Off-site Interim Remedial Measure Construction Completion Report

Former Imperial Cleaners Site
218 Lakeville Road
Lake Success, New York 11020
NYSDEC BCP Site #C130225

August 2024

Prepared for:

Mr. Joseph Jones
Project Manager
NYS Department of Environmental Conservation
Remedial Bureau A, 11th Floor
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Albany, New York 12233

WALDEN ENVIRONMENTAL ENGINEERING, PLLC

Industry Leader in Environmental Engineering Consulting

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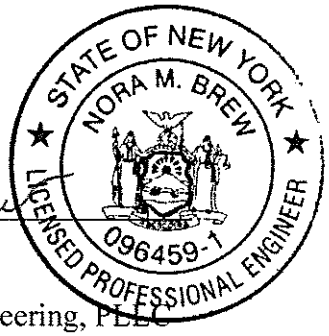
Professional Engineer Certification

I, Nora M. Brew, certify that I am currently a professional engineer licensed to practice in New York State in accordance with New York State Education Law, Article 145, Section 7200 et seq. I have completed accredited university courses and degrees in engineering and have sufficient training and experience in remediation, groundwater hydrology, and related fields that enable me to make sound professional judgments with regards to engineering design.

I further certify that this submittal, *Construction Completion Report*, dated August 29, 2024, was prepared under my direction. I had primary direct responsibility for the implementation of the subject construction program, and I certify that the *Generic Interim Remedial Measure Work Plan*, dated March 4, 2022 was implemented and that all construction activities were completed in substantial conformance with the DER-approved *Generic Interim Remedial Measure Work Plan*.



Nora M. Brew, P.E.
Walden Environmental Engineering, PLLC

8/29/2024
Date

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ATTACHMENTS

1 INTRODUCTION

Walden Environmental Engineering, PLLC ("Walden") has prepared this *Construction Completion Report* ("CCR") on behalf of 218 Lakeville Aquisition LLC, the Owner of the Former Imperial Cleaners Site located at 218 Lakeville Road, Lake Success, New York (the "Site" or "Subject Property"). The CCR summarizes the construction, startup and monitoring activities completed for the off-site vapor intrusion mitigation systems in the properties located adjacent to the Subject Property at 2 University Place and 6 University Place. These systems were installed as an Interim Remedial Measure (IRM) in accordance with the *Generic Interim Remedial Measure Work Plan* ("IRM Work Plan," Walden, March 4, 2022) approved on March 11, 2022 by the New York State Department of Environmental Conservation ("NYSDEC") and the New York State Department of Health ("NYSDOH"), collectively referred to as "the Departments".

The objective of the IRM is to address off-site residual VOC contamination identified during soil vapor intrusion ("SVI") investigations performed at the adjacent sites. The VOC contamination as well as the Site history and investigation details are as summarized in the *Soil Vapor Intrusion Investigation Summary Report* (Walden, May 4, 2017), *Soil Vapor Intrusion Investigation Summary Report (revised)* (Walden, September 2021), and *Supplemental Off-site Soil Vapor Intrusion Sampling Summary Report* (Walden, July 18, 2022).

The owners of 2 University Place and 6 University Place granted permission for sub-slab depressurization (SSD) systems to be installed and operated as described herein to achieve the following off-site IRM objectives:

- mitigate SVI impacts;
- prevent VOC vapor migration into the buildings; and
- ensure acceptable indoor air quality.

The off-site IRM systems were designed, installed and tested in accordance with the guidelines set forth in NYSDEC *DER-13: Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York* (dated October 18, 2006), *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (dated October 2006, with updates, referred to herein as "SVI Guidance"), and NYSDEC *DER-10*: *Technical Guidance for Site Investigation and Remediation*. SSD system operation, maintenance, and monitoring, and termination of mitigation system operations will conform with the SVI Guidance, as amended.

1.1 Site Ownership and Brownfield Cleanup Program Status

The Subject Property's previous owner, 218 Lakeville Associates L.P., entered into Voluntary Cleanup Agreement ("VCA") #D1-30001-01-03 with the NYSDEC, effective April 18, 2001, to address VOC contamination associated with the Former Imperial Cleaners Site. At that time, the Subject Property was assigned Voluntary Cleanup Program ("VCP") Site No. V-00244-1.

When 218 Lakeville Aquisition LLC purchased the Site on July 28, 2015, the VCA was amended to reflect the change in property ownership. In April 2017, the NYSDEC notified 218 Lakeville Aquisition LLC that the VCP was being terminated as of March 31, 2018. Therefore, the Owner submitted a Brownfield Cleanup Program ("BCP") application and supporting documentation to NYSDEC in order to complete the required remediation, site closure and post-closure management as a Volunteer participant in the BCP. NYSDEC approved the BCP application and the Former Imperial Cleaners Site was accepted into the Brownfield program and assigned Site #C130225. The Brownfield Cleanup Agreement ("BCA", Index No. C130225-01-18) was fully executed by 218 Lakeville Aquisition LLC (hereinafter "Volunteer") and the NYSDEC on February 12, 2018.

1.2 Report Organization

The off-site SSD system specifications and installation activities are presented in Section 2. Section 3 describes the SSD system startup and testing. Section 4 summarizes the results of the indoor air sampling performed to verify acceptable indoor air quality under normal SSD system operating conditions. Section 5 details the SSD system operation and monitoring procedures. Section 6 provides a breakdown of estimated costs associated with the off-site IRM.

2 SSD SYSTEM SPECIFICATIONS AND INSTALLATION

The 2 University Place and 6 University Place properties are located adjacent to the Subject Property as shown on **Figure 1**. Both properties are two-story residential buildings with finished basements. Sub-slab vapor, indoor air, and outdoor air sampling was performed at both properties during the February 2016 SVI investigation (see May 2017 *Soil Vapor Intrusion Investigation Summary Report*). Based on a comparison of the target compound concentrations reported for the sub-slab and indoor air samples to the concentration ranges compared in the NYSDOH SVI Guidance decision matrices, mitigation was recommended for 2 University Place and 4 University Place (now known as 6 University Place) to address potential soil vapor intrusion impacts and prevent exposure to VOCs in indoor air. SVI sampling performed in 2 University Place in February 2022 as requested by the homeowner yielded the same recommendation for mitigation (July 2022 *Supplemental Off-site Soil Vapor Intrusion Sampling Summary Report*).

The owners of 2 University Place and 6 University Place granted permission for access to install SVI mitigation systems in accordance with the off-site IRM. SSD systems are engineering controls which utilize fans and piping to draw vapors from beneath basement slabs to create adequate vacuum to prevent sub-slab vapors from entering buildings and to avoid indoor air quality impacts. Walden inspected both homes and met with the property owners to evaluate appropriate layouts for the SSD mitigation system equipment and develop site-specific layouts for each system. The SSD systems were designed and installed to minimize construction and operating impacts to the extent possible.

The SSD system construction details (i.e., location of vacuum extraction point and pressure monitoring points, screen zone depths and vacuum flow rates) were established based on an evaluation of vacuum extraction well performance observed during pilot testing to support the final design specifications. Piezometers were installed at appropriate locations in the building slab to monitor subsurface pressures and confirm effective depressurization of the slab during SSD system operation.

Details on the SSD systems installed in 2 University Place and 6 University Place are presented below. The vacuum extraction wells, piezometers, piping, radon fans, pressure gauges, and alarms were installed by Lakewood Environmental Services. Walden provided field oversight of the SSD system installations, directed pilot testing and performed startup testing to optimize system performance. The startup testing results are presented in Section 3.

2.1 2 University Place

The SSD system for 2 University Place was installed on March 28 – 29, 2023. The as-built engineering design drawings for this mitigation system, stamped by a New York State licensed Professional Engineer, are presented in **Attachment A**. Photographs of the SSD system installation and testing are provided in **Attachment B**.

The basement level of the home includes an attached garage and finished space. One (1) vapor extraction well point (SSD-1) was installed in the garage in the central southern portion of the building along the interior wall separating it from the finished basement space. The extraction point was installed by coring through the garage floor slab (approximately one inch thick) and removing subsurface material to create a suction pit. SSD-1 consists of a four (4) inch diameter slotted PVC pipe that extends approximately twenty-eight (28) inches below the bottom of the existing concrete slab. SSD-1 was backfilled with coarse No. 2 sand and sealed at the surface with bentonite and cement. The bottom of the 26-inch screened interval was capped with a solid PVC J-plug. The top of the sub-slab slotted interval was connected to a solid 4-inch PVC riser. The PVC riser is connected to aboveground 4-inch PVC pipe that runs along the interior wall about two feet above the floor and then penetrates through the eastern exterior wall of the house. The pipe was mounted onto the side of the house, run up to the in-line SSD system fan (Radon Away model GP501c), and then vented above the roofline.

The SSD fan is plugged into an outdoor electrical outlet. The fan draws vapors from beneath the building and exhausts them through a vent pipe that terminates approximately three (3) feet above the roof. A differential pressure gauge (Dwyer Magnehelic) and a radon monitoring system low-pressure alarm (Home Aire Checkpoint IIa) were installed on the leg of the PVC pipe inside the garage to monitor system operations.

Two (2) permanent vapor pin monitoring points were installed to monitor sub-slab pressures to confirm that the building slab is depressurized. MP-01 was installed inside the garage and MP-02 was installed in the boiler room. Each monitoring point consists of a stainless-steel pin recessed into the concrete slab and a silicon sleeve that seals the penetration as the pin is inserted. Each point is covered with a stainless-steel screw on cap that sits flush with the floor.

The layouts of the vapor extraction well, monitoring points, and piping are presented in the as-built drawings in **Attachment A**. The as-built drawings also supply a schematic of the system components, construction details of the extraction well point and monitoring points, and the exterior piping and exhaust fan configuration.

2.2 6 University Place

The SSD system for 6 University Place was installed on July 27 – 28, 2023. The as-built engineering design drawings for this mitigation system, stamped by a New York State licensed Professional Engineer, are presented in **Attachment C**. Photographs of the SSD system installation and testing are provided in **Attachment D**.

The basement level of the home includes finished and unfinished space. One (1) vapor extraction well point (SSD-1) was installed in the unfinished laundry room in the southeast portion of the building. The extraction point was installed by coring through the concrete floor slab (approximately six inches thick) and removing subsurface material to create a suction pit. SSD-1 consists of a four (4) inch diameter slotted PVC pipe that extends approximately twenty-four (24) inches below the bottom of the existing concrete slab. SSD-1 was backfilled with coarse No. 2 sand and sealed at the surface with bentonite and cement. The bottom of the 24-inch screened interval was capped with a solid PVC J-plug. The top of the sub-slab slotted interval was connected to a solid 4-inch PVC riser. The PVC riser is connected to aboveground 4-inch PVC pipe that runs up towards the ceiling and then turns to penetrate through the eastern exterior wall of the house into the basement window well that sits below the rear patio and contains plumbing and mechanical components. From the window well, the PVC piping was run along the ground and then mounted onto the side of the house, then up to the in-line SSD system fan (Radon Away model GP501c). The system vents above the roofline.

The SSD fan is plugged into an outdoor electrical outlet. The fan draws vapors from beneath the building and exhausts them through a vent pipe that terminates approximately three (3) feet above the roof. A differential pressure gauge (Dwyer Magnehelic) and a radon monitoring system low-pressure alarm (Home Aire Checkpoint IIa) were installed on the leg of the PVC pipe inside the laundry room to monitor system operations.

Four (4) permanent vapor pin monitoring points were installed to monitor sub-slab pressures to confirm that the building slab is depressurized. MP-01, MP-03, and MP-04 were installed within the laundry room. MP-02 was installed in the closet next to the stairs at the northeast corner of the house. Each monitoring point consists of a stainless-steel pin recessed into the floor concrete slab and a silicon sleeve that seals the penetration as the pin is inserted. Each point is covered with a stainless-steel screw on cap that sits flush with the floor.

The layouts of the vapor extraction well, monitoring points, and piping are presented in the as-built drawings in **Attachment C**. The as-built drawings also supply a schematic of the system components, construction details of the extraction well point and monitoring points, and the exterior piping and exhaust fan configuration.

3 SSD SYSTEM START UP AND TESTING

After the SSD system equipment was installed, the SSD fan in each off-site property was tested at different applied pressure settings and the corresponding vacuum measurements were recorded at the monitoring points using an Infiltec DM1 Micro-Manometer. The results were evaluated to determine the optimal fan operating setting to achieve effective depressurization of the respective building slabs. Based on industry standards, achieving a pressure differential of at least -0.004 inches of water column (WC) across a slab is considered sufficient to prevent soil vapor intrusion.

