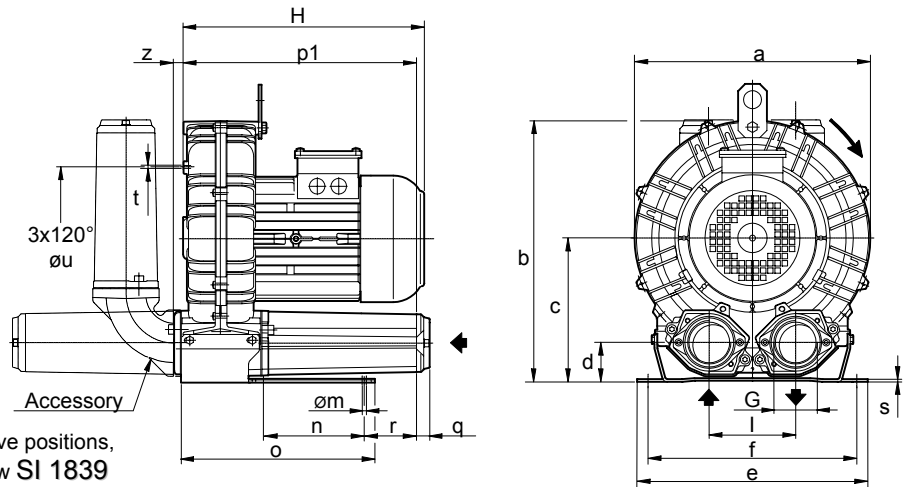
- Special voltages (IEC 38)
- Surface treatments

ACCESSORIES

- Inlet and/or inline filters
- Additional inlet/outlet silencers
- Safety valves
- Flow converting device
- Optional connectors

Dimensions in inches.
 Dimension for reference only.

Possible alternative positions,
 please refer to drw SI 1839



Model	a	b	c	d	e	f	G	l	m	n	o	p1	q	r	s	t	u	z
K03-MS	9.49	10.55	5.79	1.69	9.06	8.07	1" 1/4 NPT	3.39	0.39	3.27	5.59	8.07	0.71	2.95	0.16	M6	5.51	0.47
K04-MS	11.22	12.40	6.77	1.93	10.04	8.86	1"1/2 NPT	4.02	0.47	3.74	6.73	8.74	0.71	2.76	0.16	M6	6.89	0.71
K05-MS	12.87	14.37	7.87	2.13	12.60	10.24	2" NPT	4.72	0.59	4.53	10.43	12.60	0.71	3.86	0.16	M8	7.87	0.75
K06-MS	14.80	15.47	8.07	2.13	12.80	11.42	2" NPT	4.92	0.59	5.51	10.71	13.15	0.71	3.35	0.16	M8	9.45	0.75

Model	Maximum flow cfm		Installed power Hp		Maximum differential pressure Δp (In Hg)		Noise level Lp dB (A) (1)		Overall dimensions H Inches	Weight Lbs
	60 Hz 3500 rpm	50 Hz 2900 rpm	60 Hz 3500 rpm	50 Hz 2900 rpm	60 Hz 3500 rpm	50 Hz 2900 rpm	60 Hz 3500 rpm	50 Hz 2900 rpm		
K03-MS	52	43	3/4	3/4	4.7	3.7	61.0	59.0	10.43	24.30
			1	1	5.9	4.9	61.3	59.3	11.97	26.50
K04-MS	98	81	1 1/2	1 1/2	4.3	5.9	63.8	61.8	11.65	36.40
			2	2	6.3	6.6	64.0	62.0	13.78	43.00
			3	-	7.4	-	64.2	-	13.78	49.60
K05-MS	156	129	2	2	3.8	5.1	69.5	67.5	13.20	51.80
			3	3	6.6	7.1	69.8	67.8	13.20	58.40
			4	-	8.1	-	70.1	-	14.40	67.20
K06-MS	216	179	3	3	3.7	4.8	72.0	70.0	13.54	68.70
			4	4	5.5	7.0	72.3	70.3	14.17	71.65
			5 1/2	5 1/2	8.1	8.1	72.6	70.6	14.17	77.60
			6 1/5 (2)	-	9.6	-	72.9	-	14.45	77.60

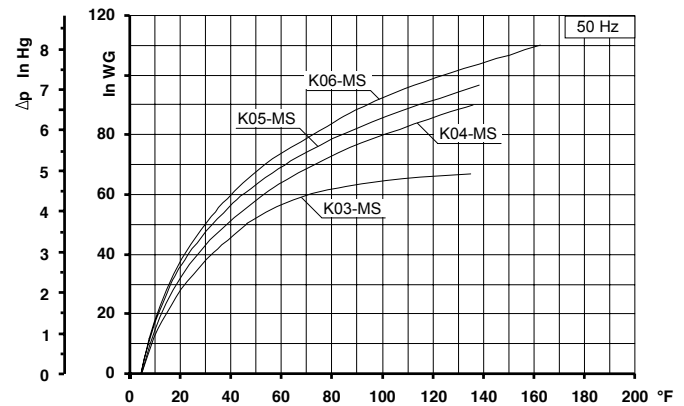
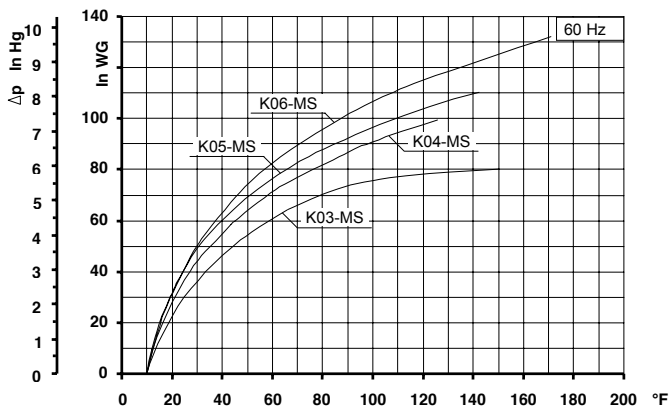
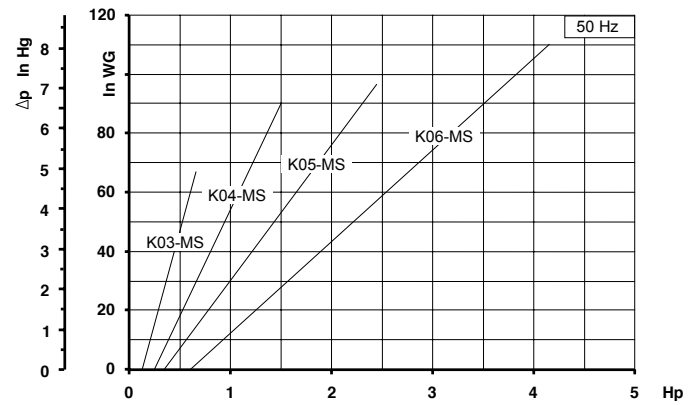
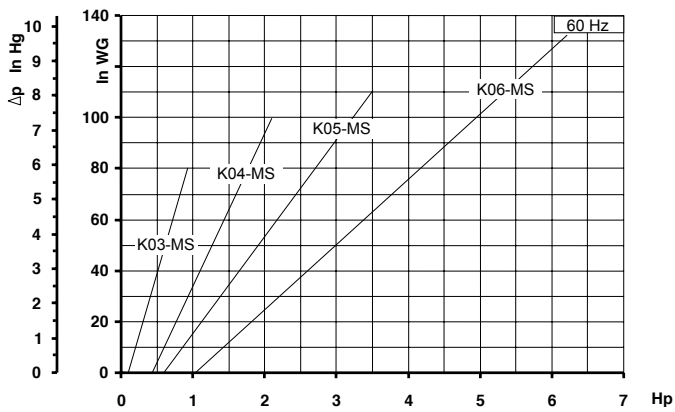
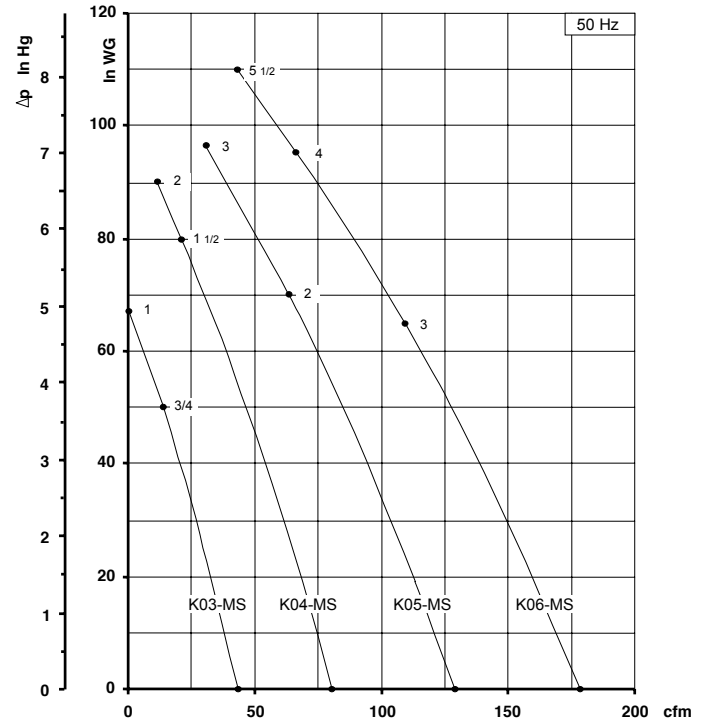
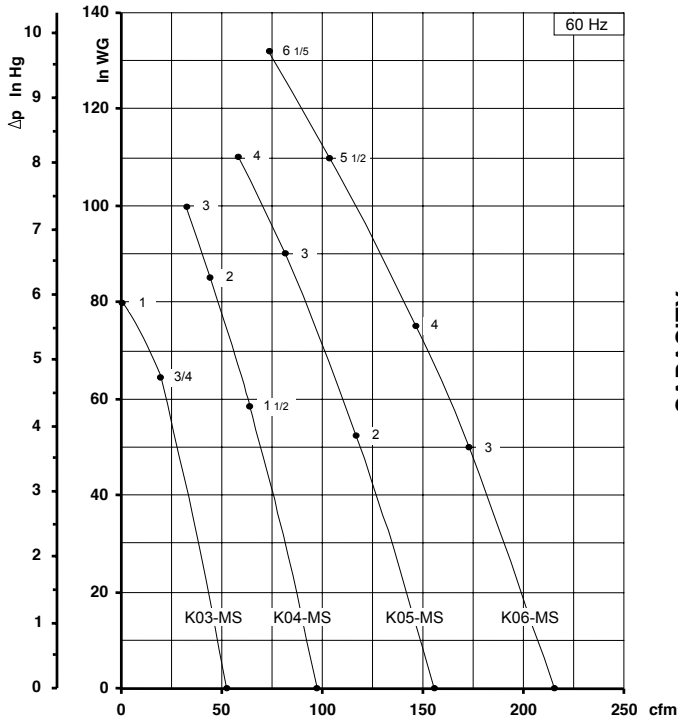
(1) Noise measured at 1 m distance with inlet and outlet ports piped, in accordance to ISO 3744.

(2) No cURus motor

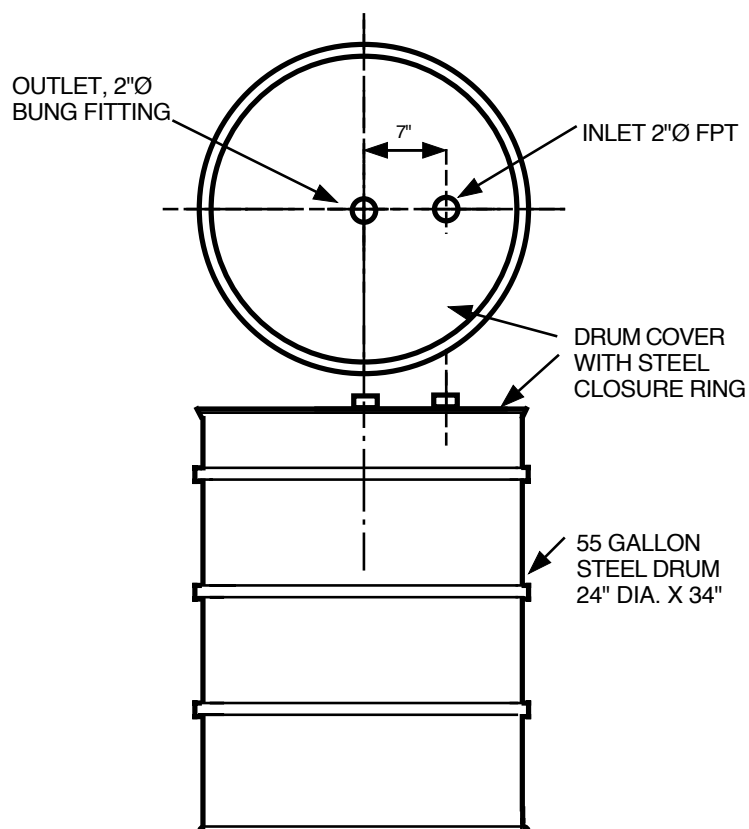
- For proper use, the blower should be equipped with inlet filter and safety valve; other accessories available on request.
- Ambient temperature from +5° to +104°F.
- Specifications subject to change without notice.



REGENERATIVE BLOWERS - VACUUM
SCL K03 / K04 / K05 / K06
MS SERIES
 SN 1879-8 2/2



Curves refer to air at 68° F temperature, measured at inlet port and 29.92 In Hg atmospheric backpressure (abs).
 Values for flow, power consumption and temperature rise: +/-10% tolerance.
 Data subject to change without notice.



