Annual Report
Soil Vapor and Indoor Air Monitoring
January 2018

Citizen Development Company / Flower Fashion Site
47 Northern Boulevard
Great Neck, New York

NYSDEC Site # 1-30-070

March 2018

Prepared for:

Citizen Development Company
111-15 Queens Boulevard
P.O. Box 10
Forest Hills, NY 11375

Prepared by:

CA Rich Consultants, Inc.
17 Dupont Street
Plainview, NY 11803

March 23, 2018

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Region 1
50 Circle Road
Stony Brook, New York 11790

Attention: Mr. Jahan Reza, Project Manager, Division of Environmental Remediation

Re: Annual Periodic Review Report (PRR)
January 2018 Soil Vapor & Indoor Air Monitoring Results
The Citizens Development Company / Flower Fashion Site (the Site)
47 Northern Boulevard, Great Neck, New York

Dear Mr. Reza:

In accordance with our Site Management Plan (SMP), attached is a copy of the Annual Soil Vapor & Indoor Air Monitoring Report and Certification (the Report) for the above-referenced Site. This document follows the Department's new "Periodic Review Report General Guidance" outline included in the NYSDEC's 45 Day Reminder Notice. It also includes a signed Institutional and Engineering Controls Certification Form.

On July 18, 2017, the NYSDEC approved the PRR, dated May 31, 2017, submitted by CA Rich Consultants, Inc. (CA RICH) for the Site. In that PRR, CA RICH demonstrated that the Site met the criteria of the termination protocol in the Site Management Plan (SMP) and the NYSDEC-approved Termination Sampling Plan. In its July 18th letter, the NYSDEC concurred with this and requested that the mitigation systems be turned off and one additional round of samples be collected in accordance with the Termination Sampling Plan, and with the data compared to the revised New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Matrices (May 2017). The mitigation systems were turned off in August 2017. The indoor air samples, outdoor air sample, and the sub-slab soil vapor sample were collected on January 30, 2018.

The findings presented in this Report indicate that the concentrations of perchloroethene (PCE) in the indoor air at the Site and in the basements of the adjacent buildings remained well below the revised NYSDOH guideline of 30 ug/m^3 with the SSD fans shutdown. Therefore, we recommended that indoor air monitoring be discontinued and the SSD systems terminated in accordance with the SMP.

During this winter's 2017-18 termination sampling round (conducted January 30, 2018), PCE was detected at 1.1 ug/m^3 inside the first floor of the AT&T store at 47 Northern Blvd. The basement indoor air sample at AT&T contained 2.5 ug/m^3 of PCE. The two indoor air samples from the basement of 55 Northern Blvd. contained PCE at 4.3 ug/m^3 for both samples. The levels detected in these samples continued to display concentrations even below the revised NYSDOH indoor air guidance value of 30 ug/m^3. In accordance with the approved Termination Sampling Plan, a sub-slab soil vapor sample was also collected from the basement of 47 Northern Blvd. The sub-slab soil vapor PCE result of this sample was 110 ug/m^3. The indoor air and sub-slab

results for 47 Northern Blvd. fall under the “no further action” recommendation in the May 2017 version of Matrix B.

As described in detail within our Report, we recommend the following for this Site:

- Indoor air monitoring at the AT&T store should be discontinued in accordance with the SMP.
- Repairs to the fresh air intake of the HVAC system at 55 Northern Blvd. have helped improve the air quality in the basement of this building. Here too, monitoring of the indoor air at 55 Northern Blvd. should be discontinued in accordance with the SMP.
- Since the results of the implemented SSD termination protocol demonstrated continued compliance with the revised NYSDOH guidelines, the indoor air monitoring program can be terminated, and the Site be considered for delisting from the NYSDEC Registry.

If there are any questions regarding this Report, please do not hesitate to call our Office.

Sincerely,

CA RICH CONSULTANTS, INC.

Michael Yager
Project Manager

ec: E. Obrecht, NYSDEC
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C. Bethoney, NYSDOH
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C. Biblow, Esq., Farrell Fritz
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Table of Contents

Periodic Review Report (PRR) – March 2018
Citizen Development Company /Flower Fashion Site
47 Northern Boulevard
Great Neck, New York
NYSDEC Site # 1-30-070

1.0 Introduction

The Citizen Development Corp./Fashion Flower (CDC/FF) site (the Site), located at 47 Northern Boulevard in Great Neck, New York (Figure 1), and is currently occupied by AT&T. Please note that in March of 2015, an automobile crashed into the AT&T store at 47 Northern Blvd. and the store remained vacant/closed pending renovation. The AT&T space has been completely renovated and re-opened in 2017. Previous tenants of this Property were: a Cingular cellular telephone store; a florist; and a dry cleaner. The contaminant of concern is tetrachloroethene (a.k.a perchloroethene or "PCE") which is a remnant of the operations of the former dry cleaner. The media that were impacted included soil, soil vapor, underlying groundwater and indoor air. Based upon the work described in this report and in the referenced reports, and the filing of the environmental easement in 2014, this site was reclassified from a NYSDEC Class 2 to a NYSDEC Class 4 site in 2014.

1.1 Nature & Extent of Contamination and Remedial History

During the 1980's and 1990's, a systematic series of investigative and remedial activities including soil borings, well installations & sampling, soil vapor surveys, soil excavation, a soil vapor extraction (SVE) system and groundwater pump & treat systems were performed at the CDC/FF Site to address a release of the dry cleaning chemical perchloroethene and its degradation products. During the 2000's, this was followed by the installation of a Sub-Slab Depressurization (SSD) system below the building, an additional soil vapor survey, a second soil removal effort, a program of in-situ chemical oxidation, the operation of a second SVE system, the installation of additional monitoring wells and the installation/conversion to a second SSD system.

As displayed in the chronologic tabulation included in Section 2 of this report, this Site has a long history of environmental investigative and remedial activities. A list of selected references pertaining to the work accomplished is included at the end of this Report. For the purposes of this periodic review, this Report will focus on the more recent investigative and remedial efforts as outlined in the Site Management Plan (SMP) (Ref 11). These are: in-situ chemical oxidation; operation of an SVE – converted to SSD system in the rear of the Property; operation of the SSD system below the building; and post remediation groundwater and indoor air monitoring.

1.2 Effectiveness of Remedial Program

The effectiveness of the corrective actions implemented at this Site has been evaluated by reviewing data collected relative to the following components of the remedial program. These are discussed in further detail in Section 3 of this Report.

In-Situ Chemical Oxidation – The last in-situ chemical oxidation application was applied during the summer of 2006. Based on the results of samples collected from the monitoring wells downgradient of the application site, this remedial effort was deemed to have been effective. In response to our 2010 Annual Monitoring Report (Ref. 16), NYSDEC agreed that groundwater monitoring at this site can be discontinued. A copy of the NYSDEC letter (Ref 17) is attached.

Operation of the SVE System in the Rear of the Property – The SVE system remained in operation from January 2005 to July 2011. A final post remediation soil boring was performed in December 2010 and the results were included in the Annual Monitoring Report for that year. Based on those results, NYSDEC concurred that the SVE system could be turned off and converted to an SSD system by replacing the blower with an energy efficient vapor abatement fan (Ref. 17). This conversion was performed in July 2011. The layout of the SSD system is illustrated on Figure 2.

Operation of the SSD System Below the Building – 2016

On May 17, 2016, NYSDEC approved the Periodic Review Report, (PRR), dated March 30, 2016, submitted by CA Rich Consultants, Inc. (CA RICH) for the Site. In that PRR, CA RICH demonstrated that the Site met the criteria of the termination protocol in the Site Management Plan (SMP). In its May 17th letter, NYSDEC concurred with this and requested that CA RICH submit a letter proposal to implement the termination sampling for the Site during the upcoming heating season. A copy of the NYSDEC letter (Ref 19) is attached.

On October 17, 2016, CA RICH submitted the Termination Sampling Plan for Site #1-30-070. The Plan was approved by NYSDEC on January 11, 2017. On January 19, 2017, the SSD fans were turned off in accordance with the Termination Sampling Plan. The indoor air samples, outdoor air sample, and the sub-slab soil vapor sample were collected on February 23, 2017, as outlined in the NYSDEC-approved Plan. A copy of the plan is included in Appendix A.

The results from the termination sampling performed demonstrated that the PCE indoor air levels were well below the NYSDOH revised guideline of 30 ug/m^3 with the SSD fans shutdown for more than four weeks. Therefore, we recommended that indoor air monitoring be discontinued and the SSD systems terminated in accordance with the SMP. We also recommended that the Site be considered for delisting.

No operational problems were reported during 2016 and the SSD fans were turned back on after the termination sampling event.

Operation of the SSD System Below the Building – 2017

On July 18, 2017, NYSDEC approved the PRR, dated May 31, 2017, submitted by CA Rich Consultants, Inc. (CA RICH) for the Site. In that PRR, CA RICH demonstrated that the Site met the criteria of the termination protocol in the Site Management Plan (SMP) and the NYSDEC-approved Termination Sampling Plan. In its July 18th letter, NYSDEC concurred with this and requested that the mitigation systems be turned off and required one additional round of samples be collected in accordance with the Termination Sampling Plan and with the data compared to the revised New York State department of Health (NYSDOH) Soil Vapor/Indoor Air Matrices (May 2017). A copy of the NYSDEC letter (Ref 20) is attached.

The mitigation systems were turned off in August 2017. The indoor air samples, outdoor air sample, and the sub-slab soil vapor sample were collected on January 30, 2018. The results from the termination sampling performed demonstrated that the PCE indoor air levels were well below the revised NYSDOH guideline of 30 ug/m^3 with the SSD fans shutdown. Based upon the results of this sampling round with the mitigation systems shutdown for an extended period, we recommend that indoor air monitoring be discontinued and the SSD systems terminated in accordance with the SMP. We also recommend that the Site be considered for delisting.

No operational problems were reported during 2017 and the SSD fans remain shut down following this sampling event.

Post Remediation Groundwater and Indoor Air Monitoring – The results of the indoor air monitoring program are discussed in Section 2 (below) of this Report. In summary, the PCE indoor air results collected in January 2018 were well below the NYSDOH revised guideline of 30 ug/m^3. The PCE results and sampling locations are illustrated on Figure 3.

Groundwater monitoring is no longer required or performed at this site.

1.3 Compliance

The Site is currently in compliance with the Site Management Plan (SMP)

1.4 Recommendations

Based on the results from this sampling period and the results from the February 2017 period, which also demonstrated that the PCE indoor air levels were below the NYSDOH revised guideline of 30 ug/m^3, we recommend that indoor air monitoring be discontinued and the SSD systems terminated in accordance with the SMP. We also recommend that the Site be considered for delisting.

2.0 Site Overview

2.1 Chronology of Investigative and Remedial Activities

During the 1980's and 1990's, a series of investigative and remedial activities including soil borings, well installations & sampling, soil vapor surveys, soil excavation, soil vapor extraction (SVE) system and groundwater pump & treat systems were performed at the CDC/FF Site to address a release of the dry cleaning chemical perchloroethene and its degradation by-products. During the 2000's, these activities were followed by the installation of a sub-slab depressurization (SSD) system below the building, an additional soil vapor survey, a second soil removal effort, a program of in-situ chemical oxidation, the operation of a second SVE system, and the installation of additional monitoring wells.