3.1 2 University Place

The SSD system installed at 2 University Place was tested on March 29, 2023 to determine the final system operating settings for this engineering control. The SSD fan was run at applied pressures ranging from zero to 3.6 inches of water column. The vacuum measurements recorded at the monitoring points during the system start-up testing are presented below.

Table 1. 2 University Place SSD System Start Up Test

SSD Fan Applied Pressure	Vacuum Measurement	
	MP-01	MP-02
0.0" WC	0.004	0
0.5" WC	-0.031	0
0.8" WC	-0.091	-0.009
3.0" WC	-0.153	-0.010
3.6" WC	-0.250	-0.015

Note that the pressure applied by the fan was adjusted to evaluate the subsurface pressure response in order to optimize the final system settings. Based on the start-up testing, the SSD fan was set to operate at an applied pressure of 2.0 inches of water column, which maintained differential pressures well above the targeted -0.004 inches of WC at the monitoring points, effectively depressurizing the slab and achieving the off-site IRM objectives of mitigating SVI impacts and preventing VOC vapor migration into this building.

Table 2. 2 University Place Final SSD System Operating Settings – March 29, 2023

SSD Fan Applied Pressure	Vacuum Measurement	
	MP-01	MP-02
2.0" WC	-0.092	-0.007

The SSD system alarm and pressure gauge were also tested during startup to confirm that these components were functioning properly.

Walden inspected the SSD system on March 21, 2024, confirmed that the system pressure gauge and alarm are functioning, and recorded the readings summarized below.

Table 3. 2 University Place SSD System Inspection Results – March 21, 2024

SSD Fan Applied Pressure	Vacuum Measurement	
	MP-01	MP-02
1.3" WC	-0.085	-0.005

This data confirms that the 2 University Place SSD system continues to effectively depressurize the slab.

3.2 6 University Place

The SSD system installed at 6 University Place was tested on July 28, 2023 to determine the final system operating settings for this engineering control. The SSD fan was run at applied pressures ranging from zero to 4.2 inches of water column. The vacuum measurements recorded at the monitoring points during the system start-up testing are presented below.

Table 4. 6 University Place SSD System Start Up Test

SSD Fan Applied Pressure	Vacuum Measurement			
	MP-01	MP-02	MP-03	MP-04
0.0" WC	-0.005	-0.001	-	-
1.0" WC	-0.008	0.0	-	-
1.4" WC	-0.011	0.0	-	-
1.6" WC	-	-	-	-0.016
2.75" WC	-0.026	-0.002	-0.079	-0.008
4.2" WC	-0.036	-0.001	-0.256	-0.030

Note that the pressure applied by the fan was adjusted to evaluate the subsurface pressure response in order to optimize the final system settings. Based on the start-up testing, the SSD fan was set to operate at an applied pressure of 2.0 inches of water column, which maintained differential pressures well above the targeted -0.004 inches of WC at three (3) of the four (4) monitoring points. Although the pressure recorded at MP-02 was below the -0.004" WC target, negative pressure was also achieved at this location. These results indicate that the SSD system

was effectively depressurizing the slab and achieving the off-site IRM objectives of mitigating SVI impacts and preventing VOC vapor migration into this building.

Table 5. 6 University Place Final SSD System Operating Settings – July 28, 2023

SSD Fan Applied Pressure	Vacuum Measurement			
	MP-01	MP-02	MP-03	MP-04
2.0" WC	-0.080	-0.001	-0.193	-0.020

The SSD system alarm and pressure gauge were also tested to confirm that these components were functioning properly.

Walden inspected the SSD system on March 20, 2024, confirmed that the system pressure gauge and alarm are functioning, and recorded the readings summarized below.

Table 6. 6 University Place SSD System Inspection Results – March 20, 2024

SSD Fan Applied Pressure	Vacuum Measurement			
	MP-01	MP-02	MP-03	MP-04
2.3" WC	-0.134	-0.002	-0.012	-0.023

This data confirms that the 6 University Place SSD system continues to effectively depressurize the slab.

4 INDOOR AIR SAMPLING

Indoor air sampling was conducted at 2 University Place and 6 University Place in March 2024, during the first heating season following startup of the off-site SSD systems. Sampling was conducted in accordance with the procedures outlined in the IRM Work Plan. Pre-sampling interior inspections were performed to identify conditions or materials stored and/or used that may affect or interfere with the sampling or interpretation of the indoor air sampling results. The indoor air quality questionnaire and building inventory sheet provided in the NYSDOH SVI Guidance were completed prior to sampling at each property.

One (1) indoor air sample was collected in each basement at a height of approximately four to five (4-5) feet above the floor to represent typical breathing zones. The indoor air samples were collected over a 24-hour period in laboratory-provided and individually certified clean 6-liter Summa® canisters with regulators. Flow rates below 0.2 liters per minute were maintained during the 24-hour sampling period as specified by the SVI Guidance.

The Summa® canisters were submitted to a York Laboratories, a NYSDOH ELAP certified laboratory, for analysis of VOCs in accordance with U.S. Environmental Protection Agency (EPA) Method TO-15 with the analytical detection limits set forth in the SVI Guidance.

The indoor air sample results were reviewed in accordance with the SVI Guidance. This guidance document lists the air guideline values (AGVs) that NYSDOH has established for methylene chloride, trichloroethylene (TCE), and tetrachloroethylene (PCE). For analytes that do not have AGVs and are not considered in the SVI Guidance decision matrices, the SVI Guidance Appendix C (*Volatile Organic Chemicals in Air – Summary of Background Databases*) was referenced for typical background concentrations of these compounds published in USEPA's 2001 Building Assessment and Survey Evaluation (BASE) database.

Additional discussion of the indoor air sampling completed as part of the off-site IRM is presented in the following sections.

4.1 2 University Place

An indoor air sample was collected in the basement boiler room on March 21-22, 2024. The SSD system was operating normally during the sampling. Chemicals including cleaning products, paints, and weed killer were noted in the basement during the building inventory. The indoor air sampling data summary table, laboratory report, and indoor air quality questionnaire and building inventory for 2 University Place are presented in **Attachment E**.

None of the primary constituents of concern associated with the Former Imperial Cleaners Site (PCE and its degradation by-products TCE and cis-1,2-dichloroethylene) were detected in the indoor air sample. None of the indoor air concentrations exceeded the respective Air Guideline Values (AGVs). Low concentrations of several VOCs were detected in the indoor air sample collected at 2 University Place. All reported indoor air concentrations were at the low end of the typical ranges of these compounds listed in the BASE database.

The laboratory analytical data confirms that indoor air quality is acceptable at 2 University Place.

4.2 6 University Place

An indoor air sample was collected in the basement laundry room on March 20-21, 2024. The SSD system was operating normally during the sampling. Chemicals including cleaning products and air freshener were noted in the basement during the building inventory. The indoor air sampling data summary table, laboratory report, and indoor air quality questionnaire and building inventory for 6 University Place are presented in **Attachment F**.

None of the indoor air concentrations exceeded the respective AGVs. Low concentrations of several VOCs were detected in the indoor air sample collected at 6 University Place. All reported indoor air concentrations were at the low end of the typical ranges of these compounds listed in the BASE database.

The laboratory analytical data confirms that indoor air quality is acceptable at 6 University Place.

5 SSD SYSTEM INSPECTIONS

The off-site SSD systems in 2 University Place and 6 University Place will be inspected annually to verify that the engineering controls at each property continue to function properly and effectively mitigate potential SVI impacts.

Vacuum measurements will be collected at the monitoring points using a digital micromanometer and recorded. If needed, the SSD fan's applied pressure will be adjusted to ensure that negative pressure is maintained beneath the building slabs.

During the annual inspections, all SSD system equipment will be visually inspected to ensure that it is in proper working order. If any damage or defects are detected, the Departments will be notified and components will be repaired or replaced as appropriate.

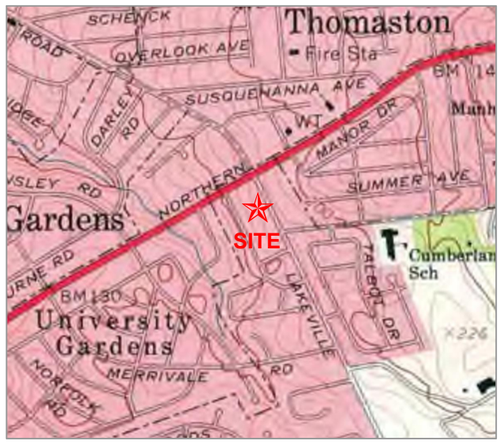
6 OFF-SITE IRM COST BREAKDOWN

The estimated costs associated with engineering design, installation, testing, and monitoring of the off-site SSD systems are as follows:

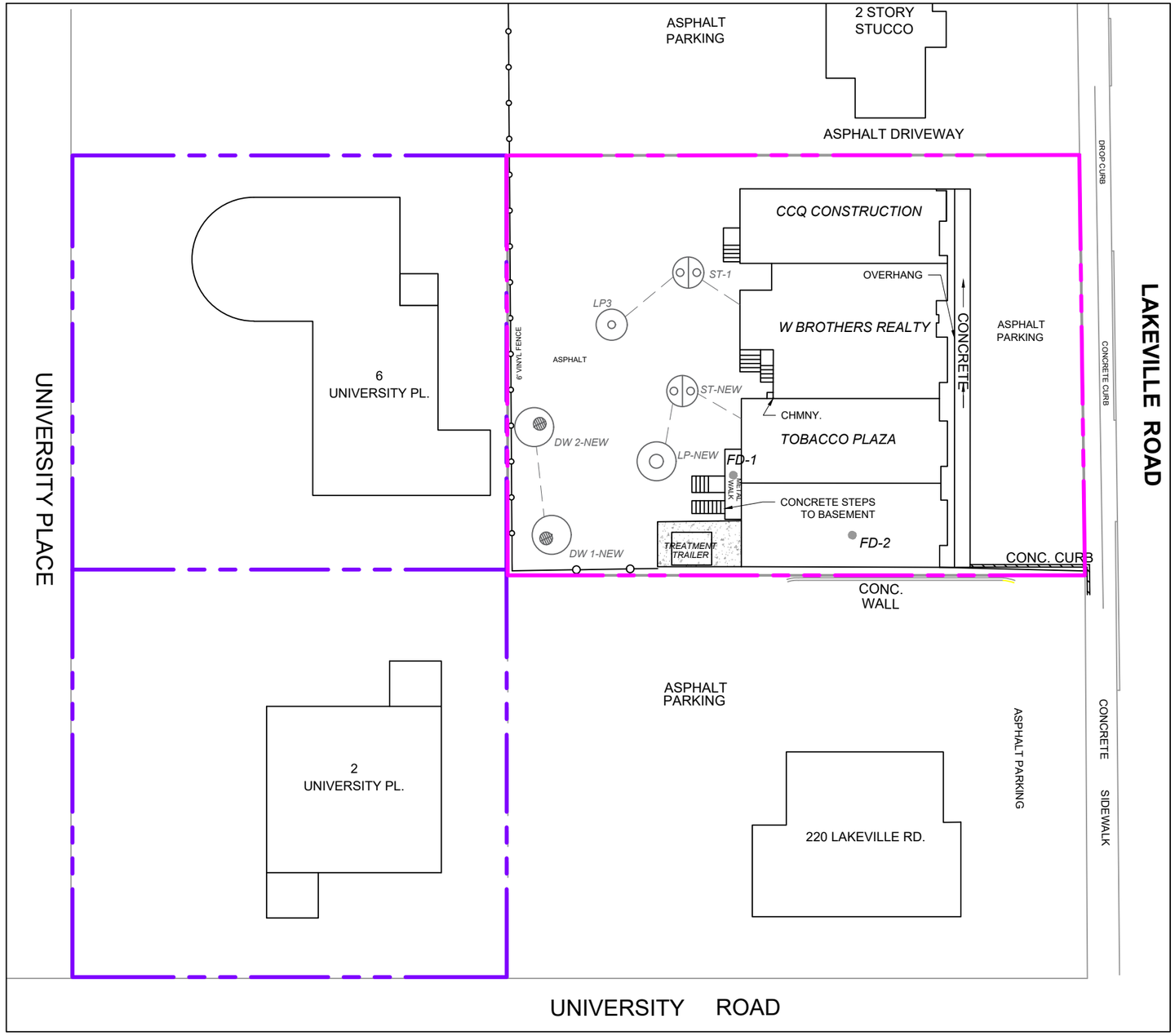
Off-site IRM Task	Estimated Off-site SSD System Cost	
	2 University Place	**6 University Place**
Design	$6,000	$6,000
Equipment & Supplies	$3,500	$4,000
Installation & Testing	$9,000	$9,000
Inspections & Monitoring	$4,000	$4,000
Subtotal	$22,500	$23,000
TOTAL ESTIMATED	$45,500	

FIGURE 1

Site Location Map



SITE LOCATION
N.T.S.