SPECIFICATION

Model:	GSE
Design Flow:	100 CFM
Design Features:	
Pressure Drop:	2.75 inch w.c. at 100 CFM
Max Operating Pressure:	10 psi
Carbon:	175 lbs. of vapor phase carbon, 4 x 8 mesh
Canister:	24" dia. x 34" steel drum, PVC internal piping.
	DOT rated. Acceptable for transport of hazardous waste.
Connections:	Inlet - 2" Ø FPT
	Outlet - 2" Ø Bung fitting
	Inlet and Outlet located in cover.
Shipping Weight (lbs.):	215
Availability:	From Stock

CARBETROL ®
C O R P O R A T I O N

955 CONNECTICUT AVENUE
BRIDGEPORT, CT 06607
(203) 337-4340

SCALE - - - -

DATE 8-15-95

BY WH

REV 3-24-99

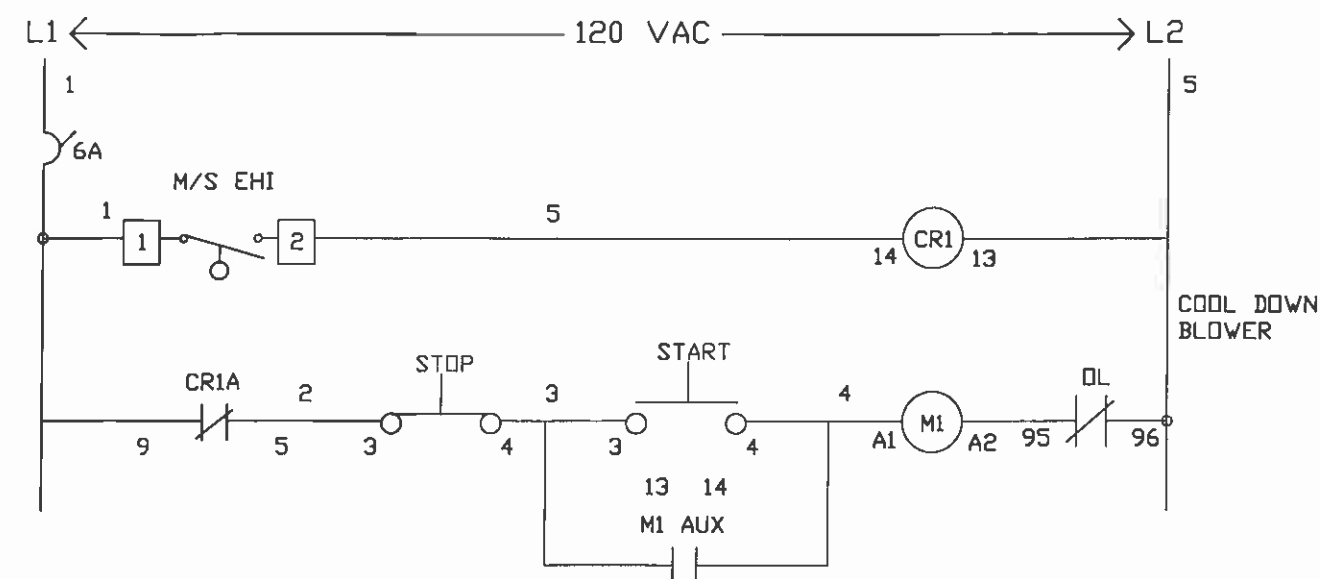
GSE
AIR PHASE CANISTER

ARRANGEMENT

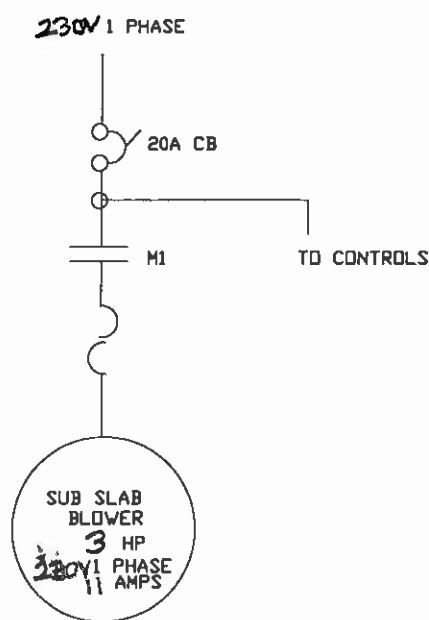
S

DWG **2621/3**

LADDER LOGIC DIAGRAM

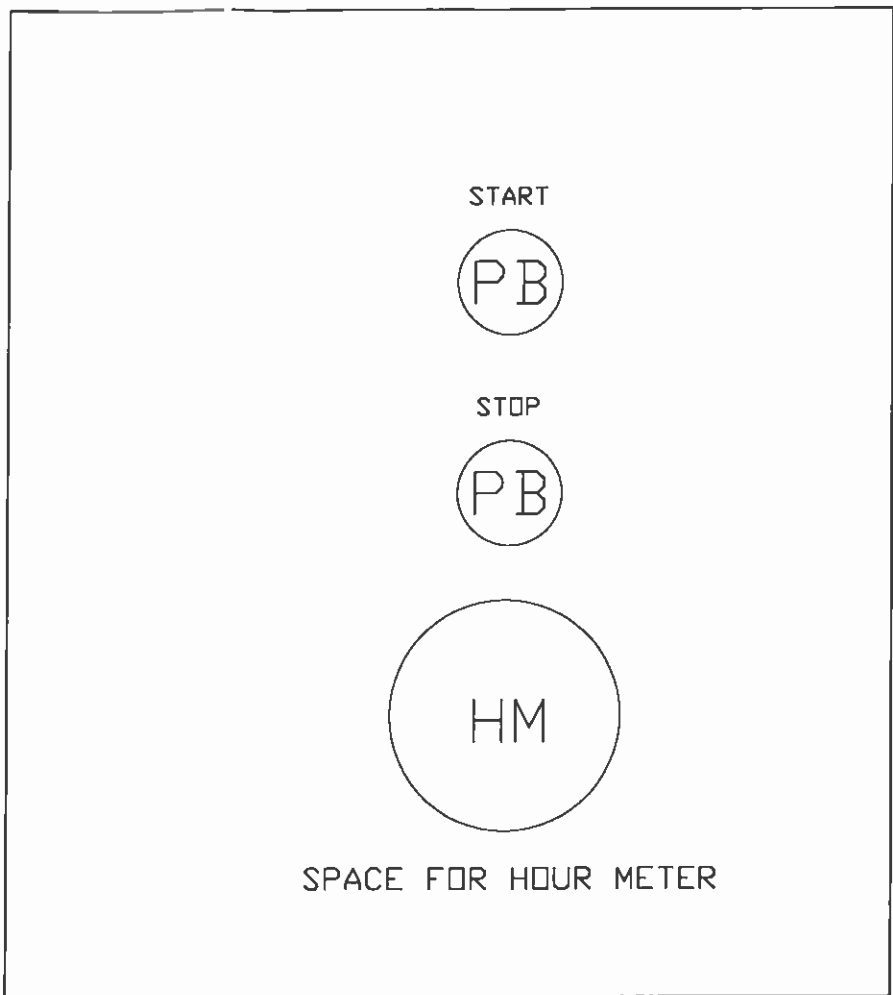


ONE LINE DIAGRAM

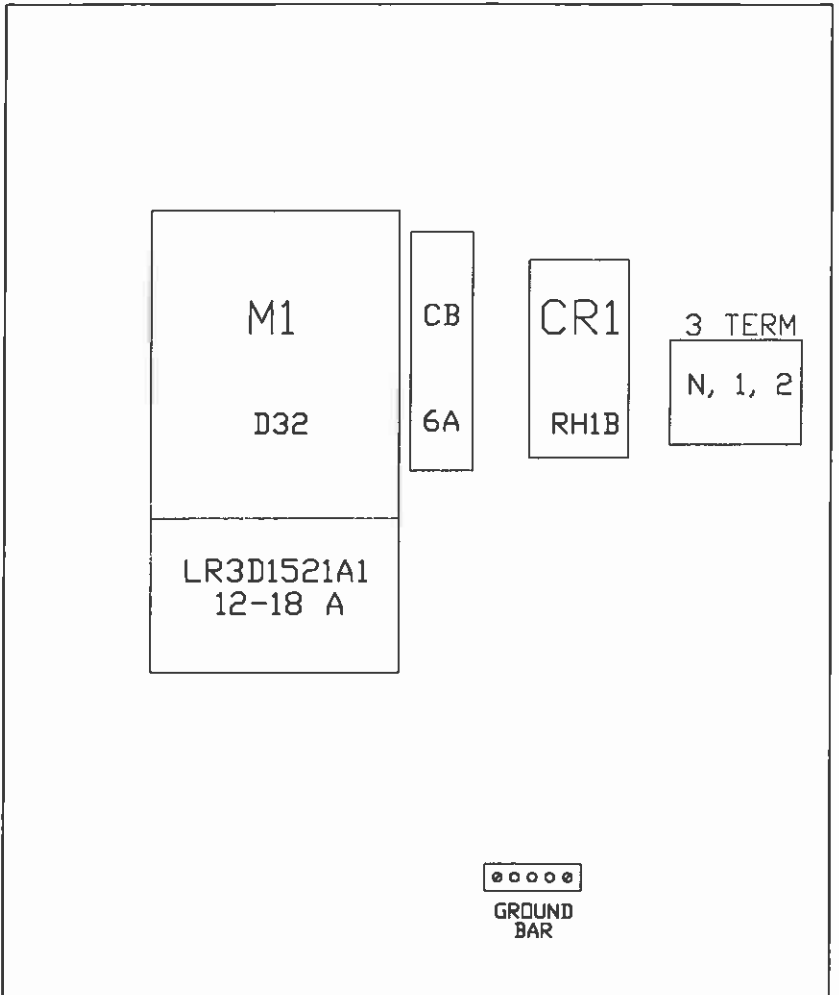


PANEL EXTERIOR

DIMENSIONS: 12" X 10" X 6" (FIBERGLASS)



PANEL INTERIOR



CONFIDENTIALITY NOTE:

The information contained in this drawing is intended for use only by National Environmental Systems and Advanced Cleanup Technologies. The information is confidential and any copying, distribution, or dissemination without the consent of National Environmental Systems is strictly prohibited.



84 DUNHAM STREET / ATTLEBORO, MA 02703
508-226-1100 (Phone) / 508-226-1180 (Fax)
www.nes-inc.biz

TITLE: CONTROL PANEL EXTERIOR
INTERIOR LAYOUT/LADDER

DRWN BY: RJD
DATE: 6/21/11

CHK BY: EMB
DATE: 8/31/11

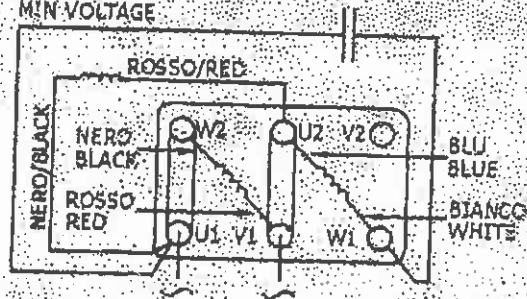
APPR BY: DATE: 8/31/11

Advanced Cleanup Technologies
Port Washington, NY
JOB NO. 11-152
SCALE: N/A
SIZE: 8
DWG NO. E1 PNL IXL
SHEET: E-1
REV: A

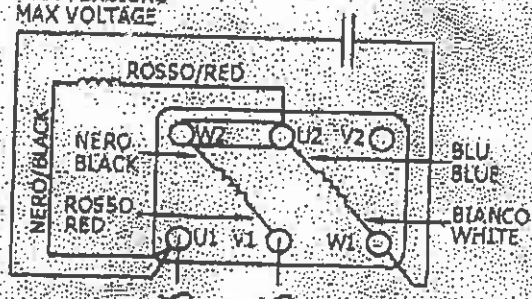
A	AS BUILT	8/31/11	EMB
REV	DESCRIPTION	DATE	APPR

MIN TENSIONE
MIN VOLTAGE

3674-00



MAX TENSIONE
MAX VOLTAGE



PER INVERTIRE IL SENSO DI MARCIA INVERTIRE
I FILI BLU E BIANCO
TO REVERSE RUNNING INVERT BLUE AND WHITE LEADS

PROTEZIONE TERMICA
THERMAL PROTECTION



Liquid Level Switch Details by Part Number

Part Number	Materials (stem, float)	Max. Temp.	Mounting	Max. Pressure (PSIG)	Elec. Rating (Watts)	Approvals (see reverse for key)	Notes (see below for key)
Standard/Full-Size/Vertical							
M4182-AL	Alum, Polypro.	105°C	1/2 NPT	150	70		
M4182-SS	316 SS	200°C	1/2 NPT	300	70		
M5600	316 SS	200°C	1/4 NPT	200	60	2, 5, 6, 7	
M5400	Brass, 316 SS	200°C	1/4 NPT	200	60	1, 4, 6	
M5917	316 SS	250°C	1/4 NPT	200	60	1, 4, 6, 7	*
M8800	Polypro.	105°C	1/4 NPT	100	60	1, 4, 6, 7	*
M8600	316 SS, Polypro.	105°C	1/4 NPT	100	60	1, 4, 6, 7	
M8400	Brass, Polypro.	105°C	1/4 NPT	100	60	1, 4, 6	
M7800	PBT, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	1
M4300	Brass, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	
M4600	316 SS, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	
M9800	Kynar	105°C	1/4 NPT	15	60	1, 6, 7	
M5600-PR	316 SS	200°C	1/4 NPT	500	100	6, 7	
M8060-PR	CPVC, Polypro.	105°C	1/4 NPT	100	100	6	
M8800-PR	Polypro.	105°C	1/4 NPT	100	100	6, 7	
M7800-PR	PBT, Buna-N	105°C	1/4 NPT	150	100	6	1
MS85600	316 SS	110°C	Bracket	85	60	8	
MS87800	PBT, Buna-N	105°C	Bracket	150	60		1
MS88800	Polypro.	105°C	Bracket	100	60		
Standard/Miniature/Vertical							
M5000	316 SS	200°C	1/8 NPT	300	30	1, 4, 6, 7	
M5040	Brass, 316 SS	200°C	1/8 NPT	300	30	1, 4, 6	
M8000	Polypro.	105°C	1/8 NPT	100	30	1, 4, 6, 7	*, **
M8020	316 SS, Polypro.	105°C	1/8 NPT	100	30	1, 4, 6, 7	**
M8040	Brass, Polypro.	105°C	1/8 NPT	100	30	1, 4, 6	**
M7000	PBT, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	*, **, 1
M4500	Brass, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M4400	316 SS, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M4008	Polypro., Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M9000	Kynar	105°C	1/8 NPT	15	30	1, 6, 7	*, **
M3326	Polypro.	105°C	3/8-16 BH	50	15	1, 6	2
M3326-NO	Polypro.	105°C	3/8-16 BH	50	15	1, 6	2
Standard/Horizontal							
M3827-XX	316 SS	200°C	NPT or Bulkhead	200	30	6	
M4249	316 SS	250°C	5/8-11 BH	300	60		
M5900	316 SS	200°C	1 x 1/2 NPT	300	30	2, 4, 6, 7	
M5910	316 SS	200°C	1/2 x 1/4 NPT	300	30	2, 4, 6, 7	
M5920	316 SS	200°C	1/2 x 1/2 NPT	300	30	2, 4, 6, 7	
M5970	316 SS	200°C	1/2 BH	100	30	1, 6	
M7790	PBT	150°C	5/8-11 BH	100	30	1, 4, 6	1
M7740	PBT	150°C	3/4-16 x 7/8-14	100	30	1, 4, 6	1
M7700	PBT	150°C	1/2 x 1/2 NPT	100	30	1, 4, 6	1
M7725	PBT	150°C	1/2 NPT	100	30	1, 4, 6	1
M7750	PBT	150°C	1/2 NPT	100	30	1, 4, 6	1
M8700	Polypro.	105°C	1/2 x 1/2 NPT	100	30	1, 4, 6, 7	*
M8710	Polypro.	105°C	1/2 x 1/4 NPT	100	30	1, 4, 6, 7	
M8725	Polypro.	105°C	1/2 NPT	100	30	1, 4, 6, 7	
M8740	Polypro.	105°C	3/4-16 x 7/8-14	100	30	1, 4, 6, 7	
M8750	Polypro.	105°C	1/2 NPT	100	30	1, 4, 6, 7	
M8790	Polypro.	105°C	5/8-11 BH	100	30	1, 4, 6, 7	
M5010	316 SS	200°C	3/8-24 BH	300	30	1, 4, 6, 7	*
M4010	Brass, Buna-N	105°C	3/8-24 BH	100	30	1, 4, 6, 7	*
M9700	Kynar	105°C	1/2 x 1/2 NPT	100	30	1, 4, 6, 7	*
M9750	Kynar	105°C	1/2 NPT	100	30	1, 4, 6, 7	*
M9740	Kynar	105°C	3/4-16 x 7/8-14	100	30	1, 4, 6, 7	*
Configured/(Multi-Level)							
M5602-XXXX	316 SS	200°C	X	200	60	2, 5, 6, 7	
M5402-XXXX	Brass, 316 SS	200°C	X	200	60	1, 4, 6	
M4302-XXXX	Brass, Buna-N	105°C	X	150	60	1, 4, 6	
M4602-XXXX	316 SS, Buna-N	105°C	X	150	60	1, 4, 6	
M8802-XXXX	Polypro.	105°C	X	100	60	1, 4, 6, 7	
M8602-XXXX	316 SS, Polypro.	105°C	X	100	60	1, 4, 6, 7	
M8402-XXXX	Brass, Polypro.	105°C	X	100	60	1, 4, 6	
M9802-XXXX	Kynar	105°C	X	15	60	1, 6	
M5002-XXXX	316 SS	200°C	X	300	30	1, 4, 6, 7	
M5042-XXXX	Brass, 316 SS	200°C	X	300	30	1, 4, 6	
M4502-XXXX	Brass, Buna-N	105°C	X	150	30	1, 4, 6	
M4402-XXXX	316 SS, Buna-N	105°C	X	150	30	1, 4, 6	
M8002-XXXX	316 SS, Polypro.	105°C	X	100	30	1, 4, 6, 7	
M8042-XXXX	Brass, Polypro.	105°C	X	100	30	1, 4, 6	
M8080-XXXX	Polypro.	105°C	X	100	30	1, 4, 6, 7	
M5605	316 SS	200°C	1/2 NPT	200	60		3
M8085	Polypro.	105°C	1/4 NPT	100	30		3