As displayed in the chronologic tabulation below, this Site has a long history of environmental investigative and remedial activities. A list of references related to the work performed is included at the end of this Report.

A chronology of the Site activities is presented in the following tabulation.

Action	Time Period
Initial subsurface investigations	1983 – 1984
Initial soil removal action in northwest corner of Property	1984
Operation of the initial SVE and groundwater pump and treat systems	1986 – 1990
Post remediation groundwater monitoring	1990 – 2010
Installation and operation of a SSD system below the building	2002 – Present
Post remediation indoor air monitoring	2002 – Present
Performance of a second soil vapor survey	2003
Second soil removal action in northeast corner of Property	2004
Application of in-situ chemical oxidation in rear of Property	2004 – 2006
Installation of additional deep monitoring wells	2005
Operation of second SVE system	2005 – 2011
Preparation of a Site Management Plan	2006
Drilling/testing of post-remediation borings	2009
Installation of two new shallow SVE wells	2009
Drilling/testing of additional post-remediation borings	2010
Conversion of SVE system to SSD system	2011
Fresh air HVAC intake set at 55 Northern Blvd. repaired	2014
Interior SSD fan replaced	2016

2.2 Nature and Extent of Contamination

As the source of contamination was the operation of a former dry cleaning facility, the contaminant of concern is tetrachloroethene (a.k.a perchloroethene, PCE or “Perc”) which is the trade name for dry cleaning fluid. The various media that were impacted included soil, soil vapor, underlying groundwater and indoor air. The extent of contamination in each of these media is discussed below.

Soil – Two known areas of soil contamination existed below the rear of the Property in the past. One portion of contaminated soil (located below the northwest portion of the property) was removed in 1984 under the oversight of the Nassau County Department of Health. Later (in 2004), a second soil removal action was performed in the northeast portion of the Property under the oversight of NYSDEC (Ref. 8). This was followed by in-situ treatments with permanganate, a chemical oxidant, followed by the operation of a SVE system (Ref. 9).

Soil Vapor – In the past, elevated PCE levels were measured in the rear of the Property. During 2004, concentrations as high as 2,400,000 ug/m^3 of PCE were recorded in the rear yard of the Property. Since that time, a soil removal effort followed by chemical oxidation treatment and the operation of an SVE system have been employed. The concentration of PCE in the exhaust of the SVE system during our December 2010 sampling event was 4,342 ug/m^3, a significant improvement since the 2004 sample collection. The historical results of the VOCs detected in the exhaust of the SVE system are included in the 2010 Annual Monitoring Report (Ref. 16). Based on the effectively decreasing concentrations in the SVE exhaust and the results of the post remediation borings, the SVE system was converted to an SSD system in July 2011.

Indoor Air Quality – Indoor air sampling was initiated in 2002. Samples were collected from the basement and ground floor level of 47 Northern Blvd.; the basement of 55 Northern Blvd.; the ground floor level of 45 Northern Blvd. (an adjoining strip-type shopping center which has no basement); and from a designated outdoor sampling point. PCE in the indoor air was detected above the then applicable NYSDOH guidance level of 100 ug/m^3 in both 47 and 55 Northern Blvd. locations during the initial 2002 sampling event. Results decreased significantly after the SSD and SVE systems were placed into operation. During the Winter of 2014/2015 sampling event, the PCE levels at all locations were well below the NYSDOH revised guidance level of 30 ug/m^3. During the Winter 2015/2016 sampling event, the PCE levels at all locations remained well below the NYSDOH revised indoor air guidance level of 30 ug/m^3. During the Winter 2016/2017 “termination sampling event”, with the SSD fans turned off in accordance with the NYSDEC approved Termination Sampling Plan, the PCE levels of the indoor air samples continued to be well below the NYSDOH revised guidance level of 30 ug/m^3. Additionally, during the Winter 2017/2018 “termination sampling event” as required by NYSDEC, with the SSD fans turned off, the PCE levels of the indoor air samples continued to be well below the NYSDOH guidance level of 30 ug/m^3.

Sub-Slab Vapor - On December 17, 2012, a sub-slab soil vapor sampling point was installed at 55 Northen Blvd. and a soil gas sample collected. The sub-slab soil vapor PCE result of this sample was 42 ug/m^3 which was below the monitoring and mitigation levels found on then applicable NYSDOH Matrix 2. In accordance with the approved Termination Sampling Plan, a sub-slab soil vapor sample was collected from the basement of 47 Northern Blvd. On February 22, 2017, a sub-slab soil vapor sampling point was installed at 47 Northern Blvd. and on February 23, 2017, a soil gas sample collected from this point. The sub-slab soil vapor PCE result of this sample was 20 ug/m^3 which is well below the monitoring and mitigation levels found on then applicable NYSDOH Matrix 2.

In accordance with NYSDEC’s request, a sub-slab soil vapor sampling point was installed at 47 Northern Blvd. on January 29, 2018. A soil gas sample was collected from this point on January 30, 2018. The sub-slab soil vapor PCE result of this sample was 110 ug/m^3. This result falls below the monitor and mitigation levels found on the revised (May 2017) NYSDOH Matrix B. The historical results of PCE detected in the indoor air and the soil vapor samples are included on Table 1.

Groundwater – A series of groundwater monitoring wells were installed at the Site. Wells MW-1A, 1B, 1C, and 1D are all upgradient water table monitoring wells. These wells have historically yielded a groundwater quality having low, but measurable, levels of PCE entering the Property. The locations of the wells are illustrated on Figure 4.

Wells MW-2, 3, 4 are hereby downgradient water table monitoring wells located near the northern boundary of the Site. In the past, these wells have contained PCE levels in the range of 100 to 1,000 ug/l with well MW-4 displaying the highest levels. Since the completion of the remedial chemical oxidation program, the PCE levels in these wells decreased significantly. In fact, during the December 2009 sampling round, the PCE concentrations in wells MW-2 and 3 were 2.0 ug/l and 0.85 ug/l. Well MW-4, the well that historically had the highest PCE levels at the site, contained only 7.1 ug/l in December 2010, just slightly above the groundwater standard of 5.0 ug/l.

For further vertical definition, a series of multi-depth monitoring wells were installed in the area of MW-4. These are identified as MW-4 (75) which is 75 feet deep, MW-4 (90) which is 90 feet deep, and MW-4D which is 146 feet deep. During the December 2009 monitoring event, PCE was not detected in the water samples from any of these deeper wells.

There were also a series of off-site wells installed further downgradient from this Site. These are identified as wells MW-5, 6, 7, 8 and 10. The off-site wells were last sampled in 2005. At that time, the PCE detections were all relatively low, between 1 and 13 ug/l.

Based on the results of the several rounds of groundwater sampling and the low levels of PCE detected in the 2010 sampling round, NYSDEC agreed that groundwater monitoring could be discontinued. As such, groundwater monitoring is no longer performed.

3.0 Evaluation of Remedy Performance, Effectiveness and Protectiveness

For the purposes of our periodic review, this report evaluates the most recent investigative and remedial efforts as outlined in the SMP. These are: in-situ chemical oxidation (conducted in 2004-2006); operation of an SVE – converted SSD system in the rear of the Property (SVE installed in 2005, operated to 2011, when it was converted to an SSD system); operation of the SSD system below the building; and post-remediation groundwater monitoring (discontinued after 2010) and indoor air monitoring.

In-Situ Chemical Oxidation – Permanganate is a strong oxidizer that has a long history of application for the control of odors at wastewater treatment plants. The application of permanganate directly to subsurface soils and groundwater has been proven successful for the remediation of PCE. Once in contact with PCE, the permanganate converts the contaminant to harmless by-products as shown below:

$$2NaMnO4 + C2HCl4 \rightarrow 2CO2 + 2MnO2 + 2H+ + 2Na- +4Cl -$$

(Permanganate + Perchloroethene → Carbon Dioxide Gas + Manganese Dioxide + Hydrogen ions + Sodium ions + Chlorine ions)

During the fall of 2004, CA RICH applied liquid permanganate to a series of 27 shallow injection points and two water table injection points located in the rear of the Property. Additional applications of permanganate were applied to the water table injection points during the summers of 2005 and 2006 (Ref 9).

The monitoring wells downgradient of the permanganate application site, wells MW-2, 3 and 4, were monitored periodically after the permanganate application treatment program. The PCE levels in these wells then significantly declined as a result of this treatment. During the December 2010 sampling round, the PCE concentrations in wells MW-2 and 3 were 2.0 ug/l and 0.85 ug/l. Well MW-4, the well that has historically had the highest PCE levels at the Site, contained only 7.1 ug/l, just slightly above the groundwater standard of 5.0 ug/l.

Based on these results, the chemical oxidation program was deemed to have been effective and protective.

Operation of the SVE – converted to SSD System in the Rear of the Property – After the permanganate treatment was completed, an SVE system was placed in the northeast portion of the rear yard to remove the remnant PCE vapors that were not addressed by the soil removal and in-situ chemical oxidation programs. The SVE system for this Site included three shallow horizontal SVE wells installed in the backfilled excavation area. Five of the shallow permanganate injection points were also converted into SVE wells. A description of the SVE system is included in Reference 9.

The SVE system remained in operation from January 2005 to July 2011. Over that period, it was effective in reducing the concentration of remnant PCE soil vapors below the rear portion of the Property. The initial PCE concentration in the untreated or "raw" soil vapor in January 2005 was 540,000 ug/m^3. During the December 2010 sampling round, this had been effectively reduced to 4,342 ug/m^3.

Pursuant to the SMP, once the SVE achieved its target of reducing VOC levels to constant or asymptotic concentrations, soil samples were collected and were analyzed for halogenated VOCs. These soil samples met the criteria in the SMP (see Ref. 11, 13, 14, 15 and 16).

Operation of the SSD System Below the Building – No operational problems were reported in 2017. Based on the results of the indoor air samples collected in the AT&T store, this SSD system has been effective and protective. In accordance with the SMP and, based upon the results of the termination sampling performed in February 2017 and January 2018, operation the SSD system can be terminated. Presently, the SSD systems are turned off.

Post-Remediation Groundwater and Indoor Air Monitoring – The results of the indoor air monitoring program are discussed in Section 5 of this Report. The most recent PCE indoor air sample results are all well below the NYSDOH revised indoor air guidance level of 30 ug/m^3. The groundwater monitoring portion of this project has been completed and monitoring of the groundwater is no longer performed.

Based on these results, we believe the remedy and the post-remediation monitoring program have been effective and protective.

4.0 Institutional Controls/Engineering Controls (IC/EC) Plan Compliance

4.1 Requirements and Compliance

Institutional Controls – Two institutional controls have been implemented for this site: 1) filing of an Environmental Easement; and 2) groundwater beneath the Site cannot be used for potable or industrial purposes without treatment unless first obtaining permission to do so from NYSDEC. The environmental easement was signed on November 26, 2013 and recorded on January 22, 2014. The groundwater beneath the Site is not being used for potable or industrial purposes.

Engineering Controls – There are now two SSD systems operating at the site. The SSD systems are currently shutdown as described in Section 3 of this Report.