LEGEND

- SUBJECT PROPERTY LINE (218 LAKEVILLE ROAD)
- OFF-SITE IRM PROPERTY - SSD SYSTEM INSTALLED

0 15 30 60 90

SCALE: 1"=30'–0"

SITE LOCATION MAP
2 & 6 UNIVERSITY PLACE
SCALE: 1" = 30'-0"

STATE OF NEW YORK
NORA MOBSBY
096459-1
LICENSED PROFESSIONAL ENGINEER

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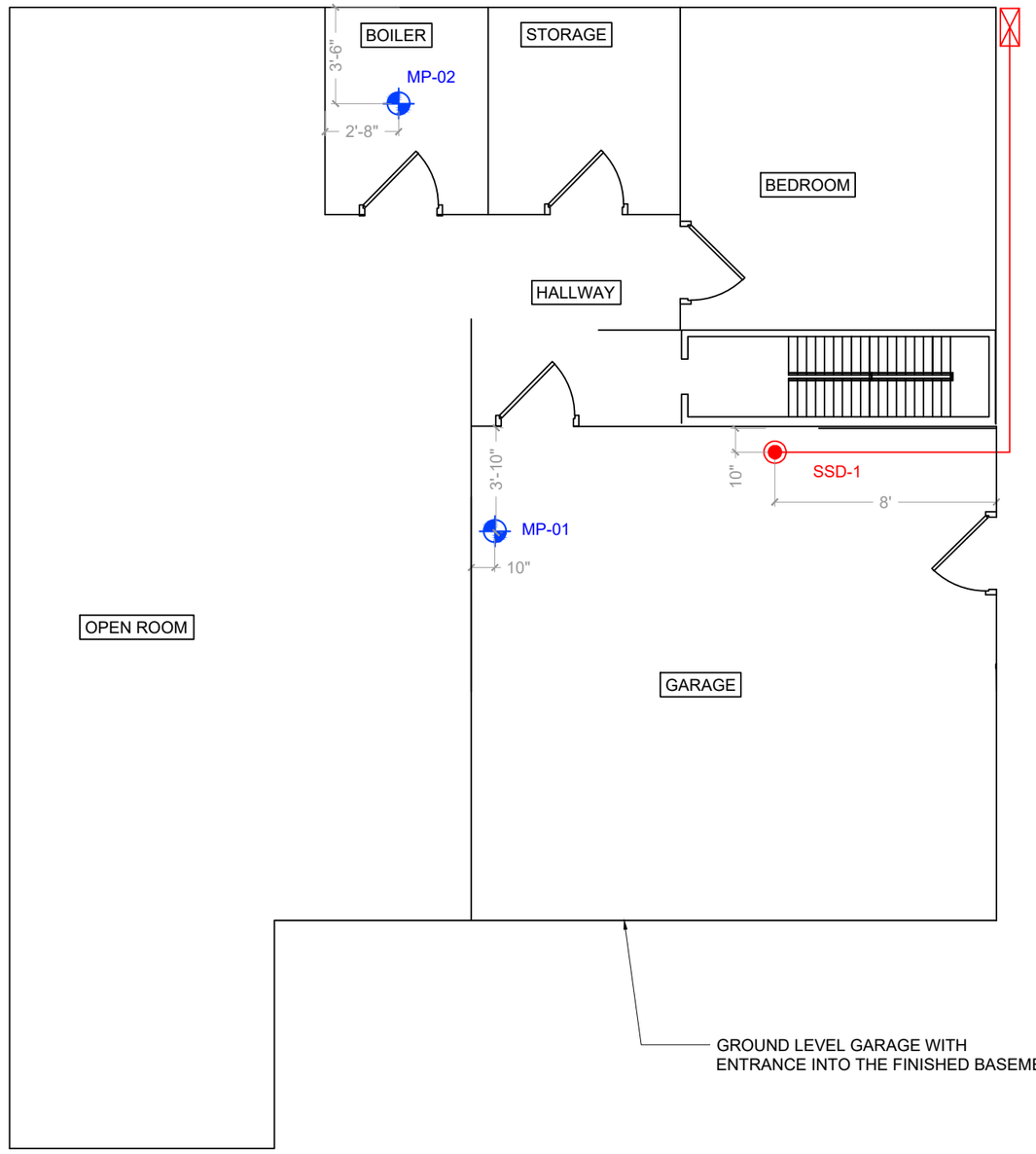
FOR: Former Imperial Cleaners Site BCP Site No. C130225 218 Lakeville Road Lake Success, New York 11020			DRAWING TITLE: OFF-SITE IRM SITE LOCATION MAP			DRAWING NO: 1	ISSUED 8/29/2024
DESIGNED BY: NB	DRAWN BY: LS	CHECKED BY: NB	JOB NO: IMPL0115.6	DATE: 8/30/24	11x17	SHEET NO: 1 of 1	
APPROVED BY: NB	SCALE: AS NOTED	CAD FILE LOCATION: Z:\IMPL0115 (Imperial Cleaners)\IMPL0115.6 - 2019 Pre-Design Investigation\Figures For Decision Document\ACAD\IMPL0115.6_Adjacent Properties_Figure 1 (8-30-24) BB.dwg					

ATTACHMENT A

2 University Place SSD System As-built Drawings



LEGEND

- BUILDING
- SSDS PIPING
- EXTRACTION POINT
- VAPOR PIN MONITORING POINT
- SSDS FAN

2 UNIVERSITY PLACE SSDS LAYOUT

SCALE: 3/16" = 1'-0"

0 1 2 3

3/16 SCALE: 3/16"=1'

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REVISIONS		
No.	DATE	COMMENTS

FOR:
For:
Former Imperial Cleaners Site
Site No. C130225
218 Lakeville Road
Lake Success, New York 11020

DRAWING TITLE:
2 UNIVERSITY PLACE
SSD SYSTEM AS-BUILT

DRAWING NO: 1

ISSUED: 8-29-2024

REVISION NO: 0

DESIGNED BY: JMS/BB | DRAWN BY: JMS/BB | CHECKED BY: NB

APPROVED BY: NB | SCALE: AS NOTED

JOB NO: IMPL0115.6 | DATE: 8/30/24 | 11x17 | SHEET NO: 1 of 2

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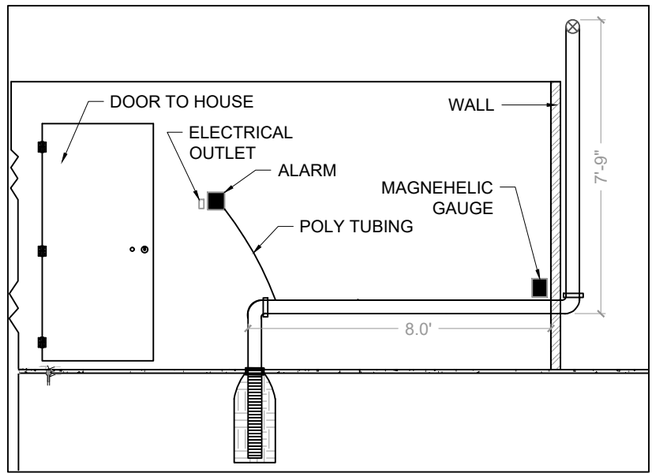

SSD-1 CROSS SECTION (INTERIOR GARAGE)

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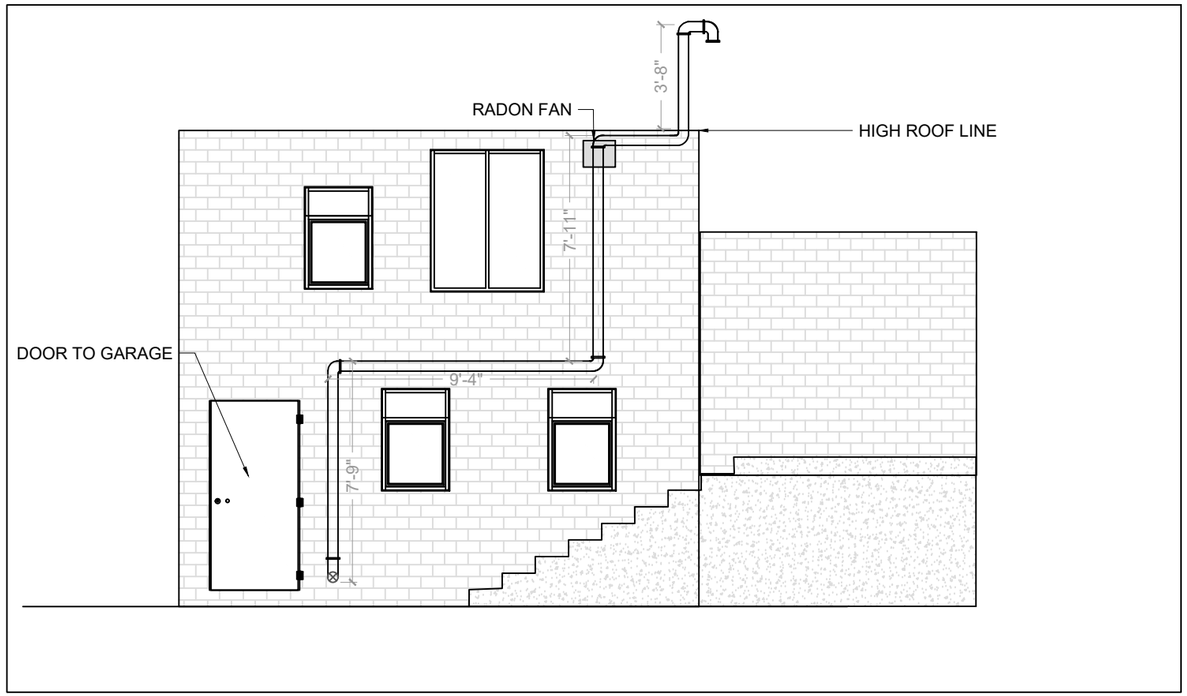
SCALE: ¼"=1'



SSD-1 CROSS SECTION (EAST EXTERIOR WALL)

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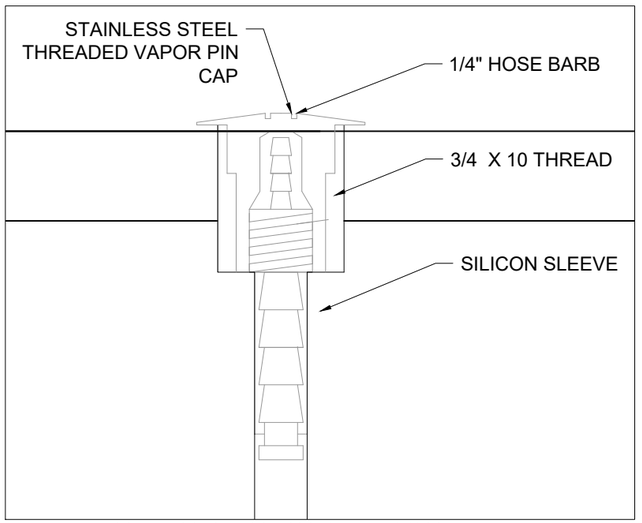
3/16

SCALE: 3/16"=1'



MONITORING POINT LAYOUT

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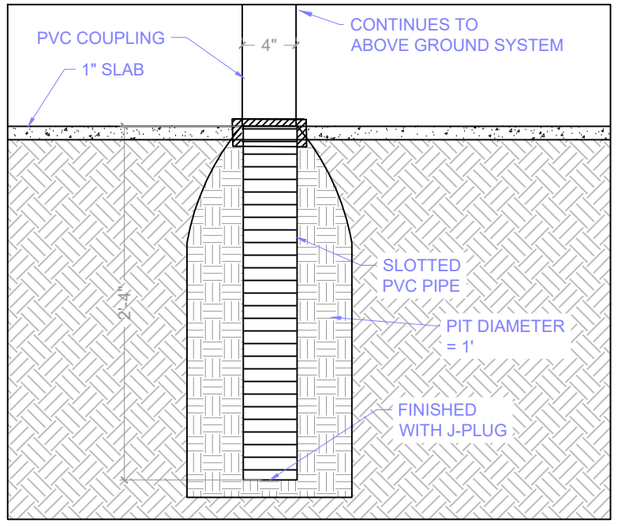

EXTRACTION POINT LAYOUT

N.T.S.