Detalles de Interruptor de Nivel Líquido por Número de Parte

Número de Parte	Materiales (vástago, flotador)	Temp. Máx.	Montaje	Presión Máx. (PSIG)	Clasificación Eléct. (Vatios)	Aprobaciones (ver clave en el reverso)	Notas (ver clave est. abajo)
Vertical/Estándar/Tamaño Total							
M4182-AL	Alum, Polipro.	105°C	1/2 NPT	150	70		
M4182-SS	316 SS	200°C	1/2 NPT	300	70		
M5600	316 SS	200°C	1/4 NPT	200	60	2, 5, 6, 7	
M5400	Brass, 316 SS	200°C	1/4 NPT	200	60	1, 4, 6	
M5917	316 SS	250°C	1/4 NPT	200	60	1, 4, 6, 7	*
M8800	Polypro.	105°C	1/4 NPT	100	60	1, 4, 6, 7	*
M8600	316 SS, Polypro.	105°C	1/4 NPT	100	60	1, 4, 6, 7	
M8400	Brass, Polypro.	105°C	1/4 NPT	100	60	1, 4, 6	
M7800	PBT, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	1
M4300	Brass, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	
M4600	316 SS, Buna-N	105°C	1/4 NPT	150	60	1, 4, 6	
M9800	Kynar	105°C	1/4 NPT	15	60	1, 6, 7	
M5600-PR	316 SS	200°C	1/4 NPT	500	100	6, 7	
M8060-PR	CPVC, Polypro.	105°C	1/4 NPT	100	100	6	
M8800-PR	Polypro.	105°C	1/4 NPT	100	100	6, 7	
M7800-PR	PBT, Buna-N	105°C	1/4 NPT	150	100	6	1
MS85600	316 SS	110°C	Bracket	85	60	8	
MS87800	PBT, Buna-N	105°C	Bracket	150	60		1
MS88800	Polypro.	105°C	Bracket	100	60		
Vertical/Estándar/Miniatura							
M5000	316 SS	200°C	1/8 NPT	300	30	1, 4, 6, 7	
M5040	Brass, 316 SS	200°C	1/8 NPT	300	30	1, 4, 6	
M8000	Polypro.	105°C	1/8 NPT	100	30	1, 4, 6, 7	*, **
M8020	316 SS, Polypro.	105°C	1/8 NPT	100	30	1, 4, 6, 7	**
M8040	Brass, Polypro.	105°C	1/8 NPT	100	30	1, 4, 6	**
M7000	PBT, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	*, **, 1
M4500	Brass, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M4400	316 SS, Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M4008	Polypro., Buna-N	105°C	1/8 NPT	150	30	1, 4, 6	**
M9000	Kynar	105°C	1/8 NPT	15	30	1, 6, 7	*, **
M3326	Polypro.	105°C	3/8-16 BH	50	15	1, 6	2
M3326-NO	Polypro.	105°C	3/8-16 BH	50	15	1, 6	2
Horizontal/Estándar							
M3827-XX	316 SS	200°C	NPT or Bulkhead	200	30	6	
M4249	316 SS	250°C	5/8-11 BH	300	60		
M5900	316 SS	200°C	1 x 1/2 NPT	300	30	2, 4, 6, 7	
M5910	316 SS	200°C	1/2 x 1/4 NPT	300	30	2, 4, 6, 7	
M5920	316 SS	200°C	1/2 x 1/2 NPT	300	30	2, 4, 6, 7	
M5970	316 SS	200°C	1/2 BH	100	30	1, 6	
M7790	PBT	150°C	5/8-11 BH	100	30	1, 4, 6	1
M7740	PBT	150°C	3/4-16 x 7/8-14	100	30	1, 4, 6	1
M7700	PBT	150°C	1/2 x 1/2 NPT	100	30	1, 4, 6	1
M7725	PBT	150°C	1/2 NPT	100	30	1, 4, 6	1
M7750	PBT	150°C	1/2 NPT	100	30	1, 4, 6	1
M8700	Polypro.	105°C	1/2 x 1/2 NPT	100	30	1, 4, 6, 7	*
M8710	Polypro.	105°C	1/2 x 1/4 NPT	100	30	1, 4, 6, 7	
M8725	Polypro.	105°C	1/2 NPT	100	30	1, 4, 6, 7	
M8740	Polypro.	105°C	3/4-16 x 7/8-14	100	30	1, 4, 6, 7	
M8750	Polypro.	105°C	1/2 NPT	100	30	1, 4, 6, 7	
M8790	Polypro.	105°C	5/8-11 BH	100	30	1, 4, 6, 7	
M5010	316 SS	200°C	3/8-24 BH	300	30	1, 4, 6, 7	*
M4010	Brass, Buna-N	105°C	3/8-24 BH	100	30	1, 4, 6, 7	*
M9700	Kynar	105°C	1/2 x 1/2 NPT	100	30	1, 4, 6, 7	*
M9750	Kynar	105°C	1/2 NPT	100	30	1, 4, 6, 7	*
M9740	Kynar	105°C	3/4-16 x 7/8-14	100	30	1, 4, 6, 7	*
Configurado/(Multinivel)							
M5602-XXXX	316 SS	200°C	X	200	60	2, 5, 6, 7	
M5402-XXXX	Brass, 316 SS	200°C	X	200	60	1, 4, 6	
M4302-XXXX	Brass, Buna-N	105°C	X	150	60	1, 4, 6	
M4602-XXXX	316 SS, Buna-N	105°C	X	150	60	1, 4, 6	
M8802-XXXX	Polypro.	105°C	X	100	60	1, 4, 6, 7	
M8602-XXXX	316 SS, Polypro.	105°C	X	100	60	1, 4, 6, 7	
M8402-XXXX	Brass, Polypro.	105°C	X	100	60	1, 4, 6	
M9802-XXXX	Kynar	105°C	X	15	60	1, 6	
M5002-XXXX	316 SS	200°C	X	300	30	1, 4, 6, 7	
M5042-XXXX	Brass, 316 SS	200°C	X	300	30	1, 4, 6	
M4502-XXXX	Brass, Buna-N	105°C	X	150	30	1, 4, 6	
M4402-XXXX	316 SS, Buna-N	105°C	X	150	30	1, 4, 6	
M8002-XXXX	316 SS, Polypro.	105°C	X	100	30	1, 4, 6, 7	
M8042-XXXX	Brass, Polypro.	105°C	X	100	30	1, 4, 6	
M8080-XXXX	Polypro.	105°C	X	100	30	1, 4, 6, 7	
M5605	316 SS	200°C	1/2 NPT	200	60		3
M8085	Polypro.	105°C	1/4 NPT	100	30		3

Notes:

* Also applies to models with slosh shields

** Also applies to Ultra Low Level (ULL) float models

1 PBT is not for use in water above 65°C (150°F)

2 The M3326 is Normally Closed. The M3326-NO is Normally Open.

Model No.	Switch Location (from bottom of fitting)	Colors	Watt Rating	Switch Type	Dry Position
M5605	1.25"	Red	60	SPST	NC
	5.75"	Black	60	SPST	NC
M8085	0.75"	Red	60	SPST	NC
	5.75"	Black	60	SPST	NC

Temperature Switches	Madison Model No.	Materials (stem,float)	Mounting	Max Pressure (PSIG)	Electrical Rating (Watts)	Temp. Type
	MT3920-1	Polypro.	3/8-16 BH	50	15	J
	MT3920-2	Polypro.	3/8-16 BH	50	15	K
	MT3920-3	Polypro.	3/8-16 BH	50	15	RTD
	MT5600	316 SS	1/4 NPT	200	60	J
	MT5600-1	316 SS	1/4 NPT	200	60	K
	MT5600-2	316 SS	1/4 NPT	200	60	RTD
	MT5600-3	316 SS	1/4 NPT	200	60	J
	MT5600-4	316 SS	1/4 NPT	200	60	K
	MT5600-5	316 SS	1/4 NPT	200	60	Bimetal Switch
MT8000	Polypro.	1/8 NPT	100	30	J	
MT8000-1	Polypro.	1/8 NPT	100	30	K	RTD
MT8000-2	Polypro.	1/8 NPT	100	30		



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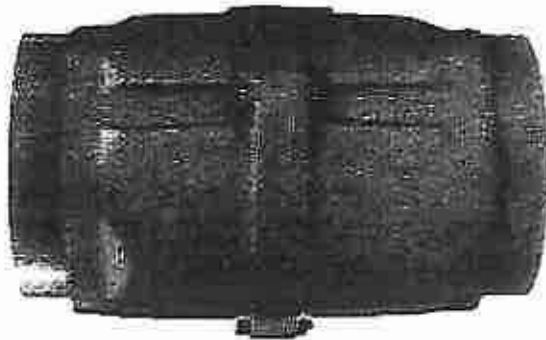
SN 1701-7

VALVOLA DI SICUREZZA VRL
SAFETY VALVE VRL
SOUPAPE DE SECURITE VRL
SICHERHEITSVENTIL VRL
VALVULA DE SEGURIDAD VRL

ISTRUZIONI D'USO
USE INSTRUCTIONS
INSTRUCTIONS D'UTILISATION
ANWENDUNGSHINWEISE
INSTRUCCIONES PARA EL USO



ATTENZIONE! LA VALVOLA E' FORNITA NON TARATA
CAUTION! THE VALVE IS SUPPLIED NOT CALIBRATED
ATTENTION ! LA SOUPAPE EST FOURNIE NON TARÉE
ACHTUNG ! DAS VENTIL IST WERKSEITIG NICHT GEEICHT
ATENCIÓN ! LA VALVULA NO ESTA GRADUADA



LEGGERE ATTENTAMENTE TUTTE LE ISTRUZIONI E CONSERVARLE
PLEASE READ CAREFULLY ALL INSTRUCTIONS AND KEEP THEM FOR FUTURE REFERENCE
LIRE ATTENTIVEMENT TOUTES LES INSTRUCTIONS ET LES CONSERVER
ALLE ANLEITUNGEN SIND SORGFÄLTIG ZU LESEN UND AUFZUBEWAHREN!
LEER ATENTAMENTE LAS INSTRUCCIONES Y CONSERVARLAS

I CONDIZIONI D'UTILIZZO

- LE VALVOLE VRL SONO ADATTE AL CONVOGLIAMENTO DI ARIA E GAS NON ESPLOSIIVI, INFIAMMABILI, NON AGGRESSIVI, IN ATMOSFERA NON ESPLOSIIVA. LA TEMPERATURA DEL FLU CONVOGLIATO È AMMESSA NEL CAMPO DI -15 A +160 °C.
- VALVOLE PROGETTATE E FABBRICATE PER LA LIMITAZIONE NEL CAMPO DELLE BASSE PRESSI / DEPRESSIONI, PER UN UTILIZZO SPECIFICO SU SOFFIANTI, ASPIRATORI E COMPRESSORI A BA PRESSIONI;
- NON SOSTRATTANO PRESSIONI INTERNE ELEVATE, COMUNQUE NON SUPERIORI A 2.8 bar A;
- SONO SOGGETTE A PICCOLE PERDITE DEL FLUIDO CONVOGLIATO;
- CORPI SOLIDI ANCHE DI PICCOLE DIMENSIONI E SPORCIZIA POSSONO PROVOCARE GRAVI DA VANNO QUINDI SEPARATI DAL FLUSSO MEDIANTE ADEGUATI FILTRI IN ASPIRAZIONE.

GB CONDITIONS OF USE

- THE VRL VALVES ARE DESIGNED FOR THE HANDLING OF AIR OR NON-EXPLOSIVE, HAZARDOUS AND NON-FLAMMABLE GASES IN NON-EXPLOSIVE ENVIRONMENTS. THE GAS IN TEMPERATURE MUST BE IN THE RANGE OF -15 TO +160 °C.
- RELIEF VALVES ARE DESIGNED AND MANUFACTURED TO LIMIT THE OPERATING PRESSURE. LOW PRESSURE/VACUUM APPLICATIONS. THEY ARE FOR USE SPECIFICALLY ON LOW PRESS BLOWERS AND VACUUM PUMPS ONLY.
- THE VALVE CANNOT WITHSTAND HIGH INTERNAL PRESSURE, DESIGN MAXIMUM OF 2.8 bar A;
- THERE IS SMALL LOSS OF THE AIR/GAS BEING HANDLED;
- SOLID PARTICLES, HOWEVER SMALL, INCLUDING DIRT CAN CAUSE SERIOUS DAMAGE. THEREFORE IT IS ESSENTIAL THAT SUCH SUBSTANCES SHOULD BE REMOVED FROM THE GAS. SUITABLE FILTERS UPSTREAM OF THE INLET.