4.2 Certification

An annual inspection of the Site continues to be performed by CA RICH with the Annual Certification provided to NYSDEC as required in the SMP.

5.0 Monitoring Plan Compliance

The following monitoring programs as described in the SMP include: groundwater monitoring, soil vapor monitoring, and indoor air quality monitoring.

5.1 Groundwater Monitoring

Groundwater monitoring is no longer required at this site.

5.2 Soil Vapor

Soil vapor monitoring is no longer required at this site.

5.3 Sub-Slab Depressurization Systems

The SSD fans were turned off in August 2017 in accordance with the NYSDEC approved PRR dated May 31, 2017. In accordance with the approved PRR, indoor air samples, outdoor air sample, and a sub-slab soil vapor sample were collected on January 30, 2018, as outlined in the NYSDEC- approved Termination Sampling Plan.

Results from the sampling performed demonstrated that the PCE indoor air levels were well below the NYSDOH revised indoor air guideline of 30 ug/m^3 with the SSD fans shutdown. The sub-slab soil vapor PCE result of this sampling event demonstrate that the PCE soil vapor level below 47 Northern Blvd is below the monitoring and mitigation levels found on the revised (May 2017) NYSDOH Matrix B. The SSD fans remained off after the termination sampling event.

Termination Criteria - The SSD systems will be terminated when monitoring of the indoor air confirms that there are no impacts to the indoor air quality within the AT&T store, as well as testing at certain specified off-site locations after the SSD fans have been turned off for an extended period during winter conditions.

We believe this criteria has been met, as demonstrated by the recent indoor air testing.

5.4 Indoor Air Quality

Indoor air samples were collected at the following locations on an annual basis (during the winter heating season):

BUILDING	SAMPLE LOCATION & IDENTIFICATION
CDC/FF Site (AT&T/Cingular Store) 47 Northern Blvd.	Ground Floor and Basement (Sample ID: PDM-1 and PDM-2)
Health Nut Store 45 Northern Blvd.	No longer sampled (as per approval of the NYSDEC)
Atlantic PC, Inc. (formerly Cambridge Educational Ctr) 55 Northern Blvd.	Basement (reception room and NW Office) (Sample ID: PDM-4 and PDM-5)
Outdoor Ambient Air	Behind Site Building (Sample ID: PDM-6)

As recommended by the New York State Department of Health (NYSDOH), all of the indoor air samples and the recent sub-slab soil vapor sample (SVTP-01) were collected via Summa canisters and were analyzed via Method T0-15 in accordance with the sampling protocols outlined in the NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006. The Summa canisters were brought out to the Site sampling locations, opened and exposed for an approximate 8-hour period via laboratory-calibrated regulators. The samples were analyzed by ELAP-approved York Analytical Laboratories, Inc. for the analysis of PCE via Method T0-15. Monitoring of the indoor air quality at locations PDM-1, PDM-2 and PDM-4 through 6 should be discontinued based on the sampling results. Analytical results are included in Appendix B.

During this most recent indoor air sampling round, a PCE level of 1.1 ug/m^3 was detected in the air inside the first floor of the AT&T store. The basement indoor air sample below the first floor contained 2.5 ug/m^3 of PCE. These levels are well below the NYSDOH revised indoor air guideline of 30 ug/m^3. Additionally, the PCE result for a sub-slab soil vapor sample (SVTP-01) from the basement of 47 Northern Blvd was below the monitoring and mitigation levels found on the revised (May 2017) NYSDOH Matrix B.

The two indoor air samples from the basement of 55 Northern Blvd. to the north, contained PCE at 4.3 ug/m^3 in both samples. These levels are still well below the revised NYSDOH indoor air guideline of 30 ug/m^3.

The Termination monitoring round results are included on Table 1.

Termination Criteria – The air quality in the AT&T store and the three adjoining stores remain well below the recently revised NYSDOH guideline for PCE, as demonstrated by the current and previous sampling rounds during the winter heating season with the SSD system turned off for an extended period. The indoor air monitoring program should be terminated and the Site delisted from the Registry.

6.0 Operations & Maintenance Plan Compliance

Currently there are two sub-slab depressurization systems operating at the site.

6.1 Sub-Slab Depressurization Systems

Currently, there is a Sub-Slab Depressurization (SSD) system operating in the basement of the existing #47 building. The system consists of a perforated pipe buried beneath the basement floor that is connected to a Fantech® low pressure SSD blower that exhausts extracted soil vapor at a rate of approximately 150 cfm. A second SSD system is connected to the horizontal and shallow vertical vents that were installed for the SVE system. Indoor air quality tests currently indicate that these systems are effectively controlling sub-slab PCE vapors.

Operations & Maintenance procedures that apply to the Fantech® fans include an on-going physical inspection of the fans to confirm that air is being discharged and that the fans remain operational. These inspections were performed during 2015. Toward the end of 2015, it was found that the fan for the basement SSD system was not operating continuously. This fan was removed and replaced in March 2016. These inspections were performed again during 2017. No operational problems were reported during 2017. The SSD fans were turned off in August 2017 in accordance with the NYSDEC approved PRR dated May 31, 2017 (approved July 18, 2017)). The fans remained off after the termination sampling event.

7.0 Conclusions and Recommendations

The corrective actions implemented at this Site have been evaluated by reviewing data collected at the Site, and they are deemed to be effective and protective.

- The operation of the existing SSD fans is checked on a regular basis. No operational problems were reported during 2017. Based on the results of the indoor air samples collected in the AT&T store the SSD system is effective and protective. No further modifications to the SSD systems are recommended at this time.

- Indoor air monitoring at the AT&T store should be discontinued in accordance with the SMP based upon the results of the recent termination sampling event. The PCE concentrations at the AT&T store and at 55 Northern Blvd. continue to be well below the recently revised NYSDOH air guidelines even with the SSD fans turned off.

- Repairs to the fresh air intake of the HVAC system at 55 Northern Blvd. have helped improve the air quality in the basement of this building. Monitoring of the indoor air at 55 Northern Blvd. should be discontinued in accordance with the SMP.

- Based upon the improved 2017/2018 indoor air sampling results and the associated termination criteria, we recommend that the indoor air monitoring program be terminated, and the Site be considered for delisting from the NYSDEC Registry.

REFERENCES

1. Cabot Kilburn, (1979), Hydrogeology of the Town of North Hempstead, Nassau County, Long Island, New York, USGS Long Island Water Resources Bulletin 12.

2. NYSDEC, (January 24, 1994), Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels.

3. JR Kolmer + Associates, (February 1998), Citizen Development Company Final RI/FS Report.

4. JR Kolmer + Associates, (June 1999), Remedial Investigation Work Plan OU 2, Citizen Development Company.

5. JR Kolmer + Associates, (December 2001), Operable Unit 2 Remedial Investigation Feasibility Study Report Flower Fashion Site.

6. CEC, Inc., (June 2002), Supplemental Remedial Investigation Work Plan Citizen Development Company, Great Neck, New York.

7. CEC, Inc., (October 2002), Groundwater Quality Data for the Flower Fashion Site.

8. CA RICH, (January 2005), Interim Remedial Measures Report – Part A, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

9. CA RICH, (April 2005), Interim Remedial Measures Report – Part B, Final Engineering Report and Operations, Maintenance & Monitoring Plan, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

10. CA RICH, (January 2006), Annual Groundwater and Indoor Air Monitoring Report – December 2005, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

11. CA RICH, (June 2006), Site Management Plan, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

12. CA RICH, (2003 thru 2008), Annual Groundwater Monitoring Reports, Citizen Development Company, Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

13. CA RICH, (July 2009), Post-Remediation Borings Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

14. CA RICH, (August 2009), Additional SVE Well Installation Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.

15. CA RICH (April 2010) Additional Post-Remediation Borings Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Boulevard, Great Neck, New York

16. CA RICH (April 2011) Annual Groundwater, Soil Vapor and Indoor Air Monitoring Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Boulevard, Great Neck, New York

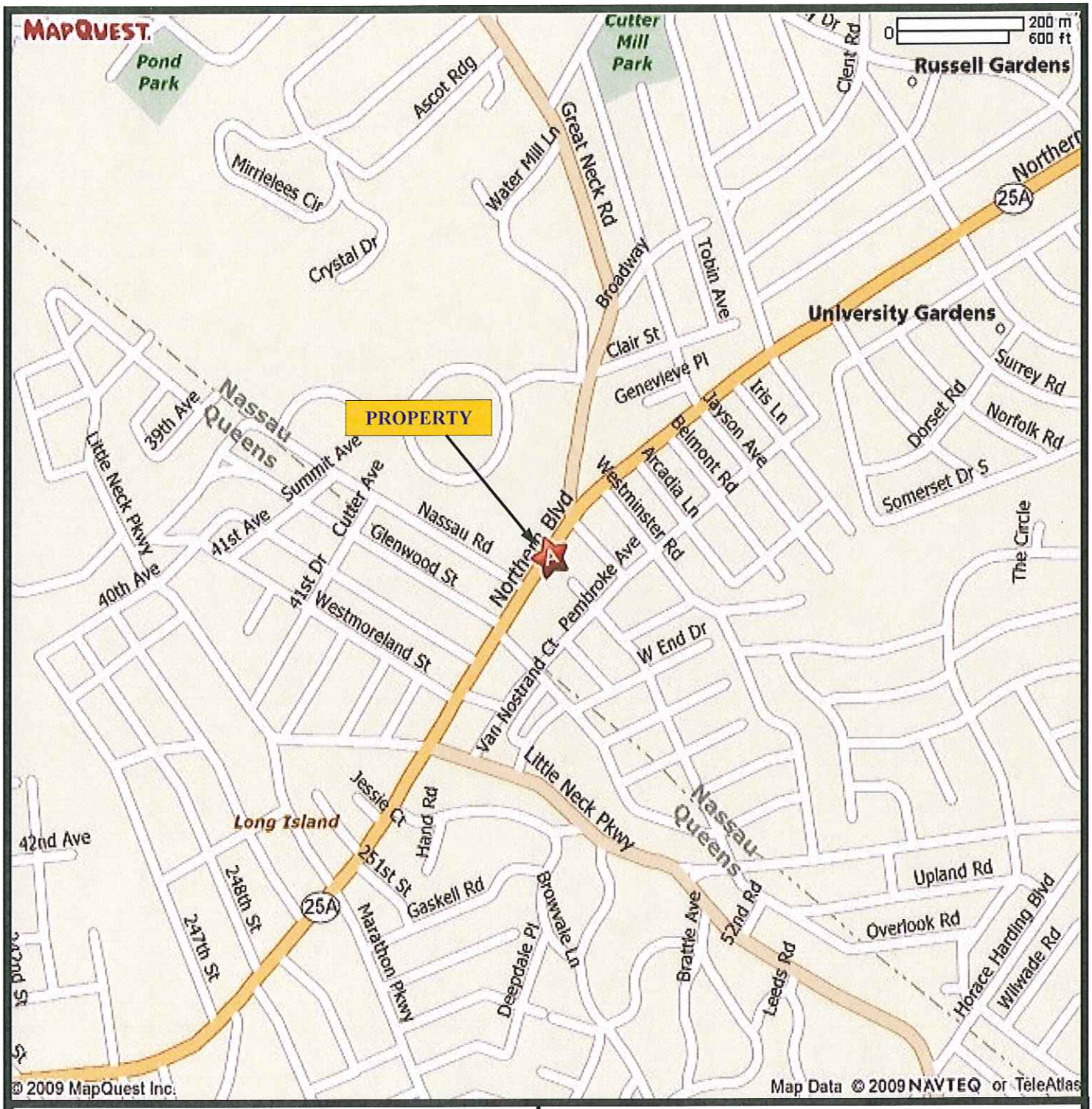
17. NYSDEC (May 16, 2011) Citizens Development Company Site #1-30-070 Site Management/Periodic Review Report Response Letter