0 ½ 1 2 3

SCALE: 1" = 1'

WALDEN

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REVISIONS		
No.	DATE	COMMENTS

FOR:
FORMER IMPERIAL CLEANERS SITE
Site No. C130225
218 Lakeville Road
Lake Success, New York 11020

DRAWING TITLE:
2 UNIVERSITY PLACE
SSD SYSTEM AS-BUILT

DRAWING NO: 2

ISSUED: 8-29-2024

REVISION NO: 0

DESIGNED BY: JMS/BB | DRAWN BY: JMS/BB | CHECKED BY: NB
APPROVED BY: NB | SCALE: AS NOTED
JOB NO: IMPL0115.6 | DATE: 8/30/24 | 11x17 | SHEET NO: 2 of 2
CAD FILE NAME: Z:\IMPL0115 (Imperial Cleaners)\ACAD\IMPL0115_OFF-SITE_RESIDENTIAL_SSDS_2UNIVERSITYPLACE (8-29-24) BB.dwg

ATTACHMENT B

2 University Place SSD System Photographs

2 University Place Sub Slab Depressurization System Startup
March 29, 2023

Photograph #1

Interior SSD-1 system configuration in garage.

Photograph #2

View of the PVC pipe penetration exiting the east wall of the house and the pressure gauge.

Photograph #3

SSD-1 Pressure gauge (Dwyer Magnehelic)

Photograph #4

Inside configuration of exhaust fan Radon Away model GP501c.

Photograph #5

System configuration along the exterior wall.

Photograph #6

View of SSD-1, exhaust fan, including vent pipe above the roof.

Photograph #7

System Radon Alarm

Photograph #8

MP-01 reading under final operating setting (-0.092 in WC)

Photograph #9

MP-02 reading under final operating settings (-0.007 in WC)

2 University Place Sub Slab Depressurization System Inspection
March 21, 2024

Photograph #1

SSD-1 Pressure gauge (Dwyer Magnehelic)

Photograph #2

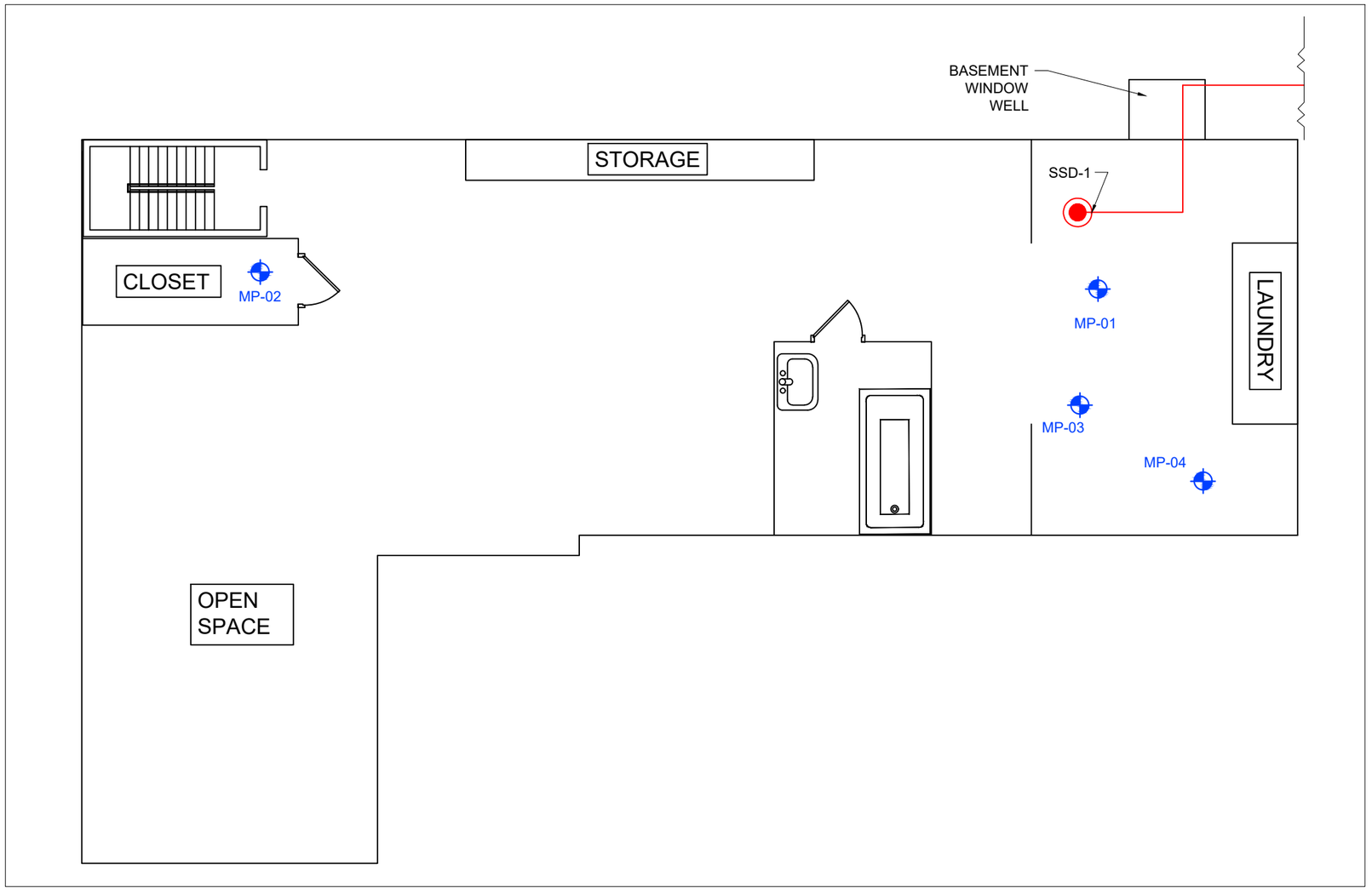
MP-01 reading under final operating settings (-0.085 in WC)

Photograph #3

MP-02 reading under final operating settings (-0.005 in WC)

ATTACHMENT C

6 University Place SSD System As-built Drawings



N

LEGEND

- BUILDING
- SSDS PIPING
- EXTRACTION POINT
- VAPOR PIN MONITORING POINT

6 UNIVERSITY PLACE SSDS LAYOUT

SCALE: 3/16" = 1'-0"

0 1 2 3

3/16

SCALE: 3/16"=1'

STATE OF NEW YORK
NORA MOBRAY
096459-1
LICENSED PROFESSIONAL ENGINEER

WALDEN
Headquarters: 16 Spring Street Oyster Bay, NY 11771
P: (516) 624-7200 F: (516) 624-3219
Additional Offices: Hopewell Junction, NY;
Hartford, CT; Latham, NY, Fort Wayne, IN
www.WaldenEnvironmentalEngineering.com

REVISIONS		
No.	DATE	COMMENTS

FOR:
FOR:
FORMER IMPERIAL CLEANERS SITE
Site No. C130225
218 Lakeville Road
Lake Success, New York 11020

DESIGNED BY: JMS | DRAWN BY: JMS | CHECKED BY: NB
APPROVED BY: NB | SCALE: AS NOTED

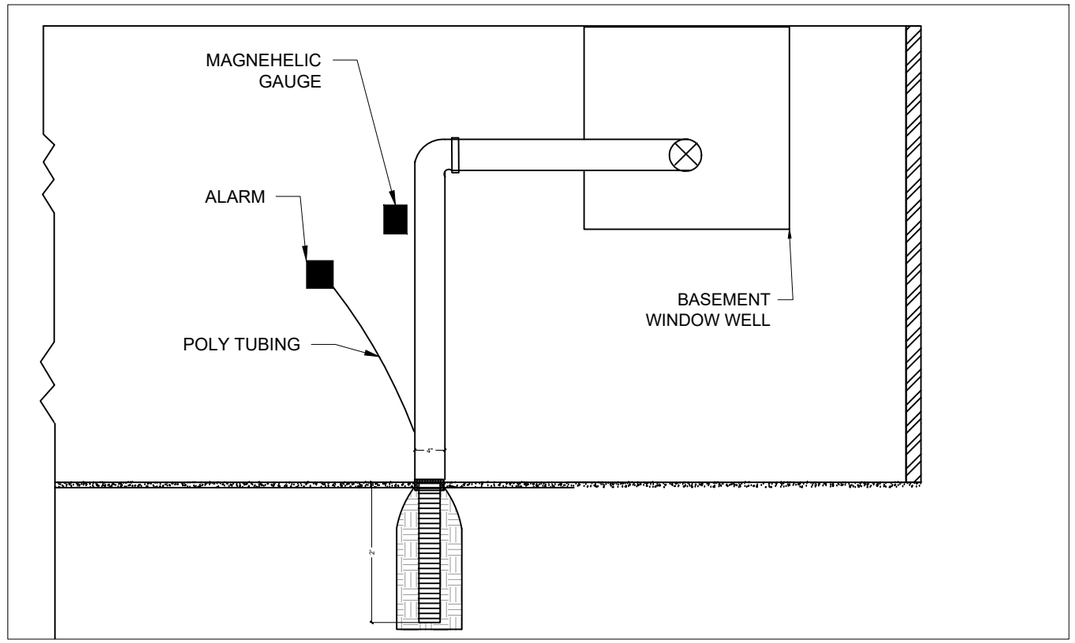
DRAWING TITLE:
6 UNIVERSITY PLACE
SSD SYSTEM AS-BUILT

JOB NO: IMPL0115 | DATE: 8/30/24 | 11x17 | SHEET NO: 1 of 1
CAD FILE NAME: Z:\IMPL0115 (Imperial Cleaners)\ACAD\IMPL0115_OFF-SITE_RESIDENTIAL_SSDS_6UNIVERSITYPLACE (8-27-24) BB.dwg

DRAWING NO: 1

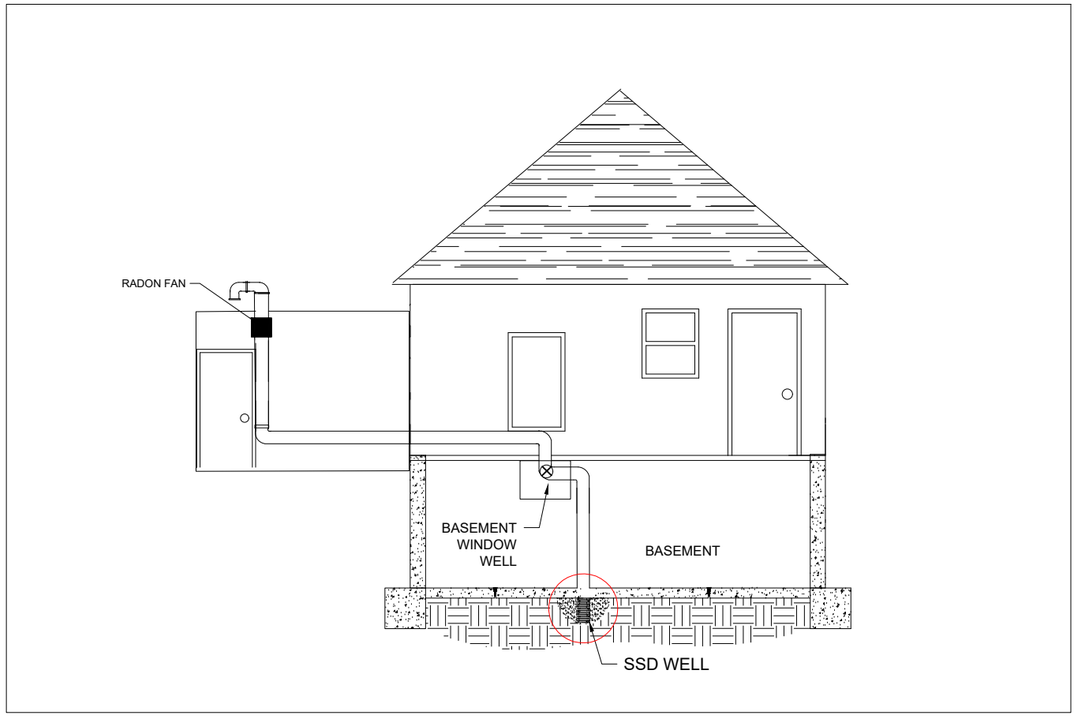
ISSUED 8-29-2024

REVISION NO: 0



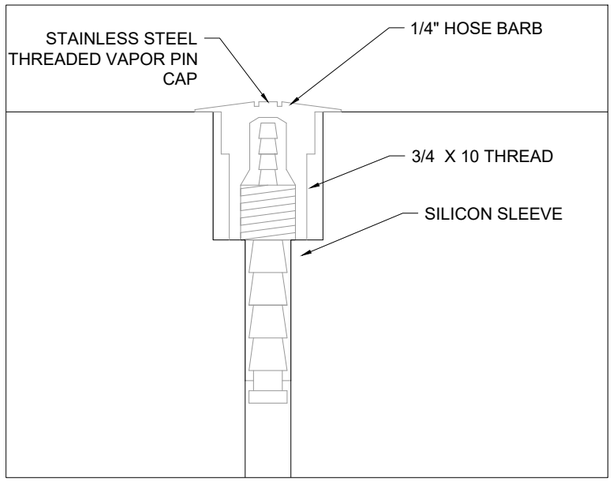
SSD-1 CROSS SECTION (BASEMENT)

N.T.S.