F CONDITIONS D'UTILISATION

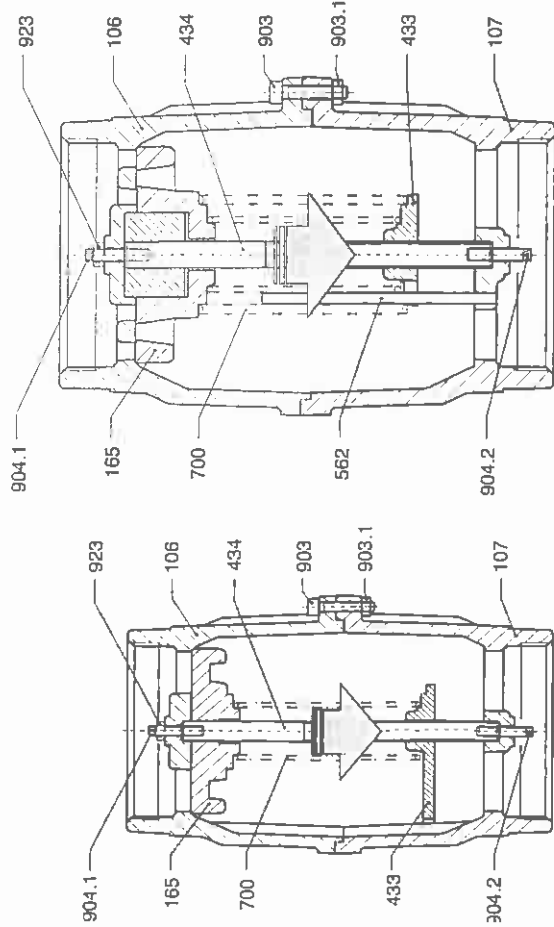
- LES SOUPAPES VRL SONT ADAPTÉS À L'ACHÈMEMENT D'AIR ET DE GAZ NON EXPLOSIF, INFLAMMABLES, NON AGRESSIFS, DANS UNE ATMOSPHÈRE NON EXPLOSIVE. LA TEMPÉRATURE DU FLUIDE ACHÉMINÉ EST ADMISE DANS UN ÉVENTAIL DE -15 A +160 °C.
- CES SOUPAPES ONT ÉTÉ DÉVELOPPÉES ET CONSTRUITES AFIN DE LIMITER LES VALE MAXIMALES VIDE/PRESSION ET LEUR UTILISATION EST SPÉCIFIQUEMENT RÉSERVÉE ASPIRATEURS ET COMPRESSEURS BASSES PRESSION.
- NE SUPPORTENT PAS DES PRESSIONS INTERNES ÉLEVÉES, C'EST-À-DIRE DES PRESSI SUPÉRIEURES À 2.8 bar A;
- SONT SUJETTES À DE PETITES PERTES DU FLUIDE ACHÉMINÉ;
- DES CORPS SOLIDES MÊME DE PETITES DIMENSIONS ET LÉGÈREMENT SALES PEUV PROVOQUER DE GRAVES DOMMAGES, ILS SONT PAR CONSÉQUENT SÉPARÉS DU FLUX PAR FILTRES ADÉQUANTS EN ASPIRATION.

D ENSATZBEDINGUNGEN

- DIE VENTILE DER SERIE VRL SIND FÜR DEN DAUERBETRIEB IN NICHT-EXPLOSIIVER UMGEBUNG ZUM ANSAUGEN UND VERDICHTEN VON LUFT ODER NICHT-EXPLOSIIVEN, NICHT-BRENNBAREN NICHT-AGGRESSIVEN GASEN GEEIGNET. DIE ZULÄSSIGE ANSAUGTEMPERATUREN LIEGEN ZWISCHEN -15 BIS +160 °C.
- DIE SPEZIELL FÜR DEN NIEDERDRUCK- BZW. NIEDERVAKUUMBEREICH ENTWICKELTEN VENTILE SIND FÜR DIE SPEZIFISCHE ANWENDUNG IN VAKUUMPUMPEN UND KOMPRESSOREN GEEIGNET. DIE GEHÄUSE WIDERSTEHEN KEINEN HOHEN INNENDRÜCKEN. UNTER KEINEN UMSTÄNDEN DÜRFEN MAX. BETRIEBSDRUCK VON 2.8 bar A ÜBERSCHRITTEN WERDEN.
- DIE VENTILE SIND NICHT VOLLSTÄNDIG GASDICHT;
- FREMDKÖRPER, AUCH GERINGER GRÖßE, UND VERUNREINIGUNGEN KÖNNEN SCHWERE SCHÄDEN VERURSACHEN. SIE MÜSSEN DAHER AUS DEM FÖRDERMEDIUM MIT GEEIGNETEN ANSAUGFILTERN ENTFERNT WERDEN.

E CONDICIONES DE USO

- LAS VALVULAS VRL SON ADAPTAS PARA EL MOVIMIENTO DE AIRE O GASES NO EXPLOSIVOS PELIGROSOS Y NO INFLAMABLES Y PARA SERVICIO EN AMBIENTES NO EXPLOSIVOS. TEMPERATURA DE ENTRADA DEL GAS DEBE ESTAR ENTRE LOS -15 Y +160 °C.
- VALVULAS PROYECTADAS Y FABRICADAS PARA LA LIMITACION EN EL SECTOR DE LAS BAJAS PRESIONES / VACIOS, PARA UN UTILIZO SOBRE ASPIRADORES, COMPRESORES A BAJAS PRESIONES.
- LA VALVULA NO PUEDE CONTENER PRESIONES INTERNAS ALTAS, NO MAYORES QUE 2.8 bar A;
- HAY UNA PEQUEÑA PERDIDA DE FLUIDO MANEJADO;
- LAS PARTICULAS SOLIDAS, AUNQUE PEQUEÑAS, INCLUIDO EL POLVO, PUEDEN CAUSAR SERIOS DAÑOS. POR LO TANTO ES ESENCIAL QUE DICHAS SUSTANCIAS SEAN ELIMINADAS DEL MEDIO MEDIANTE FILTROS APROPIADOS ANTES DE LA ENTRADA.



VRL6

Fig. 1a

VRL9

Fig. 1b

TEM Denominazione - Description - Désignation - Description - Descrpción

- | | |
|------|--|
| 06 | Corpo - Housing - Corps supérieur - Gehäuse - Cuerpo |
| 07 | Coperchio - Cover - Couvercle - Abdeckung - Cubierta |
| 65 | Otturatore - Shutter - Obturateur - Verschluss - Oblurador |
| 33 | Piatello guida molla - Spring guide disc - Guide ressort - Federführungsscheibe - Disco guía muelle |
| 34 | Asia - Shutter guide - Tige - Schließführung - Vastlago |
| 62 | Spina cilindrica - Dowel pin - Goupille cylindrique - Führungsstift - Pin |
| 00 | Molla - Spring - Ressort - Feder - Muelle |
| 03 | Vite - Screw - Vis - Schraube - Tornillo |
| 03.1 | Dado - Nut - Ecrrou - Schraubenmutter - Tuerca |
| 04.1 | Grano superiore - Upper grub screw - Tige de réglage supérieure - Obere Einstellschraube - Espárrago superior |
| 04.2 | Grano inferiore - Lower grub screw - Tige de réglage inférieure - Untere Einstellschraube - Espárrago inferior |
| 23 | Dado di fermo - Nut - Ecrrou de blocage - Schraubenmutter - Contratuera |

DIAGRAMMA DI SELEZIONE - SELECTION DIAGRAM
SCHEMA DE SÉLECTION - AUSWAHLDIAGRAMM
DIAGRAMA DE SELECCION

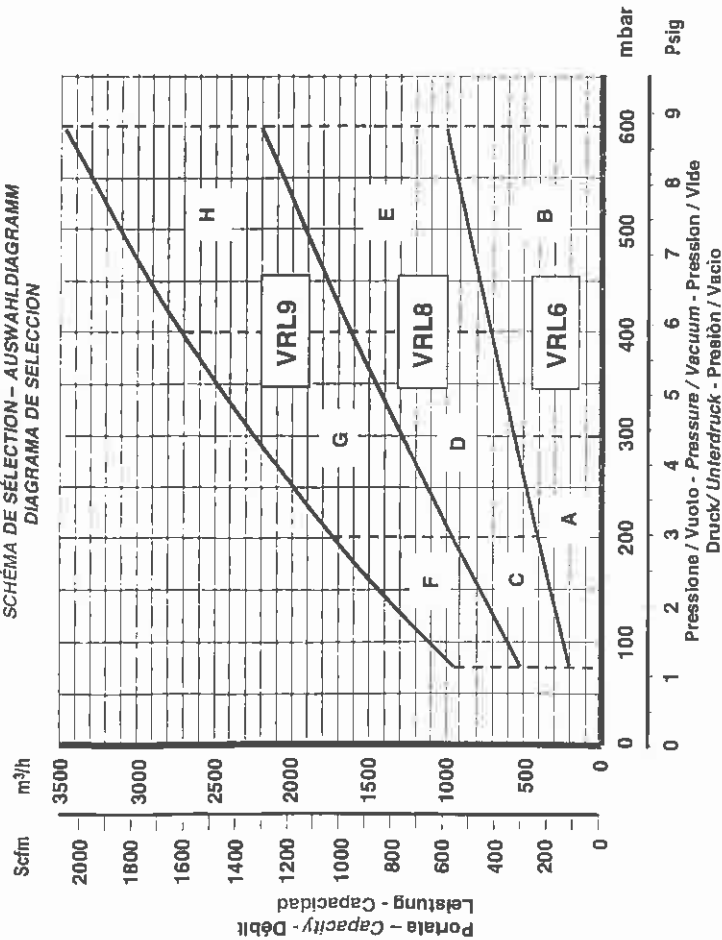


TABELLA DI SELEZIONE MOLLA - SPRING SELECTION CHART - TABLEAU DE SÉLECTION RESSORT
UEBERSICHTSTABELLE FEDERN - TABLA DE SELECCION MUELLE

RANGE	MOLLA SPRING RESSORT FEDER MUELLE	N°	Pressione / Vuoto Pressura / Vacuum Pression / Vide Druck / Underdruck Presión / Vacío		MIN		MAX		Colore di identificazione Colour of Identification Couleur d'identification Farbidentifizierung Color de identificación
			[mbar]	[psig]	[mbar]	[psig]			
			VRL6						
A	I	75	1.102	300	4.408	-			
B	II	300	4.408	600	8,820	VERDE - GREEN - VERT - GRÜN - VERDE			
VRL8									
C	I	75	1.102	200	2.940	-			
D	II	200	2.940	400	5.880	VERDE - GREEN VERT - GRÜN - VERDE			
E	I + II	400	5.880	600	8,820	-			
VRL9									
F	I	75	1.102	200	2.940	VERDE - GREEN - VERT - GRÜN - VERDE			
G	II	200	2.940	400	5.880	-			
H	I + II	400	5.880	600	8,820	-			

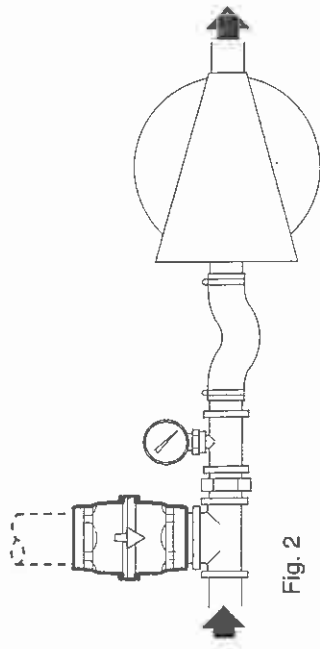


Fig. 2

SCHEMA DI INSTALLAZIONE - VALVOLA LIMITATRICE DI VUOTO
INSTALLATION SKETCH - VACUUM RELIEF VALVE
INSTALLATIONSSCHEMA - VAKUUMVENTIL
SCHÉMA DE INSTALLATION - SOUPAPE CASSE VIDE
ESQUEMA DE INSTALACIÓN - VALVULA LIMITADORA DE VACIO

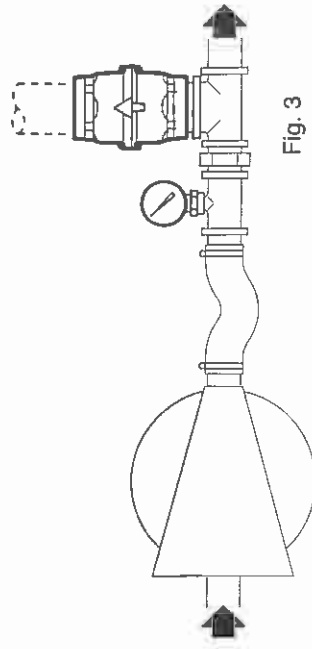


Fig. 3

SCHEMA DI INSTALLAZIONE - VALVOLA LIMITATRICE DI PRESSIONE
INSTALLATION SKETCH - PRESSURE RELIEF VALVE
INSTALLATIONSSCHEMA - DRUCKVENTIL
SCHÉMA DE INSTALLATION - SOUPAPE DE SÉCURITÉ
ESQUEMA DE INSTALACIÓN - VALVULA LIMITADORA DE PRESION

1. SCELTA DELLA MOLLA

La valvola è fornita con 2 differenti molle, ciascuna delle quali adatta a lavorare in uno specifico campo di vuoto / pressione, nel caso delle valvole VRL8 e VRL9 è previsto anche l'uso delle molle combinate. Riferendo al DIAGRAMMA DI SELEZIONE, verificare che la valvola sia della dimensione adeguata e, in unione della zona nella quale si posiziona il punto di funzionamento (zona A, B, ..., H), scegliere la molla combinazione di molle come indicato nella TABELLA DI SELEZIONE MOLLA.

La valvola è fornita con la molla n° 1 installata; se la molla fosse da sostituire o qualora fosse necessario raggiungere una supplementare (VRL8 / VRL9) procedere come da punto 2, altrimenti tarare la valvola come da punto 3.

2. SOSTITUZIONE DELLA MOLLA (O AGGIUNTA PER VRL8 / VRL9)

Rimuovere i due tappi di protezione alle estremità della valvola.

Assicurarsi che il dado di fermo 923 sia bloccato sul corpo 106.

Rimuovere le viti 903 dai dadi 903.1.

Sfilare il coperchio 107 dal corpo 106.

Svitare il piattello guida molla 433 e sfilarlo completamente dall'asta 434.

Sfilare la molla 700 solo in caso di sostituzione.

Posizionare la molla scelta nell'apposita sede dell'otturatore 165.

Comprimere la/e molla/e ed avvitare per almeno venti giri di filetto il piattello guida 433 sull'asta 434.

Verificare che entrambe le estremità della/e molla/e siano posizionate correttamente nelle sedi guida.

Posizionare il coperchio 107 nel corpo 106 inserendo:

- per VRL6: la guida di scorrimento nell'asola presente nel piattello guida molla 433.