18. NYSDEC (July 19, 2012) Citizens Development Company Site #1-30-070 Site Management/Periodic Review Report Response Letter

19. NYSDEC (May 17, 2016) Citizens Development Company Site #1-30-070 Site Management/Periodic Review Report Response Letter

20. NYSDEC (July 18, 2017) Citizens Development Company Site #1-30-070 Site Management/Periodic Review Report Response Letter

FIGURES

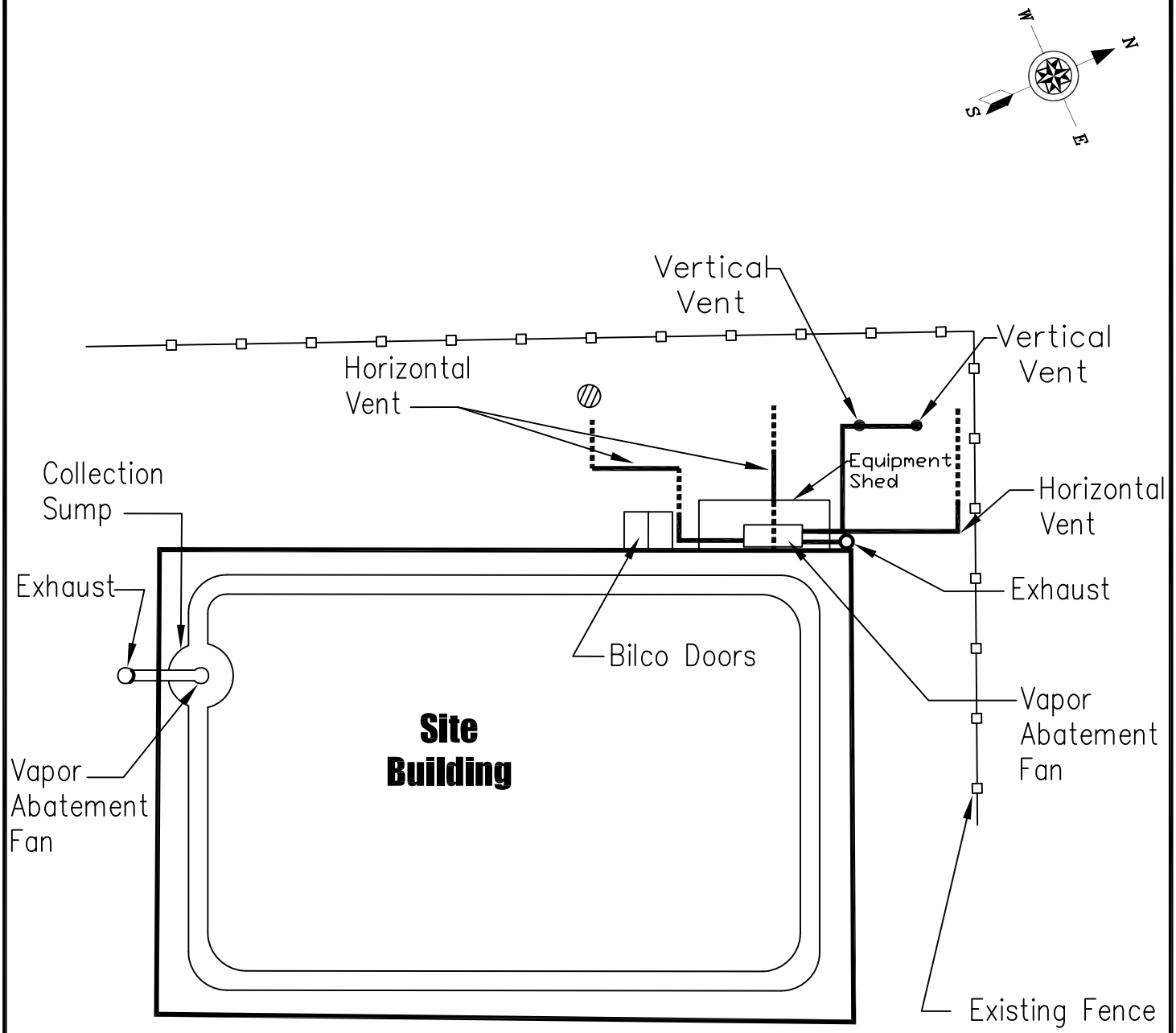


N

Map Adapted from Mapquest

CA RICH CONSULTANTS, INC.
17 Dupont Street,
Plainview, NY 11803

TITLE: **PROPERTY LOCATION MAP**		DATE: **3/19/09**
		SCALE: **AS SHOWN**
FIGURE: **1**	**47 Northern Boulevard Great Neck, New York**	DRAWN BY: **JTC**
DRAWING:		APPR. BY: **EAW**



LEGEND

- FORMER STORM WATER DRYWELL
- 2-INCH DIAMETER 20 SLOT PVC PIPE
- 2-INCH DIAMETER PVC PIPE
- PERFORATED DUCT
- VERTICAL VENT

0 10 20 30 40

GRAPHIC SCALE IN FEET

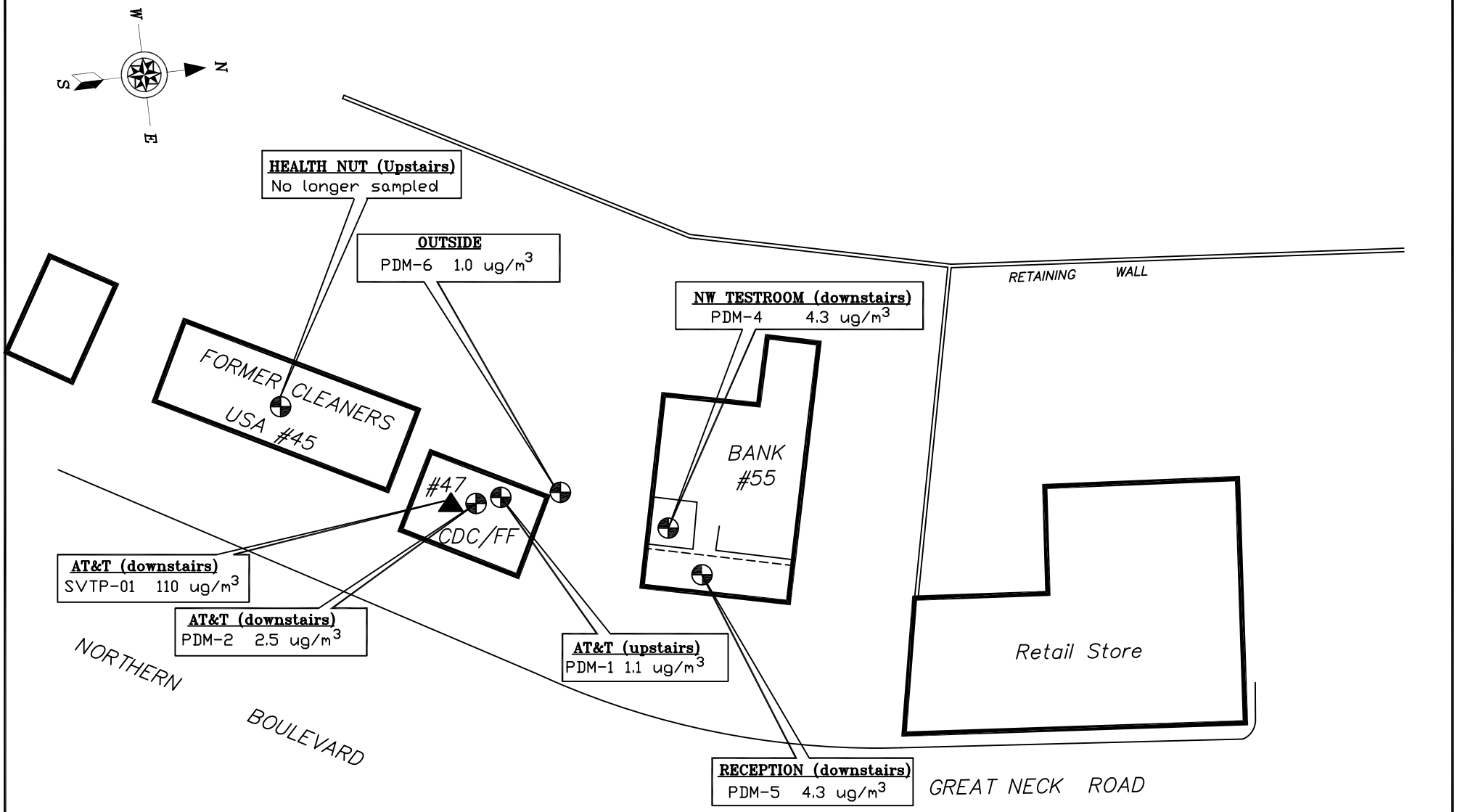
CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

Stephen J. Osmundsen, P.E.

Consulting Engineer
514 Pantigo Road # 16, East Hampton New York 11937

TITLE: LOCATION OF SUBSURFACE PIPING LAYOUT FOR SSD SYSTEMS		DATE: 1/30/2012
		SCALE: 1" = 16'
FIGURE: 2	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, NY 11020	DRAWN BY: J.T.C.
DRAWING NO: 2009-2		APPR. BY: S.J.O.



0 25 50 100 150

GRAPHIC SCALE IN FEET

Note:
Map adapted from Civil and Environmental Engineers, Inc.
Site Area Map dated May 16, 2002.