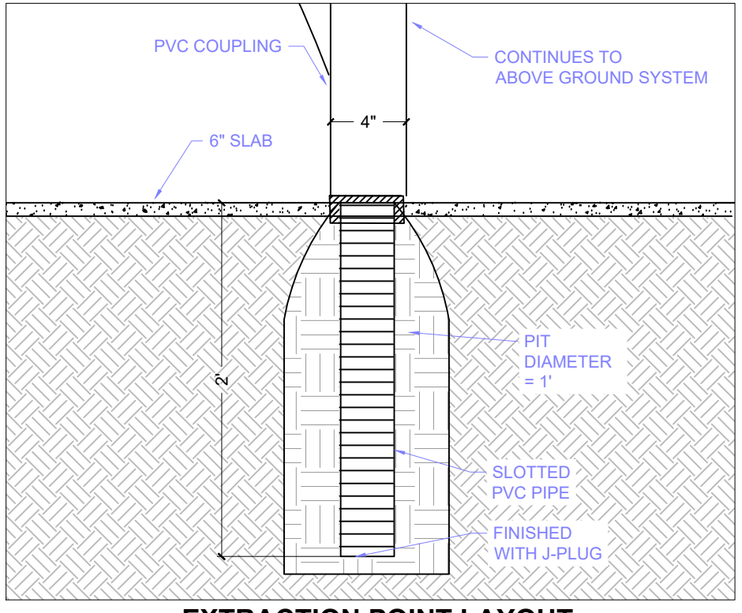
SSD-1 CROSS SECTION (EXTERIOR WALL)

N.T.S.



MONITORING POINT LAYOUT

N.T.S.



EXTRACTION POINT LAYOUT

N.T.S.

WALDEN

Headquarters: 16 Spring Street Oyster Bay, NY 11771
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Additional Offices: Hopewell Junction, NY; Hartford, CT; Latham, NY, Fort Wayne, IN
www.WaldenEnvironmentalEngineering.com

REVISIONS		
No.	DATE	COMMENTS

FOR:
FORMER IMPERIAL CLEANERS SITE
Site No. C130225
218 Lakeville Road
Lake Success, New York 11020

DRAWING TITLE:
6 UNIVERSITY PLACE
SSD SYSTEM AS-BUILT

DRAWING NO: 2

ISSUED: 8-29-2024

REVISION NO: 0

DESIGNED BY: JMS | DRAWN BY: JMS | CHECKED BY: NB

JOB NO: IMPL0115 | DATE: 8/30/24 | 11x17 | SHEET NO: 1 of 1

APPROVED BY: NB | SCALE: AS NOTED

CAD FILE NAME: Z:\IMPL0115 (Imperial Cleaners)\ACAD\IMPL0115_OFF-SITE_RESIDENTIAL_SSDS_6UNIVERSITYPLACE (8-27-24) BB.dwg

ATTACHMENT D

6 University Place SSD System Photographs

6 University Place Sub Slab Depressurization System Startup
March 29, 2023

Photograph #1

Interior SSD system configuration and penetration through wall.

Photograph #2

MP-01 stainless-steel vapor pin.

Photograph #3

SSD-1 Pressure gauge

Photograph #4

Inside configuration of exhaust fan Radon Away model GP501c.

Photograph #5

System Radon Alarm

Photograph #6

System configuration from the basement window pit

Photograph #7

System configuration along the exterior wall.

Photograph #8

System configuration along the exterior wall.

Photograph #9

View of SSD-1 vent pipe above the roof

6 University Place Sub Slab Depressurization System Inspection
March 21, 2024

Photograph #1

MP-01 reading under final operating settings
(-0.134 in WC)

Photograph #2

MP-03 reading under final operating settings
(-0.012 in WC)

Photograph #3

MP-04 reading under final operating settings
(-0.023 in WC)

ATTACHMENT E

2 University Place Indoor Air Sampling Data

2 University Place
Lake Success, NY 11020

Indoor Air Sampling Results - March 2024

Chemical Compound	CAS No.	NYSDOH Air Guideline Values (AGVs)	USEPA BASE Indoor Air 90th Percentile Conc (µg/m3)	2 University Place Indoor Air Sample 3/21 to 3/22/2024		
		µg/m3	µg/m3	µg/m3		Q
1,1,1,2-Tetrachloroethane	630-20-6	~	~	<	0.58	
1,1,1-Trichloroethane	71-55-6	~	20.6	<	0.46	
1,1,2,2-Tetrachloroethane	79-34-5	~	~	<	0.58	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~	3.5	<	0.65	
1,1,2-Trichloroethane	79-00-5	~	1.5	<	0.46	
1,1-Dichloroethane	75-34-3	~	0.7	<	0.34	
1,1-Dichloroethylene	75-35-4	~	1.4	<	0.08	
1,2,4-Trichlorobenzene	120-82-1	~	6.8	<	0.62	
1,2,4-Trimethylbenzene	95-63-6	~	9.5	<	0.41	
1,2-Dibromoethane	106-93-4	~	1.5	<	0.65	
1,2-Dichlorobenzene	95-50-1	~	1.2	<	0.51	
1,2-Dichloroethane	107-06-2	~	0.9	<	0.34	
1,2-Dichloropropane	78-87-5	~	1.6	<	0.39	
1,2-Dichlorotetrafluoroethane	76-14-2	~	6.8	<	0.59	
1,3,5-Trimethylbenzene	108-67-8	~	3.7	<	0.41	
1,3-Butadiene	106-99-0	~	3	<	0.56	
1,3-Dichlorobenzene	541-73-1	~	2.4	<	0.51	
1,3-Dichloropropane	142-28-9	~	~	<	0.39	
1,4-Dichlorobenzene	106-46-7	~	5.5	<	0.51	
1,4-Dioxane	123-91-1	~	~	<	0.61	
2-Butanone	78-93-3	~	12		0.87	
2-Hexanone	591-78-6	~	~		0.76	J
3-Chloropropene	107-05-1	~	~	<	1.3	
4-Methyl-2-pentanone	108-10-1	~	6	<	0.34	
Acetone	67-64-1	~	98.9		4.8	
Acrylonitrile	107-13-1	~	~		3.3	
Benzene	71-43-2	~	9.4		0.81	
Benzyl chloride	100-44-7	~	6.8	<	0.44	
Bromodichloromethane	75-27-4	~	~	<	0.56	
Bromoform	75-25-2	~	~	<	0.87	
Bromomethane	74-83-9	~	1.7	<	0.33	
Carbon disulfide	75-15-0	~	4.2	<	0.26	
Carbon tetrachloride	56-23-5	~	1.3		0.48	J
Chlorobenzene	108-90-7	~	0.9	<	0.39	
Chloroethane	75-00-3	~	1.1	<	0.22	
Chloroform	67-66-3	~	1.1	<	0.41	
Chloromethane	74-87-3	~	3.7		1.0	
cis-1,2-Dichloroethylene	156-59-2	~	1.9	<	0.08	
cis-1,3-Dichloropropylene	10061-01-5	~	2.3	<	0.38	
Cyclohexane	110-82-7	~	~		0.58	
Dibromochloromethane	124-48-1	~	~	<	0.72	
Dichlorodifluoromethane	75-71-8	~	16.5		2.4	
Ethyl acetate	141-78-6	~	5.4	<	0.61	
Ethyl Benzene	100-41-4	~	5.7		0.37	
Hexachlorobutadiene	87-68-3	~	6.8	<	0.90	
Isopropanol	67-63-0	~	250		0.83	
Methyl Methacrylate	80-62-6	~	~	<	0.34	
Methyl tert-butyl ether (MTBE)	1634-04-4	~	11.5	<	0.30	
Methylene chloride	75-09-2	60	10	<	0.58	
Naphthalene	91-20-3	~	~	<	0.88	
n-Heptane	142-82-5	~	~		0.79	
n-Hexane	110-54-3	~	10.2		1.8	
o-Xylene	95-47-6	~	7.9		0.44	
p- & m- Xylenes	179601-23-1	~	~		1.2	
p-Ethyltoluene	622-96-8	~	3.6	<	0.41	
Propylene	115-07-1	~	~		0.32	
Styrene	100-42-5	~	1.9	<	0.36	
Tetrachloroethylene	127-18-4	30	15.9	<	0.57	
Tetrahydrofuran	109-99-9	~	~	<	0.50	
Toluene	108-88-3	~	43		1.9	
trans-1,2-Dichloroethylene	156-60-5	~	~	<	0.33	
trans-1,3-Dichloropropylene	10061-02-6	~	1.3	<	0.38	
Trichloroethylene	79-01-6	2	4.2	<	0.11	
Trichlorofluoromethane (Freon 11)	75-69-4	~	~		1.2	
Vinyl acetate	108-05-4	~	~	<	0.30	
Vinyl bromide	593-60-2	~	~	<	0.37	
Vinyl Chloride	75-01-4	~	1.9	<	0.11	

NOTES:
Q = Laboratory data qualifier
J = Estimated value reported

Technical Report

prepared for:

Walden Associates
16 Spring Street
Oyster Bay NY, 11771
Attention: Nora Brew

Report Date: 04/04/2024
Client Project ID: IMPL 0115.6 Imperial Cleaners
York Project (SDG) No.: 24C1627

Revision No. 1.0

Stratford, CT Laboratory IDs:
NY:10854, NJ: CT005, PA: 68-0440, CT: PH-0723

Richmond Hill, NY Laboratory IDs:
NY:12058, NJ: NY037, CT: PH-0721, NH: 2097,
EPA: NY01600

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: 04/04/2024
Client Project ID: IMPL 0115.6 Imperial Cleaners
York Project (SDG) No.: 24C1627

Walden Associates
16 Spring Street
Oyster Bay NY, 11771
Attention: Nora Brew

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 25, 2024 and listed below. The project was identified as your project: **IMPL 0115.6 Imperial Cleaners**.

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
24C1627-01	2 University Place	Indoor Ambient Air	03/22/2024	03/25/2024

General Notes for York Project (SDG) No.: 24C1627

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, NJ Cert No. CT005, PA Cert No. 68-04440, CT Cert No. PH-0723; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058, NJ Cert No. NY037, CT Cert No. PH-0721, NH Cert No. 2097, EPA Cert No. NY01600.

Approved By: Cassie L. Mosher

Cassie L. Mosher
Laboratory Manager

Date: 04/04/2024

Sample Information

Client Sample ID: **2 University Place** **York Sample ID:** **24C1627-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1627	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 22, 2024 10:01 am	03/25/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

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
540-84-1	*** 2,2,4-Trimethylpentane**	**1.06**		ug/m³	0.197	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:			

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	0.58	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.46	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.58	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.65	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.46	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.34	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.083	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.62	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.41	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.65	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.51	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.34	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.39	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.59	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.41	0.842	EPA TO-15	04/03/2024 12:00	04/04/2024 01:01	YR
							Certifications:	NELAC-NY12058,NJDEP-NY037		

Sample Information

Client Sample ID: **2 University Place** **York Sample ID:** **24C1627-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1627	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 22, 2024 10:01 am	03/25/2024

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
106-99-0	1,3-Butadiene	ND		ug/m³	0.56	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.51	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.39	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.51	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
123-91-1	1,4-Dioxane	ND		ug/m³	0.61	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
78-93-3	**2-Butanone**	**0.87**		ug/m³	0.25	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
591-78-6	*** 2-Hexanone**	**0.76**	TO-CCV	ug/m³	0.69	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
108-10-1	4-Methyl-2-pentanone	ND	TO-CCV	ug/m³	0.34	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
67-64-1	**Acetone**	**4.8**		ug/m³	0.40	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
107-13-1	**Acrylonitrile**	**3.3**		ug/m³	0.18	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
71-43-2	**Benzene**	**0.81**		ug/m³	0.27	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
100-44-7	Benzyl chloride	ND		ug/m³	0.44	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
75-27-4	Bromodichloromethane	ND		ug/m³	0.56	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
75-25-2	Bromoform	ND		ug/m³	0.87	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
74-83-9	Bromomethane	ND		ug/m³	0.33	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
56-23-5	**Carbon tetrachloride**	**0.48**	TO-CCV	ug/m³	0.13	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR
108-90-7	Chlorobenzene	ND		ug/m³	0.39	0.842	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:01	YR

Sample Information

Client Sample ID: 2 University Place

York Sample ID: 24C1627-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1627	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 22, 2024 10:01 am	03/25/2024