- per VRL8 e VRL9: la spina cilindrica 562 nell'asola presente nel piattello guida molla 433.

Avvitare le viti 903 ai dadi 903.1.

TARATURA DELLA VALVOLA

1) Regolazione al valore di vuoto consentito

Rimuovere i due tappi di protezione alle estremità della valvola, se presenti.

Montare la valvola in derivazione sulla condotta di aspirazione e predisporre una presa di pressione il più vicino possibile alla bocca dell'aspiratore (Fig. 2).

Allentare il dado di fermo 923.

Scaricare la/e molla/e della valvola sfilando, con la chiave a brugola data in dotazione, il grano superiore 904.1.

Avviare l'aspiratore e chiudere l'aspirazione, a monte della valvola, fino ad ottenere le condizioni più gravose di esercizio (normalmente condotta completamente chiusa).

Avvitare il grano superiore 904.1 fino al raggiungimento del vuoto massimo consentito.

Serrare il dado di fermo 923 mantenendo fermo il grano superiore 904.1.

Aprire la condotta di aspirazione.

Verificare le perdite di carico dovute a condotte e/o filtri installati a monte della valvola.

2) Regolazione al valore di pressione consentita

Avvitare i due tappi di protezione alle estremità della valvola, se presenti.

Svitare il dado di fermo 923 e toglierlo dal grano superiore 904.1.

Avvitare senza serrare il dado di fermo 923 sul grano inferiore 904.2.

Montare la valvola in derivazione sulla condotta di mandata e predisporre una presa di pressione il più vicino possibile alla bocca del compressore (Fig. 3).

Scaricare la/e molla/e della valvola avviando il grano inferiore 904.2 con la chiave a brugola data in dotazione.

Avviare il compressore e chiudere la mandata, a valle della valvola, fino ad ottenere le condizioni più gravose di esercizio (normalmente condotta completamente chiusa).

Svitare il grano inferiore 904.2 fino al raggiungimento della pressione massima consentita.

Serrare il dado di fermo 923 mantenendo fermo il grano inferiore 904.2.

Aprire la condotta di mandata.

Verificare le perdite di carico dovute a condotte installate a valle della valvola.

1. CHOICE OF SPRING

The valve is supplied with 2 different springs; each spring is to be used within a specific pressure-vacuum operating range. For the VRL8 and VRL9 there is the possibility to use both springs working in parallel. Referring to the SELECTION DIAGRAM, check that the valve is correctly sized and depending where operating point (area A, B, ..., H) is located, choose one or two springs according to SPRING SELECTION CHART.

The valve is supplied with spring # 1 installed. If spring needs to be replaced or a supplementary spring needed to be added (for VRL8 / VRL9), proceed to point # 2 otherwise, adjust valve as per point #3.

2. INSTRUCTIONS FOR SPRING REPLACEMENT (OR MOUNTING ADDITIONAL SPRING FOR VRL8 / VRL9)

- Remove the two plastic caps on valve.

- Ensure stop-nut 923 is locked on the upper housing 106.

- Unscrew screw 903 from nut 903.1.

- Remove cover 107 from housing 106.

- Unscrew spring guide disc 433 taking it out from shutter guide 434.

- Remove spring 700 (only in case of replacement).

- Install the appropriate spring into shutter 165.

- Compress spring and screw spring guide disc 433 on shutter guide 434 for at least 20 full turns.

- Check that both ends of the spring are properly positioned within their seats.

- Install the cover 107 on the housing 106 inserting:

 - for VRL6: the sliding guide on the slot in spring guide disc 433.

 - for VRL8 and VRL9: dowel pin 562 on the slot in spring guide disc 433.

- Tighten screw 903 on nut 903.1.

3. VALVE SETTING

A) Setting-up at allowed vacuum level

- Remove the two plastic caps on valve, if any.

- Position valve on the suction by-pass and connect a vacuum gage as close as possible to the exhaust inlet (Fig. 2).

- Unscrew nut 923.

- Relieve spring tension by backing off upper grub screw 904.1 with the fit key.

- Turn on exhaustier. Induce highest attainable vacuum by throttling air intake upstream relief valve (normally reducing throttle to fully-closed).

- Adjust upper grub screw 904.1 until maximum allowable vacuum level is reached.

- Tighten nut 923 keeping blocked upper grub screw 904.1

- Open suction line.

Double-check vacuum gauge to ensure no additional losses are induced by pipes or fittings installed upstream relief valve.

B) Setting-up at allowed pressure level

- Remove the two plastic caps on valve, if any.

- Remove nut 923 from upper grub screw 904.1 and place it on to the lower grub screw 904.2. Do not tighten.

- Position valve on the discharge by-pass and connect a pressure gage as close as possible to the blower outlet (Fig. 3).

- Relieve spring tension by backing on lower grub screw 904.2 with the fit key.

- Turn on blower. Induce highest attainable pressure by throttling air discharge downstream of the valve (normally reducing throttle to fully-closed).

- Unscrew lower grub screw 904.2 until maximum allowable pressure level is reached.

- Tighten nut 923 keeping blocked lower grub screw 904.2.

- Open discharge line.

Double-check pressure gauge to ensure no additional losses are induced by pipes or filters installed downstream the valve

1. CHOIX DU RESSORT

La soupape est fournie avec 2 ressorts différents, chacun conçu pour travailler dans une gamme spécifique de la vide ou pression ; dans le cas des soupapes VRL 8 et VRL 9, l'utilisation des ressorts en combinaison est également prévue.

En se référant au diagramme de sélection, vérifier que la soupape soit de dimension adaptée et en fonction du point de travail demandé (point A, B... H) choisir le ressort ou la combinaison comme indiqué dans le TABLEAU DE SÉLECTION RESSORT.

La soupape est fournie avec le ressort n° 1 monté ; si le ressort est à changer ou s'il faut en rajouter un VRL8 / VRL9), procéder comme indiqué au point 2, sinon tarer la soupape comme indiqué au point 3.

2. REMPLACEMENT DU RESSORT (OU ADJONCTION POUR VRL8 / VRL9)

Retirer les capsules de protection aux extrémités de la soupape.

S'assurer que l'écrou 923 soit bloqué sur le corps supérieur 106.

- Dévisser la vis 903 de l'écrou 903.1.

Dévisser le couvercle 107 du corps 106.

Dévisser le guide ressort 433 et l'enlever complètement de la lige 434.

Enlever le ressort 700 seulement en cas de changement.

Positionner le ressort choisi sur l'embase appropriée de l'obturateur 165.

Comprimer le ressort et visser sur au moins 20 tours de filetage le guide ressort 433 sur la lige 434.

Vérifier que chaque extrémité du/des ressort soient positionnées correctement sur l'embase des guides.

Positionner le couvercle 107 dans le corps 106 en insérant :

- pour VRL6 : la rail de guidage dans l'un des trous du guide ressort 433.
 - pour VRL8 et VRL9 : la goupille cylindrique 562 dans l'un des trous du guide ressort 433.
- Visser la vis 903 à l'écrou 903.1.

1. TARAGE DE LA SOUPE

1) Réglage à la valeur du vide souhaité

Si présentes, retirer les capsules de protection aux extrémités de la soupape.

Monter la soupape en dérivation sur le conduit d'aspiration et créer une prise de pression la plus près possible de l'orifice de la soufflante (Fig. 2).

Dévisser l'écrou 923.

A l'aide de la clé fournie, détendre le ressort de la soupape en dévissant la lige supérieure 904.1.

Mettre la soufflante en route et observer l'aspiration en amont de la soupape jusqu'à obtenir les conditions de travail les plus mauvaises (conduit complètement obstrué).

- Visser la lige supérieure 904.1 jusqu'à atteindre le vide maxi souhaité.

- Serrer l'écrou 923 en maintenant la lige supérieure 904.1 bloquée.

- Déboucher le conduit d'aspiration.

Vérifier les pertes de charge dues à des conduits et/ou filtres installés en amont de la soupape.

3) Réglage à la pression souhaité

- Si présentes, retirer les capsules de protection aux extrémités de la soupape.

- Dévisser l'écrou 923 et l'enlever de la lige supérieure 904.1.

- Visser sans serrer l'écrou 923 sur la lige inférieure 904.2.

Monter la soupape en dérivation sur le conduit de refoulement et créer une prise de pression la plus près possible de l'orifice de la soufflante (Fig. 3).

- A l'aide de la clé fournie, détendre le ressort de la soupape en vissant la lige inférieure 904.2.

Mettre la soufflante en route et obstruer le refoulement, en aval de la soupape, jusqu'à obtenir les conditions de travail les plus mauvaises (conduit complètement obstrué).

- Dévisser la lige inférieure 904.2 jusqu'à atteindre la pression maximale souhaitée.

- Serrer l'écrou 923 en maintenant la lige inférieure 904.2 bloquée.

- Déboucher le conduit de refoulement.

Vérifier les pertes de charge dues à des conduits installés en aval de la soupape.

1. WAHL DER FEDER

Das Ventil wird mit zwei unterschiedlichen Federn geliefert. Jede Feder ist auf einen speziellen Druck- und Vakuum-Leistungsbereich ausgerichtet. Bei den Ventilen VRL8 und VRL9 besteht die Möglichkeit, bei beiden Ventilen parallel einzusetzen.

Überzeugen Sie sich anhand des Auswahlgramms, dass das Ventil die richtige Größe hat und wählen abhängig vom Arbeitspunkt (A, B, ... H) eine der beiden Federn anhand der Übersichtstabelle Federn. Das Ventil wird standardmäßig mit Feder Nr. 1 installiert geliefert. Wenn die Feder ausgewechselt oder eine zusätzliche Feder montiert werden muß (bei VRL8 und VRL9), gehen Sie bitte entsprechend Punkt 2.

Andernfalls stellen Sie das Ventil gemäß der Beschreibung unter Punkt 3 ein.

2. AUSTAUSCH DER FEDER

- Entfernen Sie die zwei Plastikklappen auf dem Ventil (falls vorhanden).

- Verschrauben Sie sich, dass die Schraubenmutter 923 fest am oberen Gehäuse 106 verschraubt ist.
- Lösen Sie die Schraube 903 aus der Mutter 903.1.

- Nehmen Sie die Abdeckung 107 vom Gehäuse 106.

- Schrauben Sie die Federführungsscheibe 433 ab und nehmen Sie sie von der Schließführung 434.

- Entnehmen Sie die Feder 700 (nur bei Austausch).

- Setzen Sie die gewünschte Feder in den Verschluss 165 ein.

- Drücken Sie die Feder und die Federführungsscheibe 433 auf der Schließführung 434 durch wenigstens 20 Schraubdrehungen zusammen.

- Prüfen Sie, ob beide Federn genau in den Anschlüssen sitzen.

- Setzen Sie die Abdeckung 107 auf das Gehäuse 106 führen Sie:

- für VRL6: den Gleitführung in den Schlitz der Federführungsscheibe 433 ein.
- für VRL8 und VRL9: den Führungsstift 562 in den Schlitz der Federführungsscheibe 433 ein.

- Drehen Sie die Schraube 903 in der Mutter 903.1 fest.

3. VENTILEINSTELLUNG

A) Einstellung des zugelassenen und gewünschten Unterdruckwertes

- Entfernen Sie die beiden Plastikklappen auf dem Ventil (falls vorhanden).

- Befestigen Sie das Ventil an der Druckumleitung und schliessen Sie einen Druckmesser so dicht möglich am Gebläseeingang (Fig. 2) an.

- Lösen Sie die Schraube 923.

- Reduzieren Sie den Federdruck indem Sie die obere Einstellschraube 904.1 mit dem Einstellschlüssel lösen.

- Stellen Sie das Gebläse an und erzeugen Sie größtmögliches Vakuum durch Drosselung der Zuluft (normalerweise Drosselung bis zur vollen Schließung).

- Stellen Sie die obere Einstellschraube 904.1 so ein, bis der maximal zulässige Unterdruck erreicht ist.

- Schrauben Sie die Mutter 923 fest während Sie die obere Einstellschraube 904.1 festhalten.

- Öffnen Sie den Luftansaugkanal.

Überprüfen Sie die Druckwerte sorgfältig, um sicherzustellen, dass keine Unterdruckverluste dem Ventil durch Leitungen oder Filter entstehen.

B) Einstellung des zugelassenen und gewünschten Druckwertes

- Entfernen Sie die beiden Plastikklappen auf dem Ventil (falls vorhanden).

- Drehen Sie die Mutter 923 von der oberen Einstellschraube 904.1 und drehen Sie sie auf die obere Einstellschraube 904.2. Nicht fest anziehen.

- Befestigen Sie das Ventil an der Auslassleitung und schliessen Sie es so dicht wie möglich am Gebläseausgang (Fig. 3) an.

- Reduzieren Sie den Federdruck indem Sie die untere Einstellschraube 904.2 mit dem Einstellschlüssel lösen.

- Stellen Sie das Gebläse an und erzeugen Sie größtmöglichen Druck durch Drosselung der Abluft (normalerweise Drosselung bis zur vollen Schließung).

- Stellen Sie die untere Einstellschraube 904.2 so ein, bis der maximal zulässige Druck erreicht ist.

- Schrauben Sie die Mutter 923 fest während Sie die untere Einstellschraube 904.2 festhalten.

- Öffnen Sie den Luftansaugkanal.

Überprüfen Sie die Druckwerte sorgfältig, um sicherzustellen, dass keine Druckverluste hinter dem Ventil durch Leitungen oder Filter entstehen.

1. SELECCION DEL MUELLE

La válvula es suministrada con 2 muelles diferentes. Cada uno de ellos adecuado a un rango específico de trabajo bien en presión bien en vacío, en el caso de las válvulas VRL8 / VRL9 se podrán usar los muelles combinados.

Observando el diagrama de selección, hay que controlar que la válvula sea la adecuada y en función de la zona de los valores operativos de presión/vacío (zona A,B...H) seleccionar el muelle o la combinación de muelles como indicado en la TABLA DE SELECCION MUELLE.

La válvula es suministrada con el muelle nº 1 instalado. Si el muelle debe de ser sustituido o adicionado uno suplementar seguir el procedimiento del punto nº 2. Para graduar el muelle seguir el procedimiento del punto nº 3.

2. SUSTITUCION DEL MUELLE (O ADICION PARA VRL8 / VRL9)

- Quitar las dos tapas de plástico de la válvula.
- **Comprobar que la contratuercas ref.923 esta atada al cuerpo ref.106.**
- Desenroscar los tornillos ref.903 de las tuercas 903.1.
- Quitar la cubierta 107 del cuerpo 106.
- Desenroscar el disco guía ref.433 sacandolo de vastago ref.434.
- Sacar el muelle ref.700 (solo en caso de sustitución).
- Instalar el muelle adecuado en la base del obturador ref.165.
- Comprimir el/los muelle/s y enroscar veinte vueltas como mínimo el disco guía ref.433 en el vastago ref.434.
- Comprobar que las extremidades de el/los muelle/s es/en bien posicionadas.
- Poner la cubierta ref.107 en el cuerpo ref.106 introduciendo
 - para VRL6: la guía de desplazamiento en el orificio del disco guía ref.433.
 - para VRL8 y VRL9: la guía ref.562 en el orificio del disco guía ref.433.
- Alornillar los tornillos ref.903 en las tuercas ref.903.1.