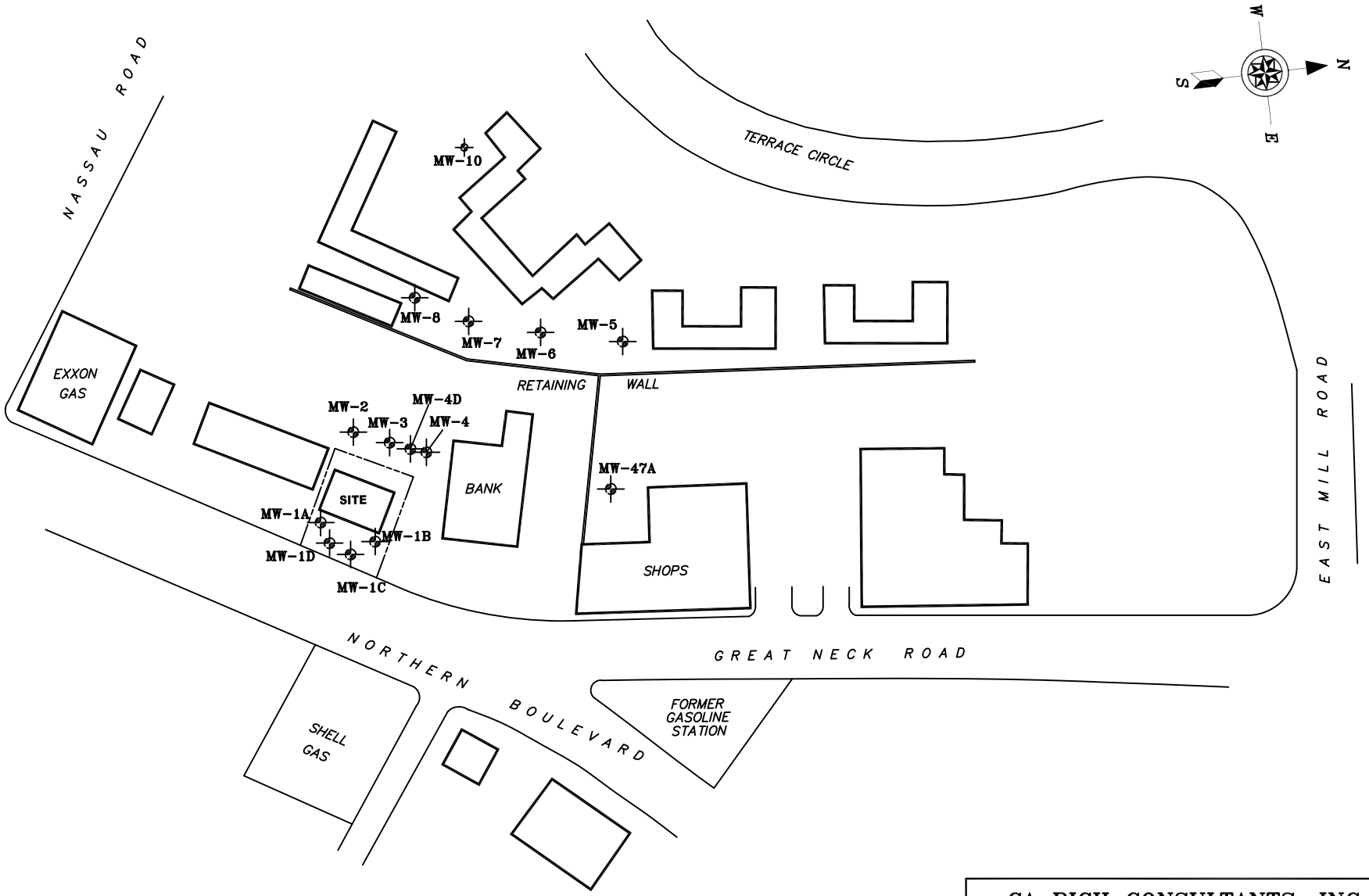
Legend

- AIR SAMPLE LOCATIONS
- SOIL VAPOR SAMPLE LOCATION

CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

TITLE: PERCHLOROETHENE IN AIR SAMPLES AND SOIL VAPOR JANUARY 2018		DATE: 3/16/18
		SCALE: As Shown
FIGURE: 3	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, N Y 11020	DRAWN BY: J.T.C.
DRAWING NO: 1192-1bc.13		APPR. BY: M.T.Y.



Legend

GROUNDWATER MONITORING WELL

0 50 100 150 300

GRAPHIC SCALE IN FEET

Note:
Map adapted from Civil and Environmental Engineers, Inc.
Site Area Map dated May 16, 2002.

CA RICH CONSULTANTS, INC.		
Environmental Specialists Since 1982 17 Dupont Street, Plainview, New York 11803		
TITLE: Locations of Monitoring Wells		DATE: 1/30/2012 SCALE: As Shown
FIGURE: 4 DRAWING NO: 2009-3a	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, N Y 11020	DRAWN BY: S.T.M. APPR. BY: E.A.W.

TABLES

Table 1
Citizens Development Co./Flower Fashion Site
Summary of Perchloroethene Indoor Air & Sub-slab Soil Vapor Results
Units - ug/m3

Sample #:	PDM-1	PDM-2	PDM-3	PDM-4	PDM-5	PDM-6*	SS-01 (2012) SVTP-01 (2017)
Location:	AT&T	AT&T	Health Nut	55 No. Blvd. NW test rm.	55 No. Blvd. Reception	Outdoors	Sub-Slab
Level:	(Ground Fl.)	(Downstairs)	(Ground Fl.)	(Downstairs)	(Downstairs)	NA	NA
Date							
11/20/02	120	280	NA	170	150	7	NA
12/02/03	27	18	4	47	47	6.4	NA
06/15/04	22	27	6.6	39	39	10	NA
12/17/04	47	52	5.5	70	91	2.6	NA
06/23/05	4.5	8.3	1.4	8.8	10	5.7	NA
12/13/05	2.5	1.6	<0.5	6.2	6.2	<0.5	NA
12/04/06	2.3	1.4	<1.4	9.7	8.9	<1.4	NA
12/27/07	8.5	3.4	2.0	59	48	15	NA
02/06/08	5.2	3.9	2.6	22	48	6.1	NA
03/27/08	NA	NA	NA	21	17	3	NA
04/29/08	NA	NA	NA	29	34	7.1	NA
05/29/08	NA	NA	NA	14	17	11	NA
12/05/08	3.1	2.0	<1	19	11	2.9	NA
12/17/09	<1	<1	NA	30	32	<1	NA
12/02/10	2	3.1	NA	40	37	<1	NA
12/21/11	8.1	4.6	NA	59	38	3.2	NA
12/17/12	53	15	NA	37	48	2	42
12/23/13	130	8.9	NA	51	48	4.8	NA
01/27/14	Damper on HVAC system at the AT&T store opened to allow more fresh air into building						
02/16/14	0.76	1.2	NA	NA	NA	NA	NA
03/28/14	Damper to HVAC unit at 55 Northern Blvd. opened to allow more fresh air into basement						
05/01/14	NA	NA	NA	132	130	NA	NA
06/12/14	Exhaust duct at 55 Northern Blvd. repaired and placed into operation						
06/26/14	NA	NA	NA	3.4	3.8	0.85	NA
12/18/14	2.37	1.56	NA	6.44	<1.36	7.46	NA
01/06/16	5.8	7	NA	12	12	0.93	NA
03/22/16	SSD fan in basement at 47 Northern Blvd was removed and replaced with new fan						
01/19/17	SSD fans turned off for minimum of four weeks for Termination Sampling						
02/23/17	2.1	5.5	NA	8.3	10	1.1	20
08/01/17	SSD fans turned off for Termination Sampling						
01/30/18	1.1	2.5	NA	4.3	4.3	1	110

Notes:
1-AT&T store also known as Cingular
2-Subslab venting system in basement of AT&T installed during the Spring of 2002
3-November 20, 2002 samples collected and analyzed by NYSDOH
4-SVE system in rear yard installed January 2005
5-December 27, 2007 - SVE system shut down for <1 month
6-January 25, 2008 - SVE repairs completed and system restarted
7-Additonal SVE wells added during August 2009
8-SVE System turned off and converted to a SSD System on 7/21/11
9-Exhaust duct at 55 Northern Blvd. repaired and placed into operation on June 12, 2014
* - Outdoor air sample NA - Not Analyzed

ENCLOSURES

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

May 16, 2011

Mr. Eric A. Weinstock, Vice President
CA Rich Consultants, Inc.
17 Dupont Street
Plainview, NY 11803

Re: Citizens Development Company Site #1-30-070
Site Management/Periodic Review Report Response Letter

Dear Mr. Weinstock,

The New York State Department of Environmental Conservation has received the annual periodic review report entitled "Annual Groundwater, Soil Vapor and Indoor Air Monitoring Report" for the referenced site. On April 22, 2011, the Department received a revised Institutional and Engineering Controls Certification Form. The Department hereby accepts the report and associated certification. The remedy is performing properly and the effectiveness will continue to be monitored. The frequency of periodic reviews for the site is annually and your next periodic review report (PRR) is due on April 1, 2012.

Based upon the results of the most recent soil, groundwater and indoor air sampling, the Department concurs with your recommendations to discontinue groundwater sampling at monitoring well MW-4 and to replace the fan on the exterior soil vapor extraction system with a more energy efficient low pressure blower. Your next PRR should memorialize these changes to site management. If you should have any questions, please feel free to contact me at (631) 444-0246.

Sincerely,

Jamie Ascher
Engineering Geologist 2

ec: J. Harrington, NYSDEC
G. Bobersky, NYSDEC
W. Parish, NYSDEC
S. Karpinski, NYSDOH
S. Panico, Cord Meyer Development, LLC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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

May 17, 2016

Citizens Development Company
Ms. Andrea Butler
PO Box 10
111-15 Queens Blvd.
Forest Hills, NY 11375

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter
Citizens Development Co., Great Neck
Nassau County, Site No.: 1-30-070

Dear Ms. Butler,

The New York State Department of Environmental Conservation (DEC) has reviewed the Periodic Review Report (PRR) and IC/EC Certification for the following period: 3/5/2015 to 3/5/2016.

The Department hereby accepts the PRR and associated Certification. The frequency of periodic reviews for this site is annually and your next PRR is due on April 4, 2017. You will receive a reminder letter and updated certification form 45 days prior to the due date.

Based upon the recommendations in the report and recent discussions with CA Rich, you are requesting to undertake termination sampling during the upcoming heating season. This sampling will provide data to help evaluate the potential for soil vapor intrusion into the buildings located at 47 & 55 Northern Blvd. when the mitigation systems are turned off. Please have your consultant submit a letter proposal outlining the termination sampling for DEC and New York State Department of Health's (DOH) review and approval. Please consult the DOH October 2006 document, "*Guidance for Evaluating Soil Vapor Intrusion in the State of New York*", for additional guidance on termination sampling. If you or your consultant should have any questions regarding termination sampling protocol, please feel free to contact me at 631-444-0246 or e-mail: jamie.ascher@dec.ny.gov.

Sincerely,

Jamie Ascher
Engineering Geologist 2

ec: J. Harrington,DEC
W. Parish, DEC
J. Nealon, DOH
M. Yager, CA Rich

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 I F: (631) 444-0248
www.dec.ny.gov

July 18, 2017

Citizens Development Company
Mr. John Garcia
111-15 Queens Blvd.
P.O. Box 10
Forest Hills, NY 11375

Re: Site Management/Periodic Review Report Response Letter
Citizens Development Company Site #1-30-070
Great Neck, Nassau County

Dear Mr. Garcia,

The New York State Department of Environmental Conservation (DEC) has reviewed the Periodic Review Report (PRR) and Institutional Controls/Engineering Controls Certification for the following period: March 2016 through March 2017.

The Department hereby accepts the PRR and associated Certification. The frequency of periodic reviews for this site is annually and your next PRR is due on April 4, 2018. You will receive a reminder letter and updated Certification form 45 days prior to the due date.

Based upon the termination sampling data collected from 47 & 55 Northern Boulevard during the previous heating season, the mitigation systems can remain turned off. To ensure that there is no rebound effect, the Department requests that you collect one additional round of samples in accordance with the Termination Sampling Plan, this upcoming heating season. This data will enable DEC and the New York State Department of Health (DOH) to determine if site closure and reclassification is appropriate along with the decommissioning of the mitigation systems and the groundwater monitoring wells. Please be advised that DOH has recently revised their Soil Vapor/Indoor Air Matrices (May 2017), so future data collected from the buildings should be compared to the new guideline values.