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
75-00-3	Chloroethane	ND		ug/m³	0.22	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
67-66-3	Chloroform	ND		ug/m³	0.41	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
74-87-3	**Chloromethane**	**1.0**		ug/m³	0.17	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.083	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.38	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
110-82-7	**Cyclohexane**	**0.58**		ug/m³	0.29	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
124-48-1	Dibromochloromethane	ND		ug/m³	0.72	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
75-71-8	**Dichlorodifluoromethane**	**2.4**		ug/m³	0.42	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
141-78-6	* Ethyl acetate	ND		ug/m³	0.61	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
100-41-4	**Ethyl Benzene**	**0.37**		ug/m³	0.37	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.90	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
67-63-0	**Isopropanol**	**0.83**		ug/m³	0.41	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
80-62-6	Methyl Methacrylate	ND		ug/m³	0.34	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
75-09-2	Methylene chloride	ND		ug/m³	0.58	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
91-20-3	* Naphthalene	ND		ug/m³	0.88	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NJDEP-NY037	YR
142-82-5	**n-Heptane**	**0.79**		ug/m³	0.35	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
110-54-3	**n-Hexane**	**1.8**		ug/m³	0.30	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
95-47-6	**o-Xylene**	**0.44**		ug/m³	0.37	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR
179601-23-1	**p- & m- Xylenes**	**1.2**		ug/m³	0.73	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01 NELAC-NY12058,NJDEP-NY037	YR

Sample Information

Client Sample ID: 2 University Place

York Sample ID: 24C1627-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1627	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 22, 2024 10:01 am	03/25/2024

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
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.41	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
115-07-1	*** Propylene**	**0.32**		ug/m³	0.14	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
100-42-5	Styrene	ND		ug/m³	0.36	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
127-18-4	Tetrachloroethylene	ND		ug/m³	0.57	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.50	0.842	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:01	YR
108-88-3	**Toluene**	**1.9**		ug/m³	0.32	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.33	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.38	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.2**		ug/m³	0.47	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
108-05-4	Vinyl acetate	ND		ug/m³	0.30	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
593-60-2	Vinyl bromide	ND		ug/m³	0.37	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.842	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:01	YR

Sample and Data Qualifiers Relating to This Work Order

TO-CCV The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

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 current NELAC/TNI 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.

Revision Description: This report has been revised to report in ppbv.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record - AIR

YORK Project No. 24K1627

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

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: Walden Environmental Engineering	Company:	Company:	IMPL0115.6	RUSH - Next Day
Address: 16 Spring Street Oyster Bay, NY 11771	Address: SAME	Address:	YOUR Project Name: Imperial Cleaners	RUSH - Two Day
Phone: 516-624-7200	Phone.:	Phone.:		RUSH - Three Day
Contact: Nora Brew	Contact:	Contact:		RUSH - Four Day
E-mail: nbrew@waldenassociates.com	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below) Jacqueline Bell

Air Matrix Codes

AI - Indoor Ambient Air
AO - Outdoor Amb. Air
AE - Vapor Extraction Well/ Process Gas/Effluent
AS - Soil Vapor/Sub-Slab

Samples From

New York X
New Jersey
Connecticut
Pennsylvania
Other

Report / EDD Type (circle selections)

Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced Deliv. | NYSDEC EQuIS
NY ASP B Package | NJDKQP | NJDEP SRP HazSite
Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ✓ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
2 University Place	3/21/24 - 3/22/24 10:18 - 10:01	AI	-30	-5	48326	19384	TO-15

Comments:

Detection Limits Required

≤ 1 ug/m³ ____ NYSDEC V1 Limits ____
Routine Survey ____ Other ____

Sampling Media

6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
	12:08 3/22/24	York	3/22/24 12:08		3/22/24 12:30
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
KBarkyork	3/24/24 445 PM	KBarkyork	3/25/24 915 AM		
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
					3/25/24 1327

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Jacqueline Bell Date/Time Prepared 3/21/24

Preparer's Affiliation Walden Environmental Engineering Phone No. 516-624-7208

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) N/A

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 2 + Basement Building age ~1929

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Doors/windows

Airflow near source

Garage door - slight draft

Outdoor air infiltration

from outside through garage door

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with Vinyl	
e. Concrete floor:	unsealed	sealed	sealed with ~~[illegible]~~	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 0 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Garage sealed & not opened during sampling

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	finished basement / garage
1st Floor	not inspected
2nd Floor	not inspected
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? (Y) / N

b. Does the garage have a separate heating unit? Y / (N) / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify generator & gas can

d. Has the building ever had a fire? Y / (N) When? _____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y /(N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y /(N) Where & When? _____

l. Have air fresheners been used recently? Y /(N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y /(N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

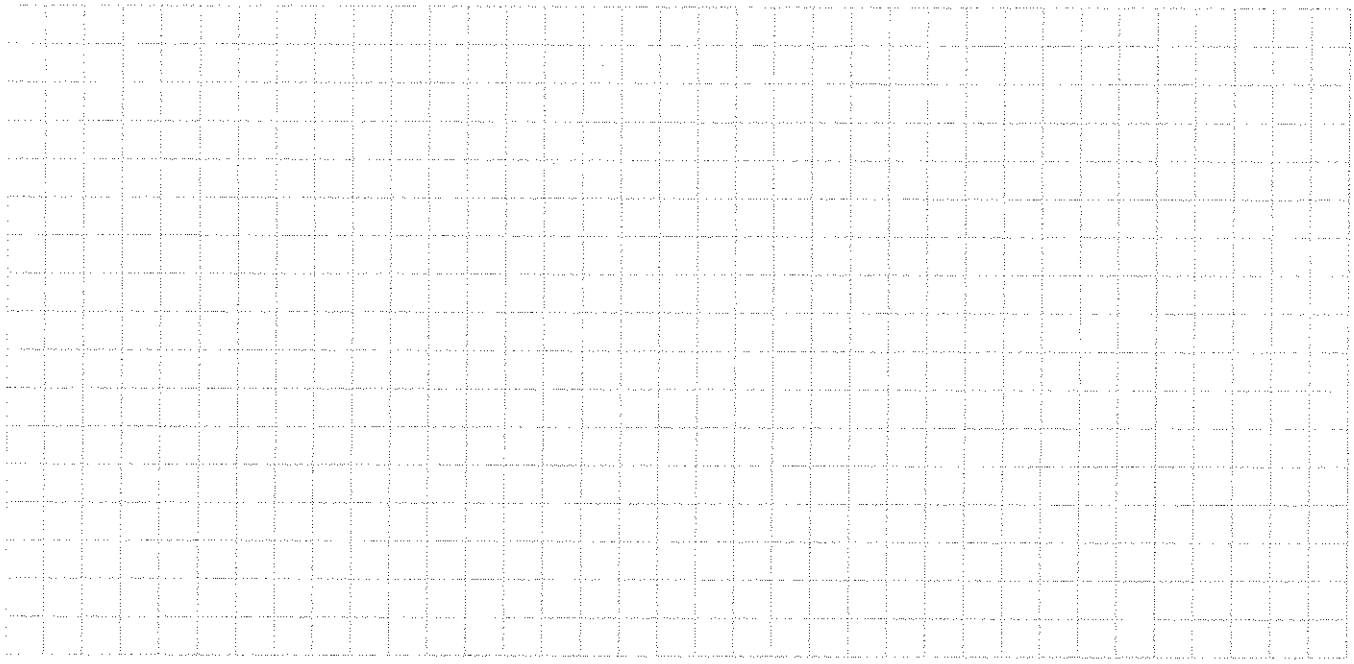
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

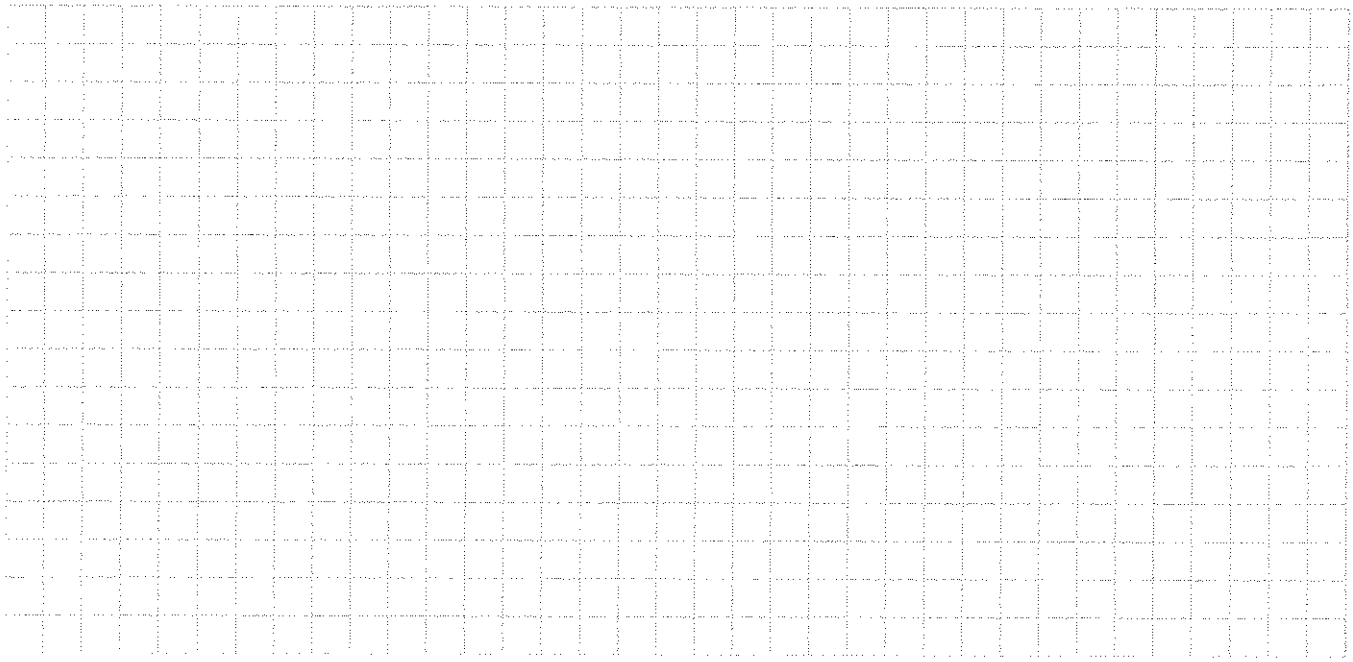
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



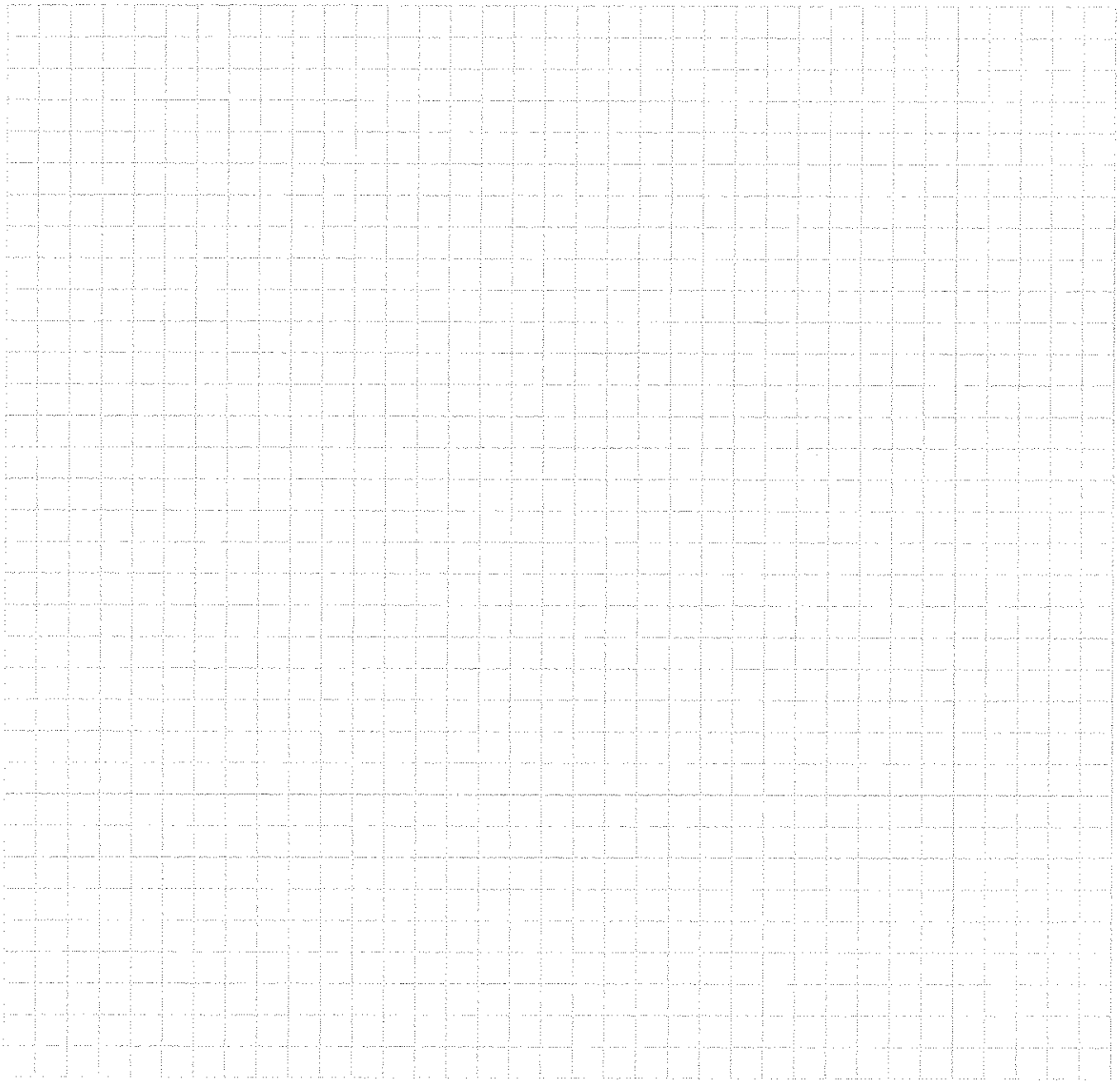
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
	Scotts Outdoor Cleaner multi Purpose	1Gal				
	kitchen tooth silicone					
	heavy duty Cleaning wipes					
	varathane woodstain	237mL x2				
	BEHR Direct-to-metal	3.67L				
	varathane polyurethane	3.78L				
	BEHR Rutt & Scuff Defense	887mL				
	Rustoleum Chalked	887mL				
	Benjamin moore color samples	7.87oz x3				
	Rain-X All season	1Gal				
	Preen Garden weed preventer	22lbs				
	fertilizer	50lb				
	gas canister					