3. GRADUACION DE LA VALVULA

A) Ajuste para la regulación de vacío

- Quitar las dos tapas de plástico de la válvula.
- Colocar la válvula en by-pass en la aspiración y conectar tan cerca como sea posible un vacuometro en la entrada del aspirador (ver Fig. 2).
- Desenroscar la contratuercas ref.923.
- Rebajar la tensión del muelle desenroscando, con la llave allen, el esparrago superior ref.904.1
- Poner en marcha el aspirador y cerrar la boca de aspiración, para obtener las condiciones extremas de funcionamiento (generalmente boca completamente cerrada).
- Ajustar alornillando el esparrago superior ref.904.1 hasta alcanzar el nivel de vacío deseado.
- Enroscar la contratuercas ref.923 hasta bloquearla con el cuerpo ref.106, sin mover el esparrago superior ref.904.1.
- Abrir la tubería de aspiración.

El vacuometro no mide las pérdidas adicionales debidas a tuberías o filtros instalados a continuación de la válvula.

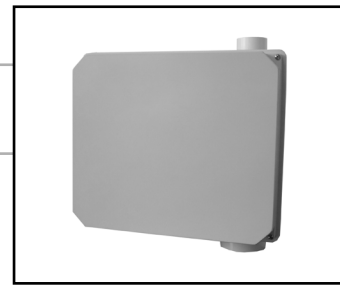
B) Ajuste para regulación de presión

- Quitar las dos tapas de plástico de la válvula.
- Desenroscar la contratuercas ref.923 del esparrago superior ref.904.1 y enroscarla sin apretar en el esparrago inferior ref.904.2
- Colocar la válvula en el by-pass en la impulsión y conectar tan cerca como sea posible un manometro en la boca de salida del compresor (ver Fig. 3).
- Rebajar la tensión del muelle alornillando, con la llave allen, el esparrago inferior ref.904.2
- Poner en marcha el compresor y cerrar la boca de impulsión, para obtener las condiciones más elevadas de funcionamiento (generalmente boca completamente cerrada).
- Ajustar desalornillando el esparrago inferior ref.904.2 hasta alcanzar el nivel de presión deseado.
- Enroscar la contratuercas ref.923 hasta bloquearla con el cuerpo ref.107, sin mover el esparrago inferior 904.2.
- Abrir la tubería de impulsión.

El manometro no mide las pérdidas adicionales debidas a tuberías o filtros instalados a continuación de la válvula.



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Radon Fan Manufacturer



HS Series

Installation & Operating Instructions

RadonAway

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RadonAway Ward Hill, MA.

HS Series Fan Installation & Operating Instructions

Please Read and Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

1. **WARNING!** Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible or flammable materials.
2. **WARNING!** Do not use fan to pump explosive or corrosive gases.
See Vapor Intrusion Application Note #AN001 for important information on VI applications. RadonAway.com/vapor-intrusion
3. **WARNING!** Check voltage at the fan to insure it corresponds with nameplate.
4. **WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
5. **NOTICE!** There are no user serviceable parts located inside the fan unit.
Do NOT attempt to open. Return unit to the factory for service.
6. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA) "National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.
7. **WARNING!** In the event that the fan is immersed in water, return unit to factory for service before operating.
8. **WARNING!** Do not twist or torque fan inlet or outlet piping as Leakage may result.
9. **WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
10. **WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**
 - a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
 - b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.



INSTALLATION & OPERATING INSTRUCTIONS (Rev J)

for High Suction Series

HS2000 p/n 23004-1

HS3000 p/n 23004-2

HS5000 p/n 23004-3

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The HS Series Fan is intended for use by trained, certified/licensed, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of the HS Series Fan. This instruction should be considered as a supplement to EPA/Radon Industry standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The HS Series Fan is designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the HS Series Fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F. The HS Series Fan is thermally protected such that it will shut off when the internal temperature is above 104 degrees F. Thus if the HS Series Fan is idle in an area where the ambient temperature exceeds this shut off, it will not restart until the internal temperature falls below 104 degrees F.

1.3 ACOUSTICS

The HS Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. There are, however, some considerations to be taken into account in the system design and installation. When installing the HS Series Fan above sleeping areas, select a location for mounting which is as far away as possible from those areas. Avoid mounting near doors, fold-down stairs or other uninsulated structures which may transmit sound. Insure a solid mounting for the HS Series Fan to avoid structure-borne vibration or noise.

The velocity of the outgoing air must also be considered in the overall system design. With small diameter piping, the "rushing" sound of the outlet air can be disturbing. The system design should incorporate a means to slow and quiet the outlet air. The use of the RadonAway Exhaust Muffler, p/n 24002, is strongly recommended.

1.4 GROUND WATER

Under no circumstances should water be allowed to be drawn into the inlet of the HS Series Fan as this may result in damage to the unit. The HS Series Fan should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the HS Series Fan with water in installations with occasional high water tables.

In the event that a temporary high water table results in water at or above slab level, water will be drawn into the riser pipes thus blocking air flow to the HS Series Fan. The lack of cooling air will result in the HS Series Fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the HS Series Fan be disconnected until the water recedes allowing for return to normal operation.

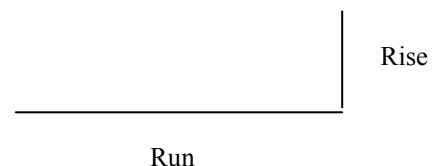
1.5 CONDENSATION & DRAINAGE

(WARNING!: Failure to provide adequate drainage for condensation can result in system failure and damage the HS Series Fan).

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation.

The use of small diameter piping in a system increases the speed at which the air moves. The speed of the air can pull water uphill and at sufficient velocity it can actually move water vertically up the side walls of the pipe. This has the potential of creating a problem in the negative pressure (inlet) side piping. For HS Series Fan inlet piping, the following table provides the minimum recommended pipe diameters as well as minimum pitch under several system conditions. Use this chart to size piping for a system.

Pipe Diam.	Minimum Rise per Foot of Run*		
	@ 25 CFM	@ 50 CFM	@ 100 CFM
4"	1/32 "	3/32 "	3/8 "
3"	1/8 "	3/8 "	1 1/2 "



*Typical operational flow rates:

HS3000, or HS5000	20 - 40 CFM
HS2000	50 - 90 CFM

All exhaust piping should be 2" PVC.

1.6 SYSTEM MONITOR AND LABEL

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A Magnehelic pressure gauge is recommended for this purpose. The indicator should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the gauge with water in installations with occasional high water tables. A System Label (P/N 15022) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted by the building occupants, must be conspicuously placed where the occupants frequent and can see the label.

1.7 SLAB COVERAGE

The HS Series Fan can provide coverage of well over 1000 sq. ft. per slab penetration. This will, of course, depend on the sub-slab aggregate in any particular installation and the diagnostic results. In general, sand and gravel are much looser aggregates than dirt and clay. Additional suction points can be added as required. It is recommended that a small pit (2 to 10 gallons in size) be created below the slab at each suction hole.

1.8 ELECTRICAL WIRING

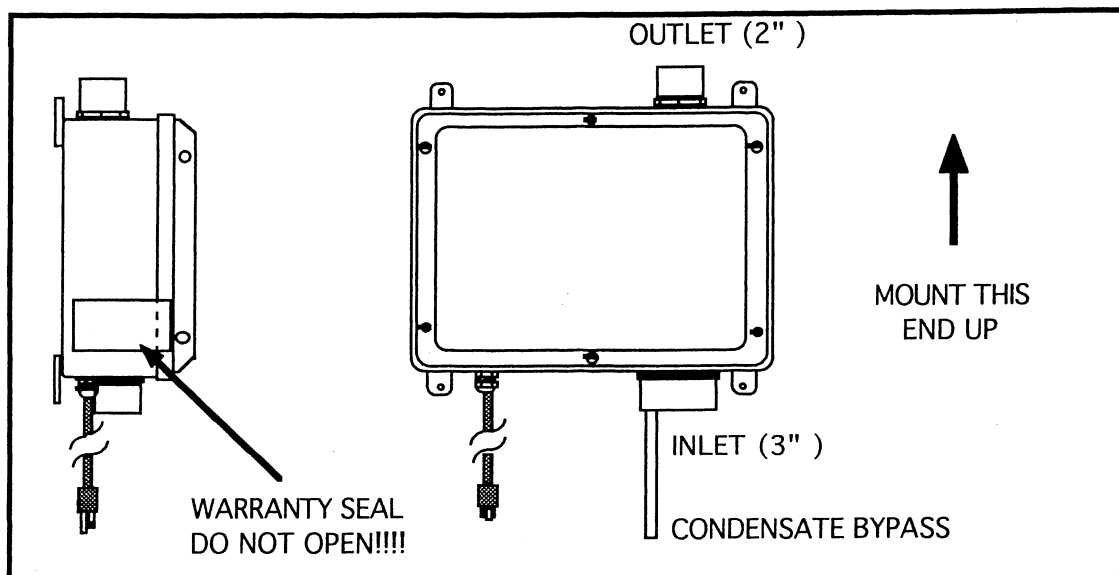
The HS Series Fan plugs into a standard 120V outlet. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA) "National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.8a ELECTRICAL BOX (optional)

The optional Electrical Box (p/n 20003) provides a weather tight box with switch for outdoor hardwire connection. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA) "National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.9 SPEED CONTROLS

Electronic speed controls can **NOT** be used on HS Series units.



2.0 INSTALLATION

2.1 MOUNTING

Mount the HS Series Fan to the wall studs, or similar structure, in the selected location with (4) 1/4" x 1 1/2" lag screws (not provided). Insure the HS Series Fan is both plumb and level.

2.2 DUCTING CONNECTIONS

Make final ducting connection to HS Series Fan with flexible couplings. Insure all connections are tight. Do not twist or torque inlet and outlet piping on HS Series Fan or leaks may result.

2.3 VENT MUFFLER INSTALLATION

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed above the roofline at the end of the vent pipe.

2.5 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

___ Make final operation checks by verifying all connections are tight and leak-free.

___ Insure the HS Series Fan and all ducting is secure and vibration-free.

___ Verify system vacuum pressure with Magnehelic. Insure vacuum pressure is within normal operating range and less than the maximum recommended as shown below:

HS2000	14" WC
HS3000	21" WC
HS5000	40" WC

(Above are based on sea-level operation, at higher altitudes reduce above by about 4% per 1000 Feet.)
If these are exceeded, increase number of suction points.

___ Verify Radon levels by testing to EPA protocol.

PRODUCT SPECIFICATIONS

Model	Maximum Static Suction	Typical CFM vs Static Suction WC (Recommended Operating Range)						Power* Watts @ 115 VAC
		0"	10"	15"	20"	25"	35"	
HS2000	18"	110	72	40	-	-	-	150-270
HS3000	27"	40	33	30	23	18	-	105-195
HS5000	50"	53	47	42	38	34	24	180-320

*Power consumption varies with actual load conditions

Inlet: 3.0" PVC

Outlet: 2.0" PVC

Mounting: Brackets for vertical mount

Weight: Approximately 18 lbs.

Size: Approximately 15"W x 13"H x 8"D

Minimum recommended inlet ducting (greater diameter may always be used):

HS3000, HS5000 --- 2.0" PVC Pipe

HS2000 --- Main feeder line of 3.0" or greater PVC Pipe

Branch lines (if 3 or more) may be 2.0" PVC Pipe

Outlet ducting: 2.0" PVC

Storage temperature range: 32 - 100 degrees F.

Thermally protected

Locked rotor protection

Internal Condensate Bypass

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the HS Series Fan for shipping damage within 15 days of receipt. Notify **RadonAway** of any damages **immediately**. RadonAway is not responsible for damages incurred during shipping. However, for your benefit, RadonAway does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open.** Return unit to factory for service.

Install the HS Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the HS Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of one (1) year from the date of manufacture (the "Warranty Term"). Outside the Continental United States and Canada the Warranty Term is one (1) year from the date of manufacture.

RadonAway will repair any fan which fails due to defects in materials or workmanship. The Fan must be returned (at owner's cost) to the RadonAway factory. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway.

RadonAway is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE HS SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping cost to and from factory.

RadonAway
3 Saber Way
Ward Hill, MA 01835
TEL. (978) 521-3703
FAX (978) 521-3964

Record the following information for your records:

Serial No. _____
Purchase Date _____

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

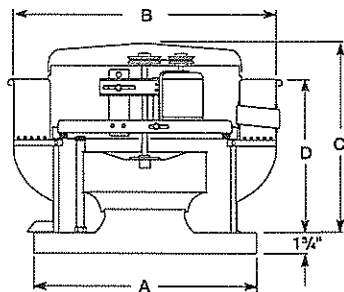
Dayton® Centrifugal Belt-Drive Upblast Exhaust Ventilators

Description

Dayton ventilators are designed for continuous operation to exhaust contaminated air, fumes, odors and grease-laden vapors from range hoods and commercial cooking appliances in addition to ventilating industrial or institutional applications. Ventilators can handle temperatures up to 300°F. Weather resistant ventilators feature spun aluminum curb, galvanized metal motor base and supports. Ventilators (excluding 6KWJ9, and 6KWK0 thru 6KWK3) are UL/cUL Listed, Standard 705 and UL/cUL Listed Subject 762 (YZHW) and comply with the NFPA 96 Standard for Ventilation Control and Fire Protection Commercial Cooking Operations. Motors are mounted out of the discharge stream in a positively cooled chamber fed by outside air drawn in through a breather tube.

High Pressure units are designed for applications that have a high resistance to exhaust contaminated air in industrial and commercial applications, directly away from the roof surface. Typically used for long and/or high resistance duct work with average volume and high pressure.

When used with explosion proof motor, ventilators 6KWJ9 and 6KWK0 thru 6KWK3 may be used to exhaust potential flammable particles or fumes. Ventilators feature spark-resistant aluminum wheel and rub ring for hazardous locations.



E53236
MH12596



Dayton Electric Mfg. Co. certifies that the ventilators shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Optional Accessories

General or UL 705	
Description	Model No.
NEMA 1 Dis. Switch:	
	1H400 (2 pole, 2 HP max)
	1H401 (3 pole, 7½ HP max)
Damper:	4HX64-4HX70
12" Fixed Roof Curb:	
	2RB75-2RB77, 2RB79-2RB82
12" Adj. Roof Curb:	2ZV82-2ZV85
Roof Curb Adapter:	
	3AZK1-3AZK9, 3AZL1-3AZL3
Birdscreen:	4YY78-4YY83

Kitchen or UL 762	
Description	Model No.
NEMA 4 Dis. Switch:	
	1H408 (2 pole, 2 HP max)
	1H409 (3 pole, 7½ HP max)
Grease Collector Box:	1RL34, 4HX78
Hinge Kit:	4HX79, 4YY84-4YY86
Clean-Out Port Kit:	3ATV9
18-24" Ventilated Fixed Roof Curb:	
	4HX54-4HX60
18-24" Ventilated Adj. Roof Curb:	
	4HX61-4HX63

⚠ WARNING Do not use a damper in any kitchen exhaust application.