Project management for this site has been transferred to Mr. Jahan Reza here at the Region One office. If you should have any questions, or need additional forms, please contact Mr. Reza at 631-444-0242 or email: jahan.reza@dec.ny.gov.

Sincerely,

Jamie Ascher, P.G.
Engineering Geologist 2

ec: E. Obrecht, DEC
W. Parish, DEC
J. Reza, DEC
C. Bethoney, DOH
J. Nealon, DOH
M. Yager, CA Rich

Enclosure 2

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

Site Details **Box 1**

Site No. 130070

Site Name Citizens Development Co.

Site Address: 47 Northern Boulevard Zip Code: 11020
City/Town: Great Neck
County: Nassau
Site Acreage: 1.0

Reporting Period: March 05, 2017 to March 05, 2018

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

Box 2

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

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. 130070

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
0020051202	Citizen's Development Company	Ground Water Use Restriction Landuse Restriction Site Management Plan Monitoring Plan O&M Plan IC/EC Plan

Continued operation, maintenance and monitoring of the soil vapor extraction systems has been implemented per the March 2006 OU-2 ROD under the Department approved June 2006 site management plan. An environmental easement was filed with the county clerk's office on January 22, 2014.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
0020051202	Vapor Mitigation

Two soil vapor extraction systems are operating on-site, one within the basement of the building and one outside the building.

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
X	☐

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

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

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

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

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

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

YES	NO
X	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 130070

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I John Garcia (print name) at 111-15 Queens Blvd. Forest Hills NY 11375 (print business address)

am certifying as Owner (Owner or Remedial Party)

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

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

3/22/18
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I Jason Cooper (print name) at 17 Dupont Street, Plainview, NY 11803 (print business address),

am certifying as a Professional ~~Engineer~~ Geologist for the owner (Owner or Remedial Party)

STATE OF NEW YORK
JASON T. COOPER
000152
LICENSED PROFESSIONAL GEOLOGIST

Jason T. Cooper
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

3/22/2018
Date

APPENDICES

APPENDIX A

Termination Sampling Plan

October 17, 2016

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
At SUNY
50 Circle Road
Stony Brook, New York 11794

Attention: Mr. Jamie Ascher
Engineering Geologist 2

Re: Termination Sampling Plan Site #1-30-070
The Citizens Development Company / Flower Fashion Site (the Site)
47 Northern Boulevard, Great Neck, New York

Dear Mr. Ascher:

Introduction/Background

On May 17, 2016, the NYSDEC approved the Periodic Review Report, (PRP), dated March 30, 2016, submitted by CA Rich Consultants, Inc. (CA RICH) for the Site. In that PRP, CA RICH demonstrated that the Site met the criteria of the termination protocol in the Site Management Plan (SMP). In its May 17th letter, the NYSDEC concurred with this and requested that CA RICH submit a letter proposal to implement the termination sampling for the Site in the upcoming heating season. This is that letter proposal.

Scope of Work

Based upon the criteria set forth in the NYSDEC-approved SMP, CA RICH recommends this scope of work for the sampling and termination of the systems at the Citizens Development Company/Flower Fashion Site (Site # 1-30-070):

1.) **Sub-slab depressurization (SSD) Systems Shut-down -** During the heating season, shut-down the SSD systems for 2-4 weeks prior to sampling.

2.) **Indoor Air Quality Sampling -** Collect indoor air samples and an ambient air sample at the following locations 2-4 weeks after the shut-down of the SSD systems (during the heating season):

BUILDING	SAMPLE LOCATION & IDENTIFICATION[1]
CDC/FF Site (AT&T Store) 47 Northern Blvd.	Ground Floor and Basement (Sample ID: PDM-1 and PDM-2)

[1] PMD-3 is no longer used as a sample ID number and relates to 45 Northern Blvd., which sampling location was discontinued by the NYSDEC several years ago.

Cambridge Educational Center 55 Northern Blvd.	Basement (waiting room and NW Test Center) (Sample ID: PDM-4 and PDM-5)
Outdoor Ambient Air	Behind Site Building (Sample ID: PDM-6)

As recommended by the New York State Department of Health (NYSDOH), all of the indoor air samples will be collected via Summa canisters and analyzed via Method T0-15 in accordance with the sampling protocols outlined in NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006. The Summa canisters will be brought out to the Site sampling locations, opened and exposed for an approximate 8-hour period via laboratory-calibrated regulators. The samples will then be analyzed by ELAP-approved York Analytical Laboratories, Inc. for the analysis of PCE via Method T0-15.

3.) **Sub-slab Soil Vapor Sampling -** A sub-slab soil vapor sample will be collected concurrently with the indoor air samples to ensure there is no longer a potential for soil vapor intrusion resulting from the historical release at the Site.

This sub-slab sample will be collected from beneath the basement slab of the building located at 47 Northern Blvd. via Summa canister and analyzed via Method T0-15 in accordance with the sampling protocols outlined in the NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006. The installation of the soil vapor sampling point will be conducted using a Bosch Hammer Drill to drill 5/16-inch diameter hole through the concrete slab.

The soil vapor point will be constructed of ¼-inch stainless steel tubing. After the vapor point is drilled and the stainless steel tubing set just below the slab, the tubing will be connected to a sample fitting to allow for the collection of sub-slab soil gas. The annular space around the stainless steel tubing will be packed with #2 sand to create a sampling zone directly beneath the existing concrete slab and a clay seal will be placed at the surface.

The soil vapor sample shall be collected utilizing a pre-cleaned six-liter Summa canister with a regulator calibrated to collect a sample at a rate of less than 0.2 liters per minute and set to fill over an 8 hour period. The vacuumed soil vapor sample will also be chemically analyzed by ELAP-approved York Analytical Laboratories, Inc. for the analysis of PCE via Method T0-15.

Termination Criteria

Provided the laboratory results of the indoor air samples from the building at 47 Northern Blvd. (AT&T Store) and the building at 55 Northern Blvd. are at or below the established NYS background level for PCE (which is currently 30 ug/m^3); and the PCE lab results for the sub-slab soil vapor sample from the basement at 47 Northern Blvd. is below the NYSDOH Matrix 2 Mitigation level of 100 ug/m^3; then the indoor air monitoring program and the SSD systems will be terminated. The Site will then be eligible for delisting from the Registry.

Please note that in March of 2015, an automobile crashed into the AT&T store at 47 Northern Blvd. and the store remained vacant/closed pending renovation. The AT&T space has been completely renovated and recently re-opened. The recent renovations are being mentioned because there may be a source of fugitive vapors in this building from this renovation unrelated to the historic contamination.

Upon your approval, and after the heating season commences, we will implement this termination protocol. If there are any questions regarding this letter proposal, please do not hesitate to call our Office.

Sincerely,

CA RICH CONSULTANTS, INC.

Michael Yager
Project Manager

cc: Charlotte Biblow, Esq., Farrell Fritz
John Garcia, Cord Meyer Development, LLC
Jacquelyn Nealon, NYSDOH

APPENDIX B

Indoor Air & Soil Vapor Laboratory Results

Technical Report

prepared for:

C.A. Rich Associates
17 Dupont Street
Plainview NY, 11803
Attention: Michael Yager

Report Date: 02/05/2018
Client Project ID: CDC-FF IAQ Termination Sampling
York Project (SDG) No.: 18A1103

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 STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 02/05/2018
Client Project ID: CDC-FF IAQ Termination Sampling
York Project (SDG) No.: 18A1103

C.A. Rich Associates
17 Dupont Street
Plainview NY, 11803
Attention: Michael Yager

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 31, 2018 and listed below. The project was identified as your project: **CDC-FF IAQ Termination Sampling**.

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 Sample and Analysis Qualifiers 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 Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

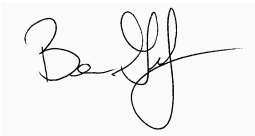
The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
18A1103-01	PDM-1	Indoor Ambient Air	01/30/2018	01/31/2018
18A1103-02	PDM-2	Indoor Ambient Air	01/30/2018	01/31/2018
18A1103-03	PDM-4	Indoor Ambient Air	01/30/2018	01/31/2018
18A1103-04	PDM-5	Indoor Ambient Air	01/30/2018	01/31/2018
18A1103-05	PDM-6	Outdoor Ambient Ai	01/30/2018	01/31/2018
18A1103-06	SVTP-01	Soil Vapor	01/30/2018	01/31/2018

General Notes for York Project (SDG) No.: 18A1103

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 analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. 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: 

Date: 02/05/2018

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **PDM-1** **York Sample ID:** **18A1103-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 21:19	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.40	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.35	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 21:19	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
78-93-3	**2-Butanone**	**0.42**		ug/m³	0.16	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 21:19	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	0.44	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 21:19	LDS

Sample Information

Client Sample ID: PDM-1 **York Sample ID:** 18A1103-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	0.83	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
67-64-1	**Acetone**	**6.3**		ug/m³	0.25	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.12	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
71-43-2	**Benzene**	**0.48**		ug/m³	0.17	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.28	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.36	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
75-25-2	Bromoform	ND		ug/m³	0.55	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
74-83-9	Bromomethane	ND		ug/m³	0.21	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
75-15-0	Carbon disulfide	ND		ug/m³	0.17	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
56-23-5	**Carbon tetrachloride**	**0.23**		ug/m³	0.084	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
75-00-3	Chloroethane	ND		ug/m³	0.14	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
67-66-3	Chloroform	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
74-87-3	**Chloromethane**	**0.61**		ug/m³	0.11	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
110-82-7	Cyclohexane	ND		ug/m³	0.18	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	0.45	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
75-71-8	**Dichlorodifluoromethane**	**1.4**		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 21:19	LDS
100-41-4	Ethyl Benzene	ND		ug/m³	0.23	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.57	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/01/2018 21:19	LDS

Sample Information

Client Sample ID: **PDM-1** **York Sample ID:** **18A1103-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	**Isopropanol**	**3.4**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	**Methyl Methacrylate**	**0.33**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**0.70**		ug/m³	0.37	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	n-Heptane	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.46	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications:			
115-07-1	*** Propylene**	**0.63**		ug/m³	0.092	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications:			
100-42-5	**Styrene**	**0.32**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**1.1**		ug/m³	0.090	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.31	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications:			
108-88-3	**Toluene**	**0.70**		ug/m³	0.20	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.072	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.81**		ug/m³	0.30	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.034	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 21:19	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*93.0 %*	*70-130*

Sample Information

Client Sample ID: **PDM-2** **York Sample ID:** **18A1103-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 23:21	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.57**		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.40	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
95-63-6	**1,2,4-Trimethylbenzene**	**1.9**		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
108-67-8	**1,3,5-Trimethylbenzene**	**0.55**		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.35	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 23:21	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
78-93-3	**2-Butanone**	**27**		ug/m³	0.16	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	0.44	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/01/2018 23:21	LDS
107-05-1	3-Chloropropene	ND		ug/m³	0.83	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/01/2018 23:21	LDS