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT F

6 University Place Indoor Air Sampling Data

6 University Place
Lake Success, NY 11020

Indoor Air Sampling Results - March 2024

Chemical Compound	CAS No.	NYSDOH Air Guideline Values (AGVs)	USEPA BASE Indoor Air 90th Percentile Conc (µg/m3)	6 University Place Indoor Air Sample 3/20 to 3/21/2024		
		µg/m3	µg/m3	µg/m3		Q
1,1,1,2-Tetrachloroethane	630-20-6	~	~	<	0.56	
1,1,1-Trichloroethane	71-55-6	~	20.6	<	0.44	
1,1,2,2-Tetrachloroethane	79-34-5	~	~	<	0.56	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	76-13-1	~	3.5	<	0.62	
1,1,2-Trichloroethane	79-00-5	~	1.5	<	0.44	
1,1-Dichloroethane	75-34-3	~	0.7	<	0.33	
1,1-Dichloroethylene	75-35-4	~	1.4	<	0.08	
1,2,4-Trichlorobenzene	120-82-1	~	6.8	<	0.60	
1,2,4-Trimethylbenzene	95-63-6	~	9.5	<	0.40	
1,2-Dibromoethane	106-93-4	~	1.5	<	0.63	
1,2-Dichlorobenzene	95-50-1	~	1.2	<	0.49	
1,2-Dichloroethane	107-06-2	~	0.9	<	0.33	
1,2-Dichloropropane	78-87-5	~	1.6	<	0.38	
1,2-Dichlorotetrafluoroethane	76-14-2	~	6.8	<	0.57	
1,3,5-Trimethylbenzene	108-67-8	~	3.7	<	0.40	
1,3-Butadiene	106-99-0	~	3	<	0.54	
1,3-Dichlorobenzene	541-73-1	~	2.4	<	0.49	
1,3-Dichloropropane	142-28-9	~	~	<	0.38	
1,4-Dichlorobenzene	106-46-7	~	5.5	<	0.49	
1,4-Dioxane	123-91-1	~	~	<	0.59	
2-Butanone	78-93-3	~	12		0.94	
2-Hexanone	591-78-6	~	~		0.80	J
3-Chloropropene	107-05-1	~	~	<	1.30	
4-Methyl-2-pentanone	108-10-1	~	6	<	0.33	
Acetone	67-64-1	~	98.9		6.00	
Acrylonitrile	107-13-1	~	~	<	0.18	
Benzene	71-43-2	~	9.4		0.44	
Benzyl chloride	100-44-7	~	6.8	<	0.42	
Bromodichloromethane	75-27-4	~	~	<	0.55	
Bromoform	75-25-2	~	~	<	0.84	
Bromomethane	74-83-9	~	1.7	<	0.32	
Carbon disulfide	75-15-0	~	4.2	<	0.25	
Carbon tetrachloride	56-23-5	~	1.3		0.46	J
Chlorobenzene	108-90-7	~	0.9	<	0.37	
Chloroethane	75-00-3	~	1.1	<	0.21	
Chloroform	67-66-3	~	1.1	<	0.40	
Chloromethane	74-87-3	~	3.7		0.97	
cis-1,2-Dichloroethylene	156-59-2	~	1.9	<	0.08	
cis-1,3-Dichloropropylene	10061-01-5	~	2.3	<	0.37	
Cyclohexane	110-82-7	~	~	<	0.28	
Dibromochloromethane	124-48-1	~	~	<	0.69	
Dichlorodifluoromethane	75-71-8	~	16.5		2.50	
Ethyl acetate	141-78-6	~	5.4	<	0.59	
Ethyl Benzene	100-41-4	~	5.7	<	0.35	
Hexachlorobutadiene	87-68-3	~	6.8	<	0.87	
Isopropanol	67-63-0	~	250		0.98	
Methyl Methacrylate	80-62-6	~	~	<	0.33	
Methyl tert-butyl ether (MTBE)	1634-04-4	~	11.5	<	0.29	
Methylene chloride	75-09-2	60	10	<	0.57	
Naphthalene	91-20-3	~	~	<	0.85	
n-Heptane	142-82-5	~	~	<	0.33	
n-Hexane	110-54-3	~	10.2	<	0.29	
o-Xylene	95-47-6	~	7.9	<	0.35	
p- & m- Xylenes	179601-23-1	~	~	<	0.71	
p-Ethyltoluene	622-96-8	~	3.6	<	0.40	
Propylene	115-07-1	~	~	<	0.14	
Styrene	100-42-5	~	1.9	<	0.35	
Tetrachloroethylene	127-18-4	30	15.9		0.72	
Tetrahydrofuran	109-99-9	~	~	<	0.48	
Toluene	108-88-3	~	43		0.58	
trans-1,2-Dichloroethylene	156-60-5	~	~	<	0.32	
trans-1,3-Dichloropropylene	10061-02-6	~	1.3	<	0.37	
Trichloroethylene	79-01-6	2	4.2	<	0.11	
Trichlorofluoromethane (Freon 11)	75-69-4	~	~		1.30	
Vinyl acetate	108-05-4	~	~	<	0.29	
Vinyl bromide	593-60-2	~	~	<	0.36	
Vinyl Chloride	75-01-4	~	1.9	<	0.10	

NOTES:
Q = Laboratory data qualifier
J = Estimated value reported

Technical Report

prepared for:

Walden Associates
16 Spring Street
Oyster Bay NY, 11771
Attention: Nora Brew

Report Date: 04/04/2024
Client Project ID: IMPL 0115.6 Imperial Cleaners
York Project (SDG) No.: 24C1629

Revision No. 1.0

Stratford, CT Laboratory IDs:
NY:10854, NJ: CT005, PA: 68-0440, CT: PH-0723

Richmond Hill, NY Laboratory IDs:
NY:12058, NJ: NY037, CT: PH-0721, NH: 2097,
EPA: NY01600

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: 04/04/2024
Client Project ID: IMPL 0115.6 Imperial Cleaners
York Project (SDG) No.: 24C1629

Walden Associates
16 Spring Street
Oyster Bay NY, 11771
Attention: Nora Brew

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 25, 2024 and listed below. The project was identified as your project: **IMPL 0115.6 Imperial Cleaners**.

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
24C1629-01	University Place 6	Indoor Ambient Air	03/21/2024	03/25/2024

General Notes for York Project (SDG) No.: 24C1629

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, NJ Cert No. CT005, PA Cert No. 68-04440, CT Cert No. PH-0723; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058, NJ Cert No. NY037, CT Cert No. PH-0721, NH Cert No. 2097, EPA Cert No. NY01600.

Approved By: Cassie L. Mosher

Cassie L. Mosher
Laboratory Manager

Date: 04/04/2024

Sample Information

Client Sample ID: **University Place 6** **York Sample ID:** **24C1629-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1629	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 21, 2024 12:00 pm	03/25/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

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
540-84-1	* 2,2,4-Trimethylpentane	ND		ug/m³	0.190	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR

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	0.56	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.44	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.56	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.62	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.44	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.33	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.081	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.60	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.63	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.49	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.33	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.38	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.57	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR

Sample Information

Client Sample ID: University Place 6 **York Sample ID:** 24C1629-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1629	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 21, 2024 12:00 pm	03/25/2024

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
106-99-0	1,3-Butadiene	ND		ug/m³	0.54	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.49	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.38	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.49	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
123-91-1	1,4-Dioxane	ND		ug/m³	0.59	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
78-93-3	**2-Butanone**	**0.94**		ug/m³	0.24	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
591-78-6	*** 2-Hexanone**	**0.80**	TO-CCV	ug/m³	0.67	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
108-10-1	4-Methyl-2-pentanone	ND	TO-CCV	ug/m³	0.33	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
67-64-1	**Acetone**	**6.0**		ug/m³	0.39	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
71-43-2	**Benzene**	**0.44**		ug/m³	0.26	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
100-44-7	Benzyl chloride	ND		ug/m³	0.42	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-27-4	Bromodichloromethane	ND		ug/m³	0.55	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-25-2	Bromoform	ND		ug/m³	0.84	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
74-83-9	Bromomethane	ND		ug/m³	0.32	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-15-0	Carbon disulfide	ND		ug/m³	0.25	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
56-23-5	**Carbon tetrachloride**	**0.46**	TO-CCV	ug/m³	0.13	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
108-90-7	Chlorobenzene	ND		ug/m³	0.37	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR

Sample Information

Client Sample ID: **University Place 6** **York Sample ID:** **24C1629-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1629	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 21, 2024 12:00 pm	03/25/2024

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
75-00-3	Chloroethane	ND		ug/m³	0.21	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
67-66-3	Chloroform	ND		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
74-87-3	**Chloromethane**	**0.97**		ug/m³	0.17	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.081	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.37	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
110-82-7	Cyclohexane	ND		ug/m³	0.28	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
124-48-1	Dibromochloromethane	ND		ug/m³	0.69	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-71-8	**Dichlorodifluoromethane**	**2.5**		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
141-78-6	* Ethyl acetate	ND		ug/m³	0.59	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
100-41-4	Ethyl Benzene	ND		ug/m³	0.35	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.87	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
67-63-0	**Isopropanol**	**0.98**		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
80-62-6	Methyl Methacrylate	ND		ug/m³	0.33	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.29	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
75-09-2	Methylene chloride	ND		ug/m³	0.57	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
91-20-3	* Naphthalene	ND		ug/m³	0.85	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NJDEP-NY037	04/04/2024 01:46	YR
142-82-5	n-Heptane	ND		ug/m³	0.33	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
110-54-3	n-Hexane	ND		ug/m³	0.29	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR
95-47-6	o-Xylene	ND		ug/m³	0.35	0.814	EPA TO-15 Certifications:	04/03/2024 12:00 NELAC-NY12058,NJDEP-NY037	04/04/2024 01:46	YR

Sample Information

Client Sample ID: University Place 6 **York Sample ID:** 24C1629-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1629	IMPL 0115.6 Imperial Cleaners	Indoor Ambient Air	March 21, 2024 12:00 pm	03/25/2024

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
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.71	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.40	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
115-07-1	* Propylene	ND		ug/m³	0.14	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
100-42-5	Styrene	ND		ug/m³	0.35	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
127-18-4	**Tetrachloroethylene**	**0.72**		ug/m³	0.55	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.48	0.814	EPA TO-15 Certifications:	04/03/2024 12:00	04/04/2024 01:46	YR
108-88-3	**Toluene**	**0.58**		ug/m³	0.31	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.32	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.37	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.3**		ug/m³	0.46	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
108-05-4	Vinyl acetate	ND		ug/m³	0.29	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
593-60-2	Vinyl bromide	ND		ug/m³	0.36	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.814	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/03/2024 12:00	04/04/2024 01:46	YR

Sample and Data Qualifiers Relating to This Work Order

TO-CCV The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

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 current NELAC/TNI 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.

Revision Description: This report has been revised to report in ppbv.

