INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT

Brownfield Cleanup Program

May 17, 2024 *(Revised September 16, 2025)*

Submitted for:

Former El Puente Site
98, 100, and 104 South 4th Street
Brooklyn, NY
Block: 2443 Lot: 13
NYSDEC BCP Site Number C224260

Prepared for:

100 S 4th St LLC
P.O. Box 1606
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Submitted to:

New York State Department of Environmental Conservation
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101

Project Number:
13817

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LIST OF ACRONYMS

Acronym	Definition
AGV	Air Guidance Value
AOC	Area of Concern
ASTM	American Society for Testing and Materials
AST	Aboveground Storage Tank
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
fbg	feet below grade
CAMP	Community Air Monitoring Program
COC	Contaminant of Concern
CVOC	Chlorinated Volatile Organic Compound
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DUSR	Data Usability Summary Report
EDD	Electronic data deliverable
EDR	Environmental Data Resources
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
EPA	United Stated Environmental Protection Agency
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
FINDS	Facility Index System/Facility Registry System
FWRIA	Fish and Wildlife Resources Impact Analysis
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
IDW	Investigation Derived Waste
LNAPL	Light Non-Aqueous Phase Liquid
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	New York Codes, Rules, and Regulations
NYSDOH	New York State Department of Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	Department of Transportation
NTU	Nephelometric Turbidity Units
ORP	Oxidation-Reduction Potential
PAH	Polycyclic Aromatic Hydrocarbon

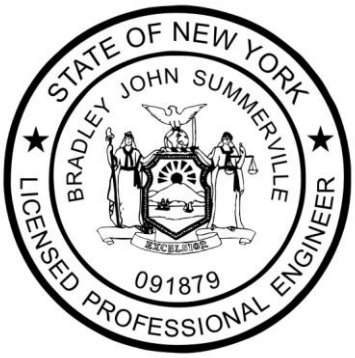
Acronym	Definition
PBS	Petroleum Bulk Storage
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PID	Photoionization Detector
PPE	Personal Protective Equipment
ppm	Parts per million
ppm_v	Parts per million by volume
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
SCO	Soil Cleanup Objective
SSDS	Sub Slab Depressurization System
SMP	Soil Management Plan
SQG	Small Quantity Generator
SVOC	Semi Volatile Organic Compound
TAL	Target Analyte List
TCA	Trichloroethane
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound

CERTIFICATION

I, Brad Summerville, certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Interim Remedial Measures Work Plan was implemented and that all construction activities were completed in substantial conformance with the DER-approved Interim Remedial Measures Work Plan.

_____ 9/16/25_____

Brad Summerville, Professional Engineer



1 INTRODUCTION

Impact Environmental Engineering & Geology, PLLC (IEEG) was retained by 100 S 4th St LLC (the "Volunteer") to complete Interim Remedial Measures (IRM) as indicated in the previously approved Interim Remedial Work Plan for the property located at 98, 100, and 104 South 4th Street, Brooklyn, New York (the "Site"). A Site Location Map is provided as **Plate 1**. The Volunteer was accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) under a NYSDEC Brownfield Cleanup Agreement (BCA), dated June 23, 2020, for Site No. C 224260. The above referenced work plan was approved on March 2, 2022.

1.1 Purpose and Scope

The IRM Work was performed in accordance with the NYSDOH document "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" October 2006, and subsequent updates in May 2017. The objective of this IRM was to install an active Sub-Slab Depressurization System (SSDS) for the Site (98, 100, and 104 South 4th Street, Brooklyn, NY), as required in email correspondence from the NYSDEC and NYSDOH on July 15, 2021 (see **Appendix A**). Per this email correspondence, following the completion and submission of the IEEG Soil Vapor Intrusion Remedial Investigation Report (SVI RIR) on June 1, 2021 (and amended on August 2, 2021), due to the elevated concentrations of trichloroethene (TCE) in both indoor air and sub-slab soil vapor within Building #3 (98 South 4th Street) and building #2 (100 South 4th Street), an IRM is required to address exposures in all three buildings.

The objective of the SSDS is to create and maintain a minimum negative pressure differential of -0.004 inches of water column (wci), below all concrete slabs which function as boundaries between sub-slab space and occupied interior space. Achieving a pressure differential of -0.004 wci (1 Pascal) across the slab is generally considered sufficient to mitigate vapor intrusion based on available industry guidance. Once an SSDS was installed, testing was performed to verify the extension of the pressure field to ensure that performance objectives were met.

The investigative protocols used for this assessment were based, in part, upon the following document: 1) the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates.

2 SITE CHARACTERISTICS

2.1 Site Description

The Site is situated on the south side of South 4th Street between Bedford Avenue and Berry Street in the Greenpoint neighborhood of Brooklyn, New York. The Site consists of a single parcel of land assigned New York City Tax Map Designation: Section 2, Block 2443, and Lot 13, and is in an area primarily comprised of residential and commercial properties within a historically industrial area (refer to **Plate 2**). The Site is located in a mixed-use district with an M1-2/R6 and MX-8 zoning designation. Based on review of sixty-five (65) historical New York City Zoning Maps covering the Site area from December 1961 through December 2018, the Site has had an M1-2/R6 zoning designation without residential overlays since March 2006, prior to which it was historically zoned M1-1. The NYC department of City Planning describes the M1—2/R6 designation as developed in built-up medium density areas consisting of multi-story lofts in districts that typically include light industrial uses and the MX-8 designation as one of mixed-use.