Sample Information

Client Sample ID: PDM-2 **York Sample ID:** 18A1103-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**28**		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.12	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**2.1**		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.28	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.36	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.55	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.44**		ug/m³	0.084	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.14	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**0.81**		ug/m³	0.11	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**1.0**		ug/m³	0.18	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.45	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**15**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**9.4**		ug/m³	0.38	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.9**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.57	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**5.4**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **PDM-2** **York Sample ID:** **18A1103-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**1.1**		ug/m³	0.37	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**2.0**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**4.0**		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**2.1**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**6.4**		ug/m³	0.46	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**1.8**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:			
115-07-1	*** Propylene**	**2.5**		ug/m³	0.092	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:			
100-42-5	**Styrene**	**0.98**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**2.5**		ug/m³	0.090	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	*** Tetrahydrofuran**	**14**		ug/m³	0.31	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:			
108-88-3	**Toluene**	**8.8**		ug/m³	0.20	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**0.37**		ug/m³	0.072	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.4**		ug/m³	0.30	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.034	0.533	EPA TO-15	02/01/2018 17:47	02/01/2018 23:21	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.5 %*	*70-130*

Sample Information

Client Sample ID: **PDM-4** **York Sample ID:** **18A1103-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 00:22	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.40	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.35	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 00:22	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
78-93-3	**2-Butanone**	**0.61**		ug/m³	0.16	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	0.44	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 00:22	LDS
107-05-1	3-Chloropropene	ND		ug/m³	0.83	0.533	EPA TO-15 Certifications:	02/01/2018 17:47 NELAC-NY12058,NJDEP-Queens	02/02/2018 00:22	LDS

Sample Information

Client Sample ID: PDM-4 **York Sample ID:** 18A1103-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**7.2**		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.12	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.83**		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.28	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.36	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.55	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.27**		ug/m³	0.084	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.14	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**0.29**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**0.64**		ug/m³	0.11	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.18	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.45	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**1.4**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**1.2**		ug/m³	0.38	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.57	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**25**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **PDM-4** **York Sample ID:** **18A1103-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	**Methyl Methacrylate**	**0.31**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**1.2**		ug/m³	0.37	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**0.26**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**0.53**		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**0.65**		ug/m³	0.46	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications:			
115-07-1	*** Propylene**	**0.59**		ug/m³	0.092	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**4.3**		ug/m³	0.090	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.31	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications:			
108-88-3	**Toluene**	**1.5**		ug/m³	0.20	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**0.17**		ug/m³	0.072	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.87**		ug/m³	0.30	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.034	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 00:22	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*94.2 %*	*70-130*

Sample Information

Client Sample ID: **PDM-5** **York Sample ID:** **18A1103-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 01:23	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.40	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
95-63-6	**1,2,4-Trimethylbenzene**	**0.26**		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.35	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 01:23	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
78-93-3	**2-Butanone**	**0.75**		ug/m³	0.16	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	0.44	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 01:23	LDS
107-05-1	3-Chloropropene	ND		ug/m³	0.83	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 01:23	LDS

Sample Information

Client Sample ID: PDM-5 **York Sample ID:** 18A1103-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**7.3**		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.12	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.82**		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.28	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.36	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.55	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.27**		ug/m³	0.084	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.14	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**0.62**		ug/m³	0.11	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.18	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.45	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**1.3**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**1.4**		ug/m³	0.38	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:			
100-41-4	**Ethyl Benzene**	**0.28**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.57	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**38**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: PDM-5 **York Sample ID:** 18A1103-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Indoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**0.61**		ug/m³	0.37	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**0.26**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**0.49**		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**0.30**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**0.83**		ug/m³	0.46	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:			
115-07-1	*** Propylene**	**0.52**		ug/m³	0.092	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**4.3**		ug/m³	0.090	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.31	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:			
108-88-3	**Toluene**	**1.7**		ug/m³	0.20	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**0.17**		ug/m³	0.072	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.87**		ug/m³	0.30	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.034	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 01:23	LDS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*92.3 %*	*70-130*

Sample Information

Client Sample ID: PDM-6 **York Sample ID:** 18A1103-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Outdoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 02:24	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.29	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.053	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
120-82-1	**1,2,4-Trichlorobenzene**	**4.4**		ug/m³	0.40	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
95-63-6	**1,2,4-Trimethylbenzene**	**0.26**		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.41	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
95-50-1	**1,2-Dichlorobenzene**	**0.51**		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.22	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.37	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.26	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.35	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
541-73-1	**1,3-Dichlorobenzene**	**0.64**		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.25	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 02:24	LDS
106-46-7	**1,4-Dichlorobenzene**	**0.83**		ug/m³	0.32	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.38	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
78-93-3	**2-Butanone**	**0.63**		ug/m³	0.16	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS
591-78-6	*** 2-Hexanone**	**1.2**		ug/m³	0.44	0.533	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 02:24	LDS
107-05-1	3-Chloropropene	ND		ug/m³	0.83	0.533	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 02:24	LDS

Sample Information

Client Sample ID: PDM-6 **York Sample ID:** 18A1103-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Outdoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	**4-Methyl-2-pentanone**	**0.63**		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**2.5**		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	**Acrylonitrile**	**0.21**		ug/m³	0.12	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.63**		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.28	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.36	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.55	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	**Carbon disulfide**	**0.35**		ug/m³	0.17	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.30**		ug/m³	0.084	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.25	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.14	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**0.59**		ug/m³	0.11	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	**cis-1,2-Dichloroethylene**	**0.13**		ug/m³	0.053	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.18	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.45	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**1.6**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**0.48**		ug/m³	0.38	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	**Hexachlorobutadiene**	**0.57**		ug/m³	0.57	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **PDM-6** **York Sample ID:** **18A1103-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Outdoor Ambient Air	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	**Isopropanol**	**1.6**		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**5.0**		ug/m³	0.37	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	n-Heptane	ND		ug/m³	0.22	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**0.23**		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**0.53**		ug/m³	0.46	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.26	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications:			
115-07-1	*** Propylene**	**0.68**		ug/m³	0.092	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications:			
100-42-5	**Styrene**	**0.23**		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**1.0**		ug/m³	0.090	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.31	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications:			
108-88-3	**Toluene**	**0.76**		ug/m³	0.20	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.21	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	**trans-1,3-Dichloropropylene**	**0.29**		ug/m³	0.24	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**0.17**		ug/m³	0.072	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.93**		ug/m³	0.30	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.19	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.23	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.034	0.533	EPA TO-15	02/01/2018 17:47	02/02/2018 02:24	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.4 %*	*70-130*

Sample Information

Client Sample ID: SVTP-01 **York Sample ID:** 18A1103-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Soil Vapor	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.3	1.853	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 03:18	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.0	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.3	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.4	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.0	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.75	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.18	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.4	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
95-63-6	**1,2,4-Trimethylbenzene**	**1.3**		ug/m³	0.91	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.4	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.1	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.75	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.86	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.3	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.91	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	1.2	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.1	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.86	1.853	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 03:18	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.1	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
78-93-3	**2-Butanone**	**31**		ug/m³	0.55	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.5	1.853	EPA TO-15 Certifications:	02/01/2018 17:47	02/02/2018 03:18	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.9	1.853	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/01/2018 17:47	02/02/2018 03:18	LDS

Sample Information

Client Sample ID: SVTP-01 **York Sample ID:** 18A1103-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Soil Vapor	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.76	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**18**		ug/m³	0.88	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.40	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.89**		ug/m³	0.59	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.96	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	1.9	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.72	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	**Carbon disulfide**	**0.58**		ug/m³	0.58	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.35**		ug/m³	0.29	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.85	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.49	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.90	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	0.38	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	**cis-1,2-Dichloroethylene**	**0.51**		ug/m³	0.18	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.84	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.64	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.6	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.8**		ug/m³	0.92	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	1.3	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.9**		ug/m³	0.80	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	2.0	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**3.0**		ug/m³	0.91	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SVTP-01 **York Sample ID:** 18A1103-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18A1103	CDC-FF IAQ Termination Sampling	Soil Vapor	January 30, 2018 3:00 pm	01/31/2018

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 LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	**Methyl Methacrylate**	**0.76**		ug/m³	0.76	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.67	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**4.2**		ug/m³	1.3	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**0.91**		ug/m³	0.76	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.65	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**3.1**		ug/m³	0.80	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**10**		ug/m³	1.6	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	*** p-Ethyltoluene**	**1.8**		ug/m³	0.91	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications:			
115-07-1	*** Propylene**	**0.77**		ug/m³	0.32	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications:			
100-42-5	**Styrene**	**2.5**		ug/m³	0.79	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**110**		ug/m³	0.31	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	*** Tetrahydrofuran**	**11**		ug/m³	1.1	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications:			
108-88-3	**Toluene**	**19**		ug/m³	0.70	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.73	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.84	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**1.8**		ug/m³	0.25	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.5**		ug/m³	1.0	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.65	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.81	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	1.853	EPA TO-15	02/01/2018 17:47	02/02/2018 03:18	LDS
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.2 %*	*70-130*

Analytical Batch Summary

Batch ID: BB80052 **Preparation Method:** EPA TO15 PREP **Prepared By:** LDS

YORK Sample ID	Client Sample ID	Preparation Date
18A1103-01	PDM-1	02/01/18
18A1103-02	PDM-2	02/01/18
18A1103-03	PDM-4	02/01/18
18A1103-04	PDM-5	02/01/18
18A1103-05	PDM-6	02/01/18
18A1103-06	SVTP-01	02/01/18
BB80052-BLK1	Blank	02/01/18
BB80052-BS1	LCS	02/01/18
BB80052-DUP1	Duplicate	02/01/18