Figure 1 — Dimensions

Dimensions and Specifications (See Figure 1)

Model Without Drive Package	Model With Drive Package, Assembled	Wheel Dia.	Shaft Dia.	A	B	C	D	Recommended Roof Opening Damper Size	
4YY13	1MBE6	11"	3/4"	19"	24⅞"	25⅞"	17⅞"	14½ x 14½"	12 x 12"
4YY14, 2RB65, 6KWJ9	1MBE7	11⅞"	3/4"	22"	24⅞"	25⅞"	17⅞"	17½ x 17½"	15 x 15"
5DVL4	—	12½"	3/4"	22"	24⅞"	25⅞"	17⅞"	17½ x 17½"	15 x 15"
4YY15, 6KWK0	1MBE8	13⅞"	3/4"	22"	24⅞"	25⅞"	17⅞"	17½ x 17½"	15 x 15"
4YY16A, 2RB66, 6KWK1	5PV06H, 3ATT8A, 3ATT9A, 3ATU1A	14⅞"	3/4"	26"	28⅞"	26⅞"	19⅞"	21½ x 21½"	19 x 19"
4YY17, 1MBF1, 6KWK2	1MBE9, 3ATU2, 3ATU3	16⅞"	3/4"	26"	28⅞"	26⅞"	19⅞"	21½ x 21½"	19 x 19"
4YY18, 6KWK3	5PV07G, 3ATU4, 3ATU5, 3ATU6	18⅞"	3/4"	30"	35⅞"	34⅞"	21"	25½ x 25½"	23 x 23"
4YY19, 1MBF2	5PV08G, 3ATU7, 3ATU8	21⅞"	3/4"	30"	35⅞"	34⅞"	21"	25½ x 25½"	23 x 23"
4YY20	3GY73G, 3ATU9, 3ATV1	24½"	1"	34"	42⅞"	39⅞"	25⅞"	29½ x 29½"	27 x 27"
4YY21	3GY74G, 3ATV2	30½"	1"	42"	50"	40"	29⅞"	37½ x 37½"	35 x 35"
4YY22	—	36"	1⅞"	46"	58⅞"	44⅞"	29⅞"	41½ x 41½"	39 x 39"

Dayton® Centrifugal Belt-Drive Upblast Exhaust Ventilators

Without Drive Package Performance

Model	Wheel Dia.	Fan RPM	HP	BHP	Sones @										
					Max .250" SP	CFM Air Delivery @ Static Pressure Shown									
					@ 5 Ft.	.000"	.125"	.250"	.375"	.500"	.750"	1.00"	1.25"	1.50"	1.75"
4YY13	11"	1140	1/6	0.06	8.3	780	656	502	294	—	—	—	—	—	—
		1725	1/4	0.20	13.0	1180	1094	1017	929	824	586	—	—	—	—
4YY14, 6KWJ9‡	11½"	1660	1/4	0.26	12.0	1413	1365	1313	1251	1189	1056	861	—	—	—
		1820	1/3	0.35	13.4	1549	1505	1459	1406	1350	1234	1106	900	—	—
5DVL4	12½"	1410	1/4	0.26	12.2	1665	1595	1528	1463	1398	1224	968	—	—	—
		1545	1/3	0.34	14.0	1824	1760	1699	1639	1580	1441	1262	990	—	—
		1725	1/2	0.48	16.7	2037	1979	1923	1869	1816	1710	1571	1406	1176	—
4YY15, 6KWK0‡	13¾"	1305	1/4	0.26	13.9	1790	1709	1629	1547	1458	1201	—	—	—	—
		1435	1/3	0.35	15.1	1968	1895	1822	1749	1671	1479	1198	—	—	—
		1645	1/2	0.52	17.4	2256	2192	2128	2065	2001	1864	1684	1455	—	—
4YY16A, 6KWK1‡	14¾"	1105	1/4	0.26	10.6	2001	1906	1793	1667	1515	998	—	—	—	—
		1210	1/3	0.34	11.7	2192	2106	2006	1896	1773	1443	—	—	—	—
		1390	1/2	0.52	14.2	2518	2445	2362	2271	2174	1949	1643	—	—	—
		1595	3/4	0.79	18.5	2889	2826	2757	2683	2602	2430	2225	1968	1568	—
		1725	1	1.00	22	3125	3066	3005	2936	2865	2711	2539	2339	2085	1704
4YY17, 6KWK2‡	16½"	875	1/4	0.26	10.1	2515	2362	2177	1974	1744	—	—	—	—	—
		965	1/3	0.35	11.5	2774	2637	2477	2300	2109	1584	—	—	—	—
		1110	1/2	0.54	14.2	3191	3072	2941	2796	2641	2297	1770	—	—	—
		1265	3/4	0.79	17.7	3636	3532	3426	3301	3172	2894	2583	2163	—	—
		1390	1	1.05	21	3996	3901	3806	3698	3584	3340	3078	2785	2394	—
4YY18, 6KWK3‡	18½"	745	1/4	0.26	8.1	2815	2617	2448	2143	1763	—	—	—	—	—
		820	1/3	0.34	10.0	3098	2916	2759	2525	2257	—	—	—	—	—
		940	1/2	0.52	13.1	3551	3389	3243	3115	2879	2363	—	—	—	—
		1075	3/4	0.78	15.8	4061	3919	3786	3666	3554	3141	2652	—	—	—
		1185	1	1.04	17.1	4477	4348	4224	4108	4005	3703	3336	2841	—	—
		1360	1½	1.58	22	5138	5026	4913	4811	4710	4532	4232	3912	3537	3023
		1495	2	2.10	27	5648	5546	5443	5345	5254	5082	4921	4598	4313	3983
4YY19	21¼"	605	1/4	0.26	6.7	3403	3054	2675	2144	—	—	—	—	—	—
		665	1/3	0.35	8.1	3740	3422	3096	2699	2073	—	—	—	—	—
		760	1/2	0.52	10.9	4275	3994	3718	3413	3048	—	—	—	—	—
		875	3/4	0.79	15.2	4922	4676	4439	4192	3922	3240	—	—	—	—
		960	1	1.04	17.7	5400	5176	4958	4742	4508	3985	3169	—	—	—
		1100	1½	1.57	23	6187	5992	5798	5610	5421	5006	4529	3861	—	—
		1210	2	2.10	23	6806	6628	6451	6279	6108	5748	5350	4892	4289	3365
4YY20	24½"	465	1/4	0.26	6.3	4216	3768	3188	2162	—	—	—	—	—	—
		510	1/3	0.34	7.3	4623	4243	3717	3134	—	—	—	—	—	—
		585	1/2	0.52	9.5	5303	4961	4540	4093	3565	—	—	—	—	—
		670	3/4	0.79	12.8	6074	5763	5461	5052	4659	3524	—	—	—	—
		735	1	1.04	15.5	6663	6370	6133	5764	5409	4618	—	—	—	—
		845	1½	1.57	18.6	7660	7400	7184	6947	6615	6002	5282	—	—	—
		930	2	2.10	23	8431	8194	7985	7798	7536	6953	6375	5706	4324	—
		1050	3	3.00	31	9519	9309	9107	8941	8775	8267	7766	7253	6672	6005

(‡) Ventilator for use with explosion proof motor in hazardous locations. Performance certified is for installation type A: Free inlet, Free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

TECHNICAL SPECIFICATIONS				
Description	EC350	EC250	EC220	EC150 + EC150-M
Order code	NB1005	NB1003	NB1000	NB1001 Plastic Housing NB1002 Metal Housing
Ethernet	10/100 Mbit/s	10/100 Mbit/s + failover mode	-	10/100 Mbit/s
3G/GSM/GPRS	3G: Five Band UMTS/HSPA+ (WCDMA/FDD) (850/800, 900, 1900 and 2100 MHz) GPRS: Quad-Band GPRS Class 12 (850/900/1800/1900 MHz)	Quad band GPRS Class 12 850/900/1800/1900 MHz	Quad band GPRS Class 12 850/900/1800/1900 MHz	-
Relay output (max 24 V, AC/DC, 1A)	1	-	1	-
Digital inputs	2 (Dry contact)	2 (Isolated, max 24 V DC)	2 (Isolated, max 24 V DC)	2 (Isolated, max 24 V DC)
Analog inputs (PT100, 0-10 V or 0-20 mA)	4	-	2	-
Analog output (0-10 V)	-	-	1	-
Serial port #1	RS-232 up to 115,2 kbit/s	RS-232 up to 115,2 kbit/s	RS-232 up to 115,2 kbit/s	RS-232 up to 115,2 kbit/s
Serial port #2	RS-485 up to 115,2 kbit/s	RS-485 up to 115,2 kbit/s	RS-485 up to 115,2 kbit/s (isolated)	RS-232/RS-485 up to 115,2 kbit/s (isolated)
GPS	Built-in (antenna via SMA female)	External GPS via RS 232	External GPS via RS 232	External GPS via RS 232
Antenna connector	SMA female	SMA female	SMA female	-
Protocols	Modbus-RTU, ASCII, SNMP, Modbus TCP, EtherNet/IP	Modbus-RTU, ASCII, SNMP, Modbus TCP	Modbus-RTU	Modbus-RTU, ASCII, SNMP, Modbus TCP
Wall mounting / DIN rail	YES/YES	NO / YES	YES / YES	NO/YES YES/YES
Mechanical dimensions	92x135x25	90 x 70 x 58 mm	92 x 115 x 25 mm	90 x 70 x 58 mm (plastic) 92 x 115 x 25 mm (metal)
Operating temperature	-40 to +65 °C	-30 to +65 °C	-30 to +65 °C	-40 to +65 °C (plastic) -40 to +75 °C (metal)
Power supply	12-48 VDC	9-24 V DC	9-24 V DC	9-24 V DC
Power consumption (max at 24 Vdc)	4.5 W	3 W	2 W	2 W
Certifications	CE, cUL _{US} , FCC, IC, PTCRB, Telec, RCM (ATEX/Haz.Loc pending)	CE, cUL _{US} , (FCC/IC, PTCRB pending)	CE, cUL _{US} , FCC/IC, PTCRB	CE
Housing	Metal or plastic	Plastic	Metal	EC150=plastic / EC150-M=Metal
Remote access functionality	YES	-	-	-

HMS Industrial Networks - worldwide

HMS - Sweden (HQ)

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Tel: + 46 (0)35 17 29 24 (Västerås office)
Email: sales@hms-networks.com

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Email: in-sales@hms-networks.com

HMS - UK

Tel: +44 (0) 1926 405599
Email: sales@hms-networks.com

Scan the QR-code to get more information about how to contact HMS and our distributors.



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Appendix J

Easement and Proof of Filing



ADVANTAGE TITLE

THE ADVANTAGE GROUP: ADVANTAGE TITLE • ADVANTAGE FORECLOSURE • ADVANTAGE LEGAL • ADVANTAGE SETTLEMENT • MORTGAGE ADVANTAGE

April 12, 2016

Lilia Factor, Esq.
Campolo, Middleton & McCormick, LLP
4175 Veterans Memorial Highway- Suite 400
Ronkonkoma, NY 11779

Title No.: REC-18071-16
Reference: Nu-Life Realty LLC
Premises: 429-441 Merrick Road, Lynbrook, NY
County: Nassau

Dear Ms. Factor:

With respect to the above referenced matter, please be advised that the following document(s) were recorded in the above county clerk's office:

- Environmental Easement from Nu-Life Realty LLC to The People of the State of New York on April 11, 2016 in Liber 13346 Page 662

The above instrument(s) have been electronically recorded. Pursuant to your request, the document(s) containing original signatures are attached.

Please contact me should you have any questions or if I can be of further assistance.

Sincerely,

Michelle Sandillo

Michelle Sandillo
Recording Department

**** Electronically Filed Document ****

Instrument Number: 2016-35119

Recorded As: EX-D06 - DEED AGREEM

Recorded On: April 11, 2016

Recorded At: 03:35:26 pm

Receipt Number: 206906

Number of Pages: 10

Processed By: 001 KAV

Book-VI/Pg: Bk-D VI-13346 Pg-662

Total Rec Fee(s): \$395.00

**** Examined and Charged as Follows ****

06 - DEED AGREEMENT	\$ 90.00	EX-Blocks - Deeds - \$300	\$ 300.00	EX-TP-584 Affidavit Fee	\$ 5.00
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	Tax Amount	Consld Amt	RS#/CS#		
Tax-Transfer	\$ 0	\$ 0	RE 17801	Basic	\$ 0.00
HEMPSTEAD				Local NY CITY	\$ 0.00
				Additional MTA	\$ 0.00
				Spec ASST	\$ 0.00
				Spec ADDL SONYMA	\$ 0.00
				Transfer	\$ 0.00

Tax Charge: \$ 0

Property Information:

Section	Block	Lot	Unit	Town Name
37	320	160		HEMPSTEAD
37	320	161		HEMPSTEAD
37	320	162		HEMPSTEAD

*****THIS PAGE IS PART OF THE INSTRUMENT*****

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.



Maureen O'Connell
County Clerk Maureen O'Connell

**ORIGINAL DOCUMENT(S)
WITH
ORIGINAL SIGNATURE(S)**

**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE
NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

THIS INDENTURE made this 29th day of December , 2015, between Owner(s), Nu-Life Realty, LLC, having an office at 1300 Harbor Rd., Hewlett, New York 11557 (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 429-441 Merrick Road in the Village of Lynbrook, Town of Hempstead, County of Nassau and State of New York, known and designated on the tax map of the County of Nassau as tax map parcel numbers: Section 37 Block 320 Lots 160, 161, 162, being the same as that property conveyed to Grantor by deed dated February 1, 2001 and recorded in the Nassau County Clerk's Office at Liber and Page 11380/156. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.460 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 8, 2015 prepared by Alexander Tsukerman, NYSLS, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: A1-0817-13-11, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health 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;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) 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 this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against

the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: 130217
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to: Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the

recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Nu-Life Realty LLC:

By: Howard M Zucker

Print Name: HOWARD M ZUCKERMAN

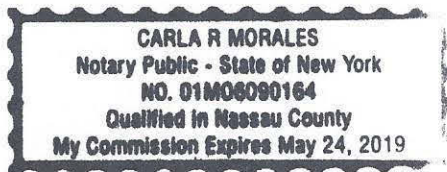
Title: V. Pres Date: 12/15/15

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF NASSAU)

On the 15th day of December, in the year 2015, before me, the undersigned, personally appeared Howard M Zucker, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Carla R Morales
Notary Public - State of New York



THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

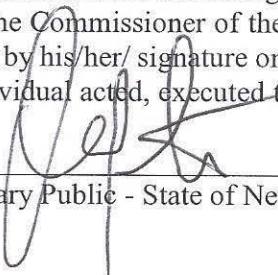
By:


Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 29th day of December, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.


Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected situate, lying and being in the Incorporated Village of Lynbrook, Town of Hempstead, County of Nassau and State of New York, being parts of Lots Nos. 1 thru 6 on a certain map entitled, "Map of Valuable Building Sites at Highland Park; situated at Lynbrook, in the Town of Hempstead, Nassau County, New York, owned by Fowler and Neimann, surveyed March 13, 1903, by D.S. Denton, East Rockaway, L.I." and filed in the Office of the Clerk of the County of Nassau on May 25, 1905 as Map No. 260, Case no. 1953, which said parts of Lots when taken together are more particularly bounded and described as follows:

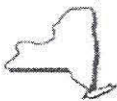
BEGINNING AT the corner formed by the intersection of the northerly side of Merrick Road, (new line) and the westerly side of Nieman Avenue;

RUNNING THENCE North 60 degrees 23 minutes 50 seconds West 151.18 along the northerly side of Merrick Road (new line);

THENCE North 22 degrees 26 minutes 00 seconds East, 124.51 feet;

THENCE South 67 degrees 34 minutes 00 seconds East, 150.00 feet to the westerly side of Nieman Avenue;

THENCE South 22 degrees 26 minutes 00 seconds West, along the westerly side of Nieman Avenue 143.38 feet to the point or place of BEGINNING.



**Combined Real Estate
Transfer Tax Return,
Credit Line Mortgage Certificate, and
Certification of Exemption from the
Payment of Estimated Personal Income Tax**

Recording office time stamp

See Form TP-584-I, Instructions for Form TP-584, before completing this form. Print or type.

Schedule A — Information relating to conveyance

Grantor/Transferor	Name (if individual, last, first, middle initial) (☐ check if more than one grantor)			Social security number
☐ Individual	Nu-Life Realty LLC			
☐ Corporation	Mailing address			Social security number
☐ Partnership	1300 Harbor Road			
☐ Estate/Trust	City	State	ZIP code	Federal EIN
☐ Single member LLC	Hewlett	NY	11557	11-3582440
☒ Other	Single member's name if grantor is a single member LLC (see instructions)			Single member EIN or SSN
Grantee/Transferee	Name (if individual, last, first, middle initial) (☐ check if more than one grantee)			Social security number
☐ Individual	New York State Department of Environmental Conservation			
☐ Corporation	Mailing address			Social security number
☐ Partnership	625 Broadway			
☐ Estate/Trust	City	State	ZIP code	Federal EIN
☐ Single member LLC	Albany	NY	12233	14-6013200
☒ Other	Single member's name if grantee is a single member LLC (see instructions)			Single member EIN or SSN

Location and description of property conveyed

Tax map designation – Section, block & lot (include dots and dashes)	SWIS code (six digits)	Street address	City, town, or village	County
37-320 Lots 160, 161, 162	282025	429-441 Merrick Road	Lynbrook	Nassau

Type of property conveyed (check applicable box)

1 ☐ One- to three-family house	5 ☒ Commercial/Industrial	Date of conveyance <table border="1"><tr><td>12</td><td>29</td><td>2015</td></tr><tr><td>month</td><td>day</td><td>year</td></tr></table>	12	29	2015	month	day	year	Percentage of real property conveyed which is residential real property <u>100</u> % (see instructions)
12	29		2015						
month	day		year						
2 ☐ Residential cooperative	6 ☐ Apartment building								
3 ☐ Residential condominium	7 ☐ Office building								
4 ☐ Vacant land	8 ☐ Other _____								

Condition of conveyance (check all that apply)

a. ☐ Conveyance of fee interest	f. ☐ Conveyance which consists of a mere change of identity or form of ownership or organization (attach Form TP-584.1, Schedule F)	i. ☐ Option assignment or surrender
b. ☐ Acquisition of a controlling interest (state percentage acquired _____ %)	g. ☐ Conveyance for which credit for tax previously paid will be claimed (attach Form TP-584.1, Schedule G)	m. ☐ Leasehold assignment or surrender
c. ☐ Transfer of a controlling interest (state percentage transferred _____ %)	h. ☐ Conveyance of cooperative apartment(s)	n. ☐ Leasehold grant
d. ☐ Conveyance to cooperative housing corporation	i. ☐ Syndication	o. ☒ Conveyance of an easement
e. ☐ Conveyance pursuant to or in lieu of foreclosure or enforcement of security interest (attach Form TP-584.1, Schedule E)	j. ☐ Conveyance of air rights or development rights	p. ☒ Conveyance for which exemption from transfer tax claimed (complete Schedule B, Part III)
	k. ☐ Contract assignment	q. ☐ Conveyance of property partly within and partly outside the state
		r. ☐ Conveyance pursuant to divorce or separation
		s. ☒ Other (describe) <u>Environmental Easement</u>

For recording officer's use	Amount received	Date received	Transaction number
	Schedule B., Part I \$ _____ Schedule B., Part II \$ _____		

Schedule B — Real estate transfer tax return (Tax Law, Article 31)**Part I — Computation of tax due**

- 1 Enter amount of consideration for the conveyance (if you are claiming a total exemption from tax, check the exemption claimed box, enter consideration and proceed to Part III) ☐ **Exemption claimed**
- 2 Continuing lien deduction (see instructions if property is taken subject to mortgage or lien)
- 3 Taxable consideration (subtract line 2 from line 1)
- 4 Tax: \$2 for each \$500, or fractional part thereof, of consideration on line 3
- 5 Amount of credit claimed for tax previously paid (see instructions and attach Form TP-584.1, Schedule G)
- 6 Total tax due* (subtract line 5 from line 4)

1.		0 00
2.		0 00
3.		0 00
4.		
5.		
6.		0 00

Part II — Computation of additional tax due on the conveyance of residential real property for \$1 million or more

- 1 Enter amount of consideration for conveyance (from Part I, line 1)
- 2 Taxable consideration (multiply line 1 by the percentage of the premises which is residential real property, as shown in Schedule A) ...
- 3 Total additional transfer tax due* (multiply line 2 by 1% (.01))

1.		
2.		
3.		

Part III — Explanation of exemption claimed on Part I, line 1 (check any boxes that apply)

The conveyance of real property is exempt from the real estate transfer tax for the following reason:

- a. Conveyance is to the United Nations, the United States of America, the state of New York, or any of their instrumentalities, agencies, or political subdivisions (or any public corporation, including a public corporation created pursuant to agreement or compact with another state or Canada) a ☒
- b. Conveyance is to secure a debt or other obligation..... b ☐
- c. Conveyance is without additional consideration to confirm, correct, modify, or supplement a prior conveyance..... c ☐
- d. Conveyance of real property is without consideration and not in connection with a sale, including conveyances conveying realty as bona fide gifts d ☐
- e. Conveyance is given in connection with a tax sale..... e ☐
- f. Conveyance is a mere change of identity or form of ownership or organization where there is no change in beneficial ownership. (This exemption cannot be claimed for a conveyance to a cooperative housing corporation of real property comprising the cooperative dwelling or dwellings.) Attach Form TP-584.1, Schedule F..... f ☐
- g. Conveyance consists of deed of partition..... g ☐
- h. Conveyance is given pursuant to the federal Bankruptcy Act h ☐
- i. Conveyance consists of the execution of a contract to sell real property, without the use or occupancy of such property, or the granting of an option to purchase real property, without the use or occupancy of such property i ☐
- j. Conveyance of an option or contract to purchase real property with the use or occupancy of such property where the consideration is less than \$200,000 and such property was used solely by the grantor as the grantor's personal residence and consists of a one-, two-, or three-family house, an individual residential condominium unit, or the sale of stock in a cooperative housing corporation in connection with the grant or transfer of a proprietary leasehold covering an individual residential cooperative apartment..... j ☐
- k. Conveyance is not a conveyance within the meaning of Tax Law, Article 31, section 1401(e) (attach documents supporting such claim) k ☐

*The total tax (from Part I, line 6 and Part II, line 3 above) is due within 15 days from the date conveyance. Please make check(s) payable to the county clerk where the recording is to take place. If the recording is to take place in the New York City boroughs of Manhattan, Bronx, Brooklyn, or Queens, make check(s) payable to the **NYC Department of Finance**. If a recording is not required, send this return and your check(s) made payable to the **NYS Department of Taxation and Finance**, directly to the NYS Tax Department, RETT Return Processing, P.O. Box 5045, Albany NY 12205-5045.

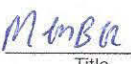
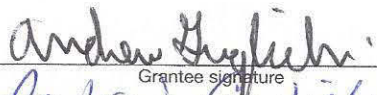
Schedule C — Credit Line Mortgage Certificate (Tax Law, Article 11)**Complete the following only if the interest being transferred is a fee simple interest.**

I (we) certify that: (check the appropriate box)

1. ☐ The real property being sold or transferred is not subject to an outstanding credit line mortgage.
2. ☐ The real property being sold or transferred is subject to an outstanding credit line mortgage. However, an exemption from the tax is claimed for the following reason:
- ☐ The transfer of real property is a transfer of a fee simple interest to a person or persons who held a fee simple interest in the real property (whether as a joint tenant, a tenant in common or otherwise) immediately before the transfer.
- ☐ The transfer of real property is (A) to a person or persons related by blood, marriage or adoption to the original obligor or to one or more of the original obligors or (B) to a person or entity where 50% or more of the beneficial interest in such real property after the transfer is held by the transferor or such related person or persons (as in the case of a transfer to a trustee for the benefit of a minor or the transfer to a trust for the benefit of the transferor).
- ☐ The transfer of real property is a transfer to a trustee in bankruptcy, a receiver, assignee, or other officer of a court.
- ☐ The maximum principal amount secured by the credit line mortgage is \$3,000,000 or more, and the real property being sold or transferred is **not** principally improved nor will it be improved by a one- to six-family owner-occupied residence or dwelling.
- Please note:** for purposes of determining whether the maximum principal amount secured is \$3,000,000 or more as described above, the amounts secured by two or more credit line mortgages may be aggregated under certain circumstances. See TSB-M-96(6)-R for more information regarding these aggregation requirements.
- ☐ Other (attach detailed explanation).
3. ☐ The real property being transferred is presently subject to an outstanding credit line mortgage. However, no tax is due for the following reason:
- ☐ A certificate of discharge of the credit line mortgage is being offered at the time of recording the deed.
- ☐ A check has been drawn payable for transmission to the credit line mortgagee or his agent for the balance due, and a satisfaction of such mortgage will be recorded as soon as it is available.
4. ☐ The real property being transferred is subject to an outstanding credit line mortgage recorded in _____ (insert liber and page or reel or other identification of the mortgage). The maximum principal amount of debt or obligation secured by the mortgage is _____. No exemption from tax is claimed and the tax of _____ is being paid herewith. (Make check payable to county clerk where deed will be recorded or, if the recording is to take place in New York City but not in Richmond County, make check payable to the **NYC Department of Finance**.)

Signature (both the grantor(s) and grantee(s) must sign)

The undersigned certify that the above information contained in schedules A, B, and C, including any return, certification, schedule, or attachment, is to the best of his/her knowledge, true and complete, and authorize the person(s) submitting such form on their behalf to receive a copy for purposes of recording the deed or other instrument effecting the conveyance.

 _____ Grantor signature	 _____ Title	 _____ Grantee signature	 _____ Title
 _____ Grantee signature	 _____ Title		

Reminder: Did you complete all of the required information in Schedules A, B, and C? Are you required to complete Schedule D? If you checked e, f, or g in Schedule A, did you complete Form TP-584.1? Have you attached your check(s) made payable to the county clerk where recording will take place or, if the recording is in the New York City boroughs of Manhattan, Bronx, Brooklyn, or Queens, to the **NYC Department of Finance**? If no recording is required, send your check(s), made payable to the **Department of Taxation and Finance**, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-5045.

Schedule D - Certification of exemption from the payment of estimated personal income tax (Tax Law, Article 22, section 663)

Complete the following only if a fee simple interest or a cooperative unit is being transferred by an individual or estate or trust.

If the property is being conveyed by a referee pursuant to a foreclosure proceeding, proceed to Part II, and check the second box under *Exemptions for nonresident transferor(s)/seller(s)* and sign at bottom.

Part I - New York State residents

If you are a New York State resident transferor(s)/seller(s) listed in Schedule A of Form TP-584 (or an attachment to Form TP-584), you must sign the certification below. If one or more transferors/sellers of the real property or cooperative unit is a resident of New York State, **each** resident transferor/seller must sign in the space provided. If more space is needed, please photocopy this Schedule D and submit as many schedules as necessary to accommodate all resident transferors/sellers.

Certification of resident transferor(s)/seller(s)

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) as signed below was a resident of New York State, and therefore is not required to pay estimated personal income tax under Tax Law, section 663(a) upon the sale or transfer of this real property or cooperative unit.

Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date

Note: A resident of New York State may still be required to pay estimated tax under Tax Law, section 685(c), but not as a condition of recording a deed.

Part II - Nonresidents of New York State

If you are a nonresident of New York State listed as a transferor/seller in Schedule A of Form TP-584 (or an attachment to Form TP-584) but are not required to pay estimated personal income tax because one of the exemptions below applies under Tax Law, section 663(c), check the box of the appropriate exemption below. If any one of the exemptions below applies to the transferor(s)/seller(s), that transferor(s)/seller(s) is not required to pay estimated personal income tax to New York State under Tax Law, section 663. **Each** nonresident transferor/seller who qualifies under one of the exemptions below must sign in the space provided. If more space is needed, please photocopy this Schedule D and submit as many schedules as necessary to accommodate all nonresident transferors/sellers.

If none of these exemption statements apply, you must complete Form IT-2663, *Nonresident Real Property Estimated Income Tax Payment Form*, or Form IT-2664, *Nonresident Cooperative Unit Estimated Income Tax Payment Form*. For more information, see *Payment of estimated personal income tax*, on page 1 of Form TP-584-I.

Exemption for nonresident transferor(s)/seller(s)

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) (grantor) of this real property or cooperative unit was a nonresident of New York State, but is not required to pay estimated personal income tax under Tax Law, section 663 due to one of the following exemptions:

- ☐ The real property or cooperative unit being sold or transferred qualifies in total as the transferor's/seller's principal residence (within the meaning of Internal Revenue Code, section 121) from _____ Date _____ to _____ Date _____ (see instructions).
- ☐ The transferor/seller is a mortgagor conveying the mortgaged property to a mortgagee in foreclosure, or in lieu of foreclosure with no additional consideration.
- ☐ The transferor or transferee is an agency or authority of the United States of America, an agency or authority of the state of New York, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, or a private mortgage insurance company.

Signature	Print full name	Date
Signature	Print full name	Date
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