York Analytical Laboratories, Inc.
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www.yorklab.com

Field Chain-of-Custody Record - AIR

YORK Project No. 24C1029

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

Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: Wallen Environmental Engineering	Company:	Company:	Imp L0115.6	RUSH - Next Day
Address: 165 Spring St Sayville NY 11771	Address:	Address:	**YOUR Project Name**	RUSH - Two Day
Phone: 516-624-7200	Phone: SAME	Phone:	Imperial Cleaners	RUSH - Three Day
Contact: Nora Brew	Contact:	Contact:		RUSH - Four Day
E-mail: nbrew@wallenassociates.com	E-mail:	E-mail:	YOUR PO#:	**Standard (5-7 Day)** X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below)
Jacqueline Bell

Air Matrix Codes	Samples From	Report / EDD Type (circle selections)			YORK Reg. Comp.
AI - Indoor Ambient Air	New York X	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
AO - Outdoor Amb. Air	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	
AE - Vapor Extraction Well/ Process Gas/Effluent	Connecticut	NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS	
	Pennsylvania	NY ASP B Package	NJDKQP	NJDEP SRP HazSite	
AS - Soil Vapor/Sub-Slab	Other	Other:			

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ✓ ppbv ✓ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
University Place 6	3/20/24 - 3/21/24 1210 - 1200	AI	-30	-4	36860	7085	TO-15

Comments:

Detection Limits Required
≤ 1 ug/m³ ____ NYSDEC V1 Limits ____
Routine Survey ____ Other ____

Sampling Media
6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Jacqueline Bell 12:08	3/22/24	York	3/22/24 1208		3/22/24 1250
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
K Barkyork	3/22/24 445pm	K Barkyork	3/25/24 915Am		
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
				[illegible]	03/25/24 1327

OSR – 3 6 University Place (formerly 4)

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Jacqueline Bell Date/Time Prepared 3/20/24

Preparer's Affiliation Walden Environmental Engineering Phone No. 716-634-7209

Purpose of Investigation SVI follow-up

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	(Colonial)
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? N/A

If the property is commercial, type? N/A

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 2 + B Building age ~1929

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

_____

_____

_____

Airflow near source

_____

_____

_____

Outdoor air infiltration

_____

_____

_____

Infiltration into air ducts

_____

_____

_____

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered – except laundry room	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with paint	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished – except laundry room	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: natural gas

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time (Occasionally) Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	laundry storage
1st Floor	kitchen, playroom, living areas
2nd Floor	bedrooms
3rd Floor	
4th Floor	

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage? (Y) / N

b. Does the garage have a separate heating unit? Y (N) / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? (Y) / N When & Type? _____

i. Have cosmetic products been used recently? (Y) / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? _____

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
No
(Unknown)

Is there a radon mitigation system for the building/structure? (Y) / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

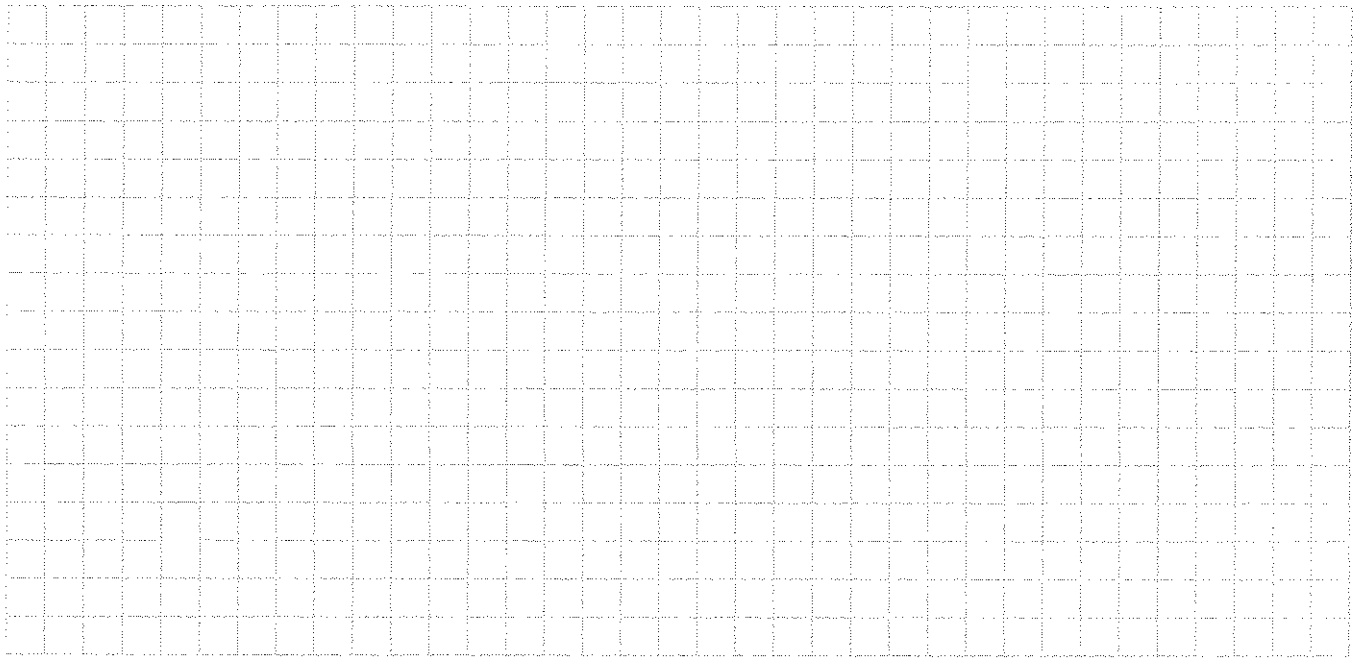
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

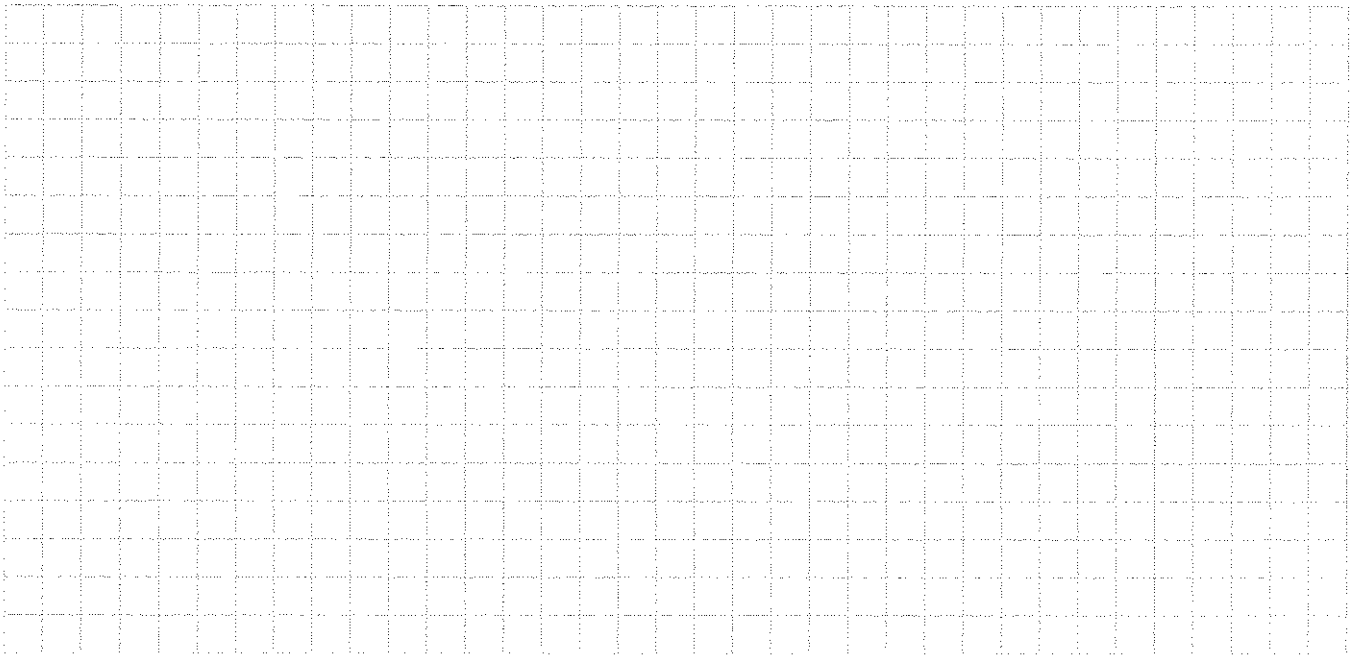
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



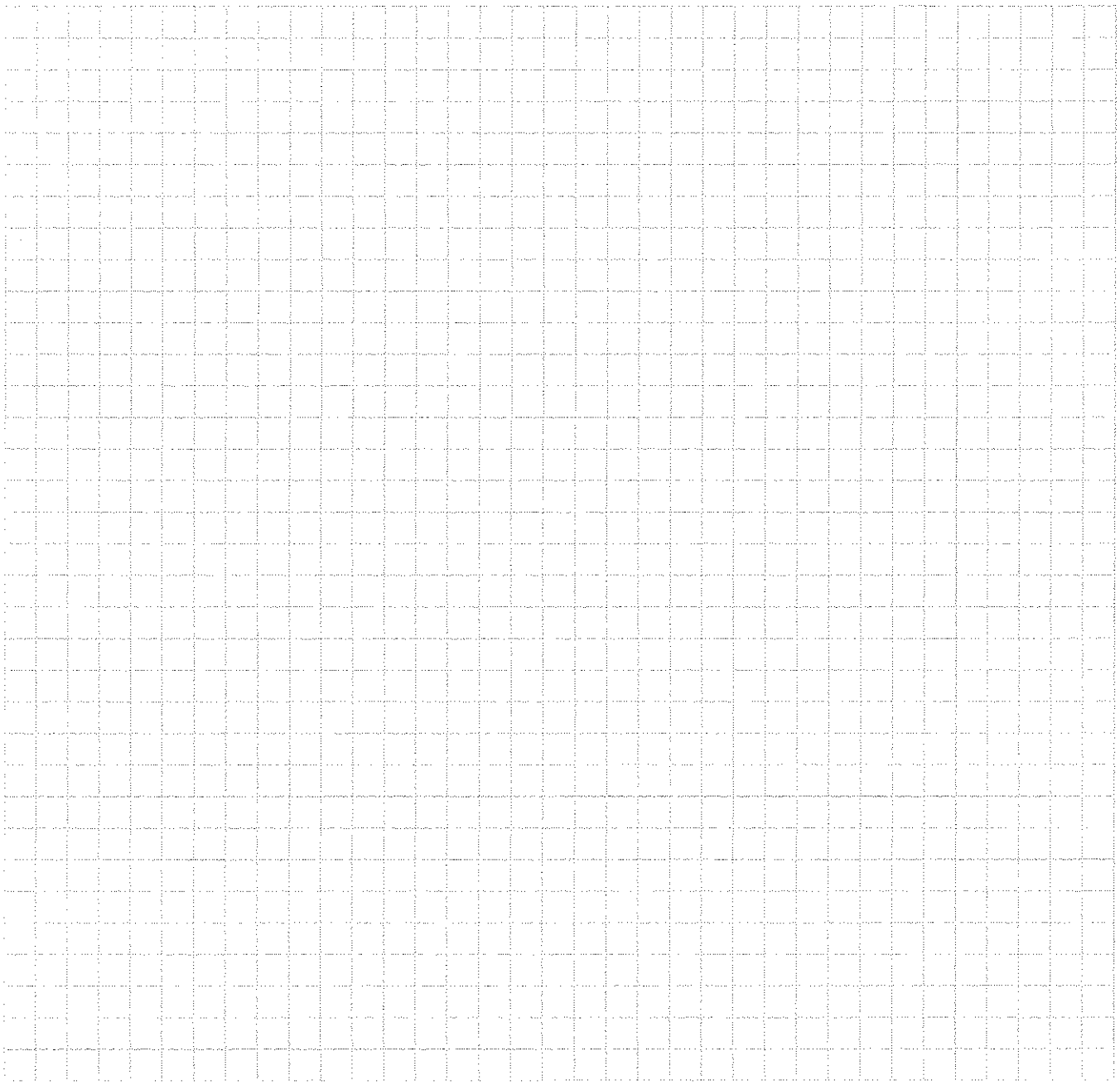
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	Tide Laundry Detergent	138g		Basement Laundry Room		
	Fabric Softner	2qts		Basement Laundy Room		
	Odorless Turpenoid	32oz		Basement Bathroom		
	Fast open 32	19oz		Basement Bathroom		
	glade odor solutions	32oz		Basement Bathroom		
	Epsom Salt	4lbs		Basement Bathroom		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.