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB80052 - EPA TO15 PREP											
Blank (BB80052-BLK1)											Prepared & Analyzed: 02/01/2018
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB80052 - EPA TO15 PREP											
Blank (BB80052-BLK1)								Prepared & Analyzed: 02/01/2018			
n-Hexane	ND	0.35	ug/m³								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.064	"								
Surrogate: p-Bromofluorobenzene	*8.39*		*ppbv*	*10.0*		*83.9*	*70-130*				
LCS (BB80052-BS1)								Prepared & Analyzed: 02/01/2018			
1,1,1,2-Tetrachloroethane	9.18		ppbv	10.0		91.8	70-130				
1,1,1-Trichloroethane	9.79		"	10.0		97.9	70-130				
1,1,2,2-Tetrachloroethane	9.46		"	10.0		94.6	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	70-130				
1,1,2-Trichloroethane	8.53		"	10.0		85.3	70-130				
1,1-Dichloroethane	9.92		"	10.0		99.2	70-130				
1,1-Dichloroethylene	9.88		"	10.0		98.8	70-130				
1,2,4-Trichlorobenzene	7.59		"	10.0		75.9	70-130				
1,2,4-Trimethylbenzene	9.72		"	10.0		97.2	70-130				
1,2-Dibromoethane	8.82		"	10.0		88.2	70-130				
1,2-Dichlorobenzene	9.51		"	10.0		95.1	70-130				
1,2-Dichloroethane	8.84		"	10.0		88.4	70-130				
1,2-Dichloropropane	8.44		"	10.0		84.4	70-130				
1,2-Dichlorotetrafluoroethane	9.44		"	10.0		94.4	70-130				
1,3,5-Trimethylbenzene	9.63		"	10.0		96.3	70-130				
1,3-Butadiene	6.04		"	10.0		60.4	70-130	Low Bias			
1,3-Dichlorobenzene	9.48		"	10.0		94.8	70-130				
1,3-Dichloropropane	8.74		"	10.0		87.4	70-130				
1,4-Dichlorobenzene	9.55		"	10.0		95.5	70-130				
1,4-Dioxane	9.26		"	10.0		92.6	70-130				
2-Butanone	8.20		"	10.0		82.0	70-130				
2-Hexanone	7.59		"	10.0		75.9	70-130				
3-Chloropropene	9.08		"	10.0		90.8	70-130				
4-Methyl-2-pentanone	7.89		"	10.0		78.9	70-130				
Acetone	8.65		"	10.0		86.5	70-130				
Acrylonitrile	9.73		"	10.0		97.3	70-130				
Benzene	9.15		"	10.0		91.5	70-130				
Benzyl chloride	9.35		"	10.0		93.5	70-130				
Bromodichloromethane	8.78		"	10.0		87.8	70-130				
Bromoform	9.53		"	10.0		95.3	70-130				
Bromomethane	12.8		"	10.0		128	70-130				
Carbon disulfide	11.2		"	10.0		112	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB80052 - EPA TO15 PREP											
LCS (BB80052-BS1)								Prepared & Analyzed: 02/01/2018			
Carbon tetrachloride	9.64		ppbv	10.0		96.4	70-130				
Chlorobenzene	9.06		"	10.0		90.6	70-130				
Chloroethane	14.7		"	10.0		147	70-130	High Bias			
Chloroform	9.59		"	10.0		95.9	70-130				
Chloromethane	9.66		"	10.0		96.6	70-130				
cis-1,2-Dichloroethylene	7.92		"	10.0		79.2	70-130				
cis-1,3-Dichloropropylene	9.95		"	10.0		99.5	70-130				
Cyclohexane	10.4		"	10.0		104	70-130				
Dibromochloromethane	8.96		"	10.0		89.6	70-130				
Dichlorodifluoromethane	11.2		"	10.0		112	70-130				
Ethyl acetate	8.72		"	10.0		87.2	70-130				
Ethyl Benzene	9.69		"	10.0		96.9	70-130				
Hexachlorobutadiene	9.54		"	10.0		95.4	70-130				
Isopropanol	8.71		"	10.0		87.1	70-130				
Methyl Methacrylate	8.82		"	10.0		88.2	70-130				
Methyl tert-butyl ether (MTBE)	10.1		"	10.0		101	70-130				
Methylene chloride	8.97		"	10.0		89.7	70-130				
n-Heptane	8.57		"	10.0		85.7	70-130				
n-Hexane	8.78		"	10.0		87.8	70-130				
o-Xylene	9.40		"	10.0		94.0	70-130				
p- & m- Xylenes	18.4		"	20.0		91.8	70-130				
p-Ethyltoluene	10.2		"	10.0		102	70-130				
Propylene	10.3		"	10.0		103	70-130				
Styrene	9.19		"	10.0		91.9	70-130				
Tetrachloroethylene	7.64		"	10.0		76.4	70-130				
Tetrahydrofuran	9.46		"	10.0		94.6	70-130				
Toluene	8.96		"	10.0		89.6	70-130				
trans-1,2-Dichloroethylene	9.94		"	10.0		99.4	70-130				
trans-1,3-Dichloropropylene	9.22		"	10.0		92.2	70-130				
Trichloroethylene	8.41		"	10.0		84.1	70-130				
Trichlorofluoromethane (Freon 11)	10.2		"	10.0		102	70-130				
Vinyl acetate	8.91		"	10.0		89.1	70-130				
Vinyl bromide	12.6		"	10.0		126	70-130				
Vinyl Chloride	9.81		"	10.0		98.1	70-130				
Surrogate: p-Bromofluorobenzene	*9.77*		*"*	*10.0*		*97.7*	*70-130*				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB80052 - EPA TO15 PREP											
Duplicate (BB80052-DUP1)	*Source sample: 18A1103-01 (PDM-1)						Prepared & Analyzed: 02/01/2018				
1,1,1,2-Tetrachloroethane	ND	0.37	ug/m³		ND					25	
1,1,1-Trichloroethane	ND	0.29	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	0.37	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.41	"		ND					25	
1,1,2-Trichloroethane	ND	0.29	"		ND					25	
1,1-Dichloroethane	ND	0.22	"		ND					25	
1,1-Dichloroethylene	ND	0.053	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.40	"		ND					25	
1,2,4-Trimethylbenzene	ND	0.26	"		ND					25	
1,2-Dibromoethane	ND	0.41	"		ND					25	
1,2-Dichlorobenzene	ND	0.32	"		ND					25	
1,2-Dichloroethane	ND	0.22	"		ND					25	
1,2-Dichloropropane	ND	0.25	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.37	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.26	"		ND					25	
1,3-Butadiene	ND	0.35	"		ND					25	
1,3-Dichlorobenzene	ND	0.32	"		ND					25	
1,3-Dichloropropane	ND	0.25	"		ND					25	
1,4-Dichlorobenzene	ND	0.32	"		ND					25	
1,4-Dioxane	ND	0.38	"		ND					25	
2-Butanone	0.41	0.16	"		0.42				3.77	25	
2-Hexanone	ND	0.44	"		ND					25	
3-Chloropropene	ND	0.83	"		ND					25	
4-Methyl-2-pentanone	ND	0.22	"		ND					25	
Acetone	6.2	0.25	"		6.3				1.01	25	
Acrylonitrile	ND	0.12	"		ND					25	
Benzene	0.48	0.17	"		0.48				0.00	25	
Benzyl chloride	ND	0.28	"		ND					25	
Bromodichloromethane	ND	0.36	"		ND					25	
Bromoform	ND	0.55	"		ND					25	
Bromomethane	ND	0.21	"		ND					25	
Carbon disulfide	ND	0.17	"		ND					25	
Carbon tetrachloride	0.23	0.084	"		0.23				0.00	25	
Chlorobenzene	ND	0.25	"		ND					25	
Chloroethane	ND	0.14	"		ND					25	
Chloroform	0.26	0.26	"		ND					25	
Chloromethane	0.55	0.11	"		0.61				9.52	25	
cis-1,2-Dichloroethylene	ND	0.053	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.24	"		ND					25	
Cyclohexane	ND	0.18	"		ND					25	
Dibromochloromethane	ND	0.45	"		ND					25	
Dichlorodifluoromethane	1.3	0.26	"		1.4				8.00	25	
Ethyl acetate	ND	0.38	"		ND					25	
Ethyl Benzene	ND	0.23	"		ND					25	
Hexachlorobutadiene	ND	0.57	"		ND					25	
Isopropanol	3.3	0.26	"		3.4				4.67	25	
Methyl Methacrylate	ND	0.22	"		0.33					25	
Methyl tert-butyl ether (MTBE)	ND	0.19	"		ND					25	
Methylene chloride	0.70	0.37	"		0.70				0.00	25	
n-Heptane	ND	0.22	"		ND					25	
n-Hexane	ND	0.19	"		ND					25	

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB80052 - EPA TO15 PREP											
Duplicate (BB80052-DUP1)	*Source sample: 18A1103-01 (PDM-1)								Prepared & Analyzed: 02/01/2018		
o-Xylene	ND	0.23	ug/m³		ND					25	
p- & m- Xylenes	ND	0.46	"		ND					25	
p-Ethyltoluene	ND	0.26	"		ND					25	
Propylene	0.60	0.092	"		0.63				5.97	25	
Styrene	0.32	0.23	"		0.32				0.00	25	
Tetrachloroethylene	1.2	0.090	"		1.1				3.17	25	
Tetrahydrofuran	ND	0.31	"		ND					25	
Toluene	0.72	0.20	"		0.70				2.82	25	
trans-1,2-Dichloroethylene	ND	0.21	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.24	"		ND					25	
Trichloroethylene	ND	0.072	"		ND					25	
Trichlorofluoromethane (Freon 11)	0.81	0.30	"		0.81				0.00	25	
Vinyl acetate	ND	0.19	"		ND					25	
Vinyl bromide	ND	0.23	"		ND					25	
Vinyl Chloride	ND	0.034	"		ND					25	
Surrogate: p-Bromofluorobenzene	*9.55*		*ppbv*	*10.0*		*95.5*	*70-130*				

Sample and Data Qualifiers Relating to This Work Order

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.
CCV-A	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to dectected analytes only.

Definitions and Other Explanations

*	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 - AIR

YORK ANALYTICAL LABORATORIES INC

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. 18A1103

YOUR Information	Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type/Deliverables
Company: CA Rich Consultants, Inc.	Company: ← SAME	Company: ← SAME	CDC-FF IAQ Termination Sampling	RUSH - Same Day ☐	Summary Report ___
Address: 17 Dupont St. Plainview, NY 11803	Address:	Address:	**Purchase Order No.**	RUSH - Next Day ☐	Summary w/ QA Summary ___
Phone No. 516-576-8844	Phone No.	Phone No.		RUSH - Two Day ☐	CT RCP Package ___
Contact Person: Michael Yager	Attention:	Attention:		RUSH - Three Day ☐	NY ASP A Package ___
E-Mail Address: myager@carichinc.com	E-Mail Address:	E-Mail Address:	Samples from: CT___ NY X NJ___	RUSH - Four Day ☐	NY ASP B/CLP Pkg X
				Standard(5-7 Days) X	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.

Michael Yager
Samples Collected/Authorized By (Signature)

Michael Yager
Name (printed)

Air Matrix Codes

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

Additional Notes:

Please enter the following Field Data

Detection Limits Required

≤ 1 ug/m³ ___
NYSDEC VI Limits ___ (VI =vapor instrusion)
NJDEP low level ___
Routine Survey ___
Other ___

Special Instructions

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont.ID	ANALYSES REQUESTED	Sampling Media
PDM-1	1/30/18	AI	30	7	23157	Y26	TO15	6 Liter canister X / Tedlar Bag
PDM-2	1/30/18	AI	29	10	18316	Y3	TO15	6 Liter canister X / Tedlar Bag
PDM-4	1/30/18	AI	30	6	Y67	7421	TO15	6 Liter canister X / Tedlar Bag
PDM-5	1/30/18	AI	30	8	16956	Y28	TO15	6 Liter canister X / Tedlar Bag
PDM-6	1/30/18	AO	29	6	20949	7420	TO15	6 Liter canister X / Tedlar Bag
								6 Liter canister ___ / Tedlar Bag
SVTP-01	1/30/18	AS	30	10	Y62	6861	TO15	6 Liter canister X / Tedlar Bag
								6 Liter canister ___ / Tedlar Bag
								6 Liter canister ___ / Tedlar Bag
								6 Liter canister ___ / Tedlar Bag

Comments

Michael Yager 1/30/18 2000
Samples Relinquished By Date/Time

K Dark 2/1/18 730AM
Samples Relinquished By Date/Time

K Dark 1/31/18 1040 AM
Samples Received By Date/Time

2-1-18 730
Samples Received in LAB by Date/Time