2.1.1 Site Conditions

The Site is currently developed with three (3) adjoining buildings: a multi-story structure made up of a 6-story, primarily residential structure in the center with a partial sub-grade cellar (100 South 4th Street) flanked by two (2) smaller 1-story structures (98 South 4th Street and 104 South 4th Street), with 98 South 4th Street also containing a partial sub-grade cellar (see **Plate 4**). The three buildings have a combined footprint of approximately 21,500 square feet (SF). Aside from narrow concrete paved patios on the south side of 98 South 4th Street and 104 South 4th Street, and a narrow light and air easement on the south side of 100 South 4th Street, the surface area of the site is covered entirely by the footprint of the buildings.

The buildings currently receive electrical and natural gas service from Con Edison and National Grid respectively, potable water from the New York City (NYC) municipal water system, while sanitary waste is reportedly handled by the NYC municipal public sanitary sewer system. Storm water runoff for the Site is handled via the municipal storm water drainage system located along South 4th Street.

2.1.2 Description of Surrounding Properties

The surrounding land parcels have a combination of residential and commercial uses. The Site is bordered to the north by South 4th Street and several three and five story residential buildings, to the east by a four-story residential apartment building with a commercial first floor, to the south by a multi-story residential

apartment building and a multi-story office building, and to the west by a concrete paved driveway, one four-story residential apartment building and one three-story residential home.

2.2 Physical Setting of the Site

2.2.1 Topography

The Site is located within the Atlantic Coastal Plain Physiographic Provence. The elevation of the Site, as presented on the United States Geologic Survey (USGS), Brooklyn Quadrangle Map, is approximately 50 feet above mean sea level (amsl). The Site Topographic Map is included as **Plate 3** and indicates the Site area has relatively flat topography. The nearest surface water body to the Site is East River (which feeds into Upper Bay), located approximately 0.28 miles (or 1,410 feet) to the west-northwest.

2.2.2 Regional Geology and Hydrogeology

Brooklyn is located in the western portion of Long Island, New York. Long Island consists of a wedge-shaped mass of un-consolidated deposits that overlie ancient basement rock. The thickness of these deposits range from approximately 100 feet on the Island's north shore to approximately 2,000 feet in some portions of the south shore. These deposits contain groundwater that is a key source of drinking water for the Island's over 3.1 million residents. The major land-forms of Long Island of importance to the hydrologic system are the moraines and outwash plains, which originated from glacial activity. The moraines represent the farthest extent of the glacial advances. The moraines consist of till, which is a poorly sorted mixture of sand, silt, clay, gravel and boulders. The till is poor to moderately permeable in most areas. Outwash plains are located to the south of the moraines. The outwash plains were formed by the action of glacial melt water streams, which eroded the headland material of the moraines and laid down deposits of well-sorted sands, silts and gravels. These outwash deposits have a moderate to high permeability.

Based upon the topographic map (USGS – Brooklyn Quadrangle) and proximity to the East River, regional groundwater flow direction is presumed to be west to southwest. It should be noted that there may be localized variations in subsurface hydrology created by sewers, wells and other anthropogenic structures. Hydrologic conditions in the vicinity of the Site may be subject to variations in seasonal precipitation and geological conditions not evident during review of publicly available records. An accurate determination of groundwater depth and flow at the Site requires a site-specific ground-water study.

The topographic map indicates the Site elevation is approximately 50 feet above mean sea level (amsl). The “USGS Groundwater Conditions on Long Island” map indicates that groundwater below the Site is

situated at less than 5 feet amsl. Thus, the estimated regional groundwater elevation at the Site is approximately 45-49 feet below grade surface (bgs).

2.2.3 Site Specific Geology and Hydrogeology

Based on NYSDEC records, obtained by IEEG, soil borings conducted in 1996 at the Site identified fill materials to a depth of approximately 7 feet below grade from the first floor of 98 S. 4th St and to a depth of approximately 6 feet below the basement floor of 100 S. 4th St. Beneath the surface fill layer is sand and silt to a depth of at least 17 feet below grade. These previous borings also identified groundwater at approximately 17 feet bgs, contrary to information provided on the USGS Groundwater Conditions map.

3 SITE BACKGROUND

The Site buildings are currently occupied. The westernmost building, 98 South 4th Street is a one-story building comprised of three individual retail spaces (a, b, and c). 98a is occupied by a catering facility, 98b is occupied by a CrossFit gym, and 98c is currently vacant. 100 South 4th Street is a 7-story building currently utilized as a residential apartment building. Finally, 104 South 4th Street is a one story building currently occupied by a bar/restaurant (see **Plate 4 – Site Plan**). The following sections describe the historical Site use, the findings from previous environmental investigations completed by IEEG and others for the Site, and a summary of the identified areas of concern (AOCs).

3.1 Historical Site Use

Through review of historical records, New York City records, NYC databases and environmental databases for the Site, the following is a summary of the information identified:

- The Site was originally developed with small residential structures from circa 1887 through to circa 1904, at which point a large portion of the Site was developed with a large multi-story building occupied by “Gretsch Musical Instruments”.
- Circa 1918, the large multi-story building was reportedly occupied by “Interstate Electric Novelty Co.”
- Circa 1935, the large building was reportedly occupied by “Celluloid Works”, with a smaller building on the east side of the property being occupied by “Dyeing”. At this time, the western portion of the Site was unoccupied.
- Circa 1945, the large building was reportedly occupied by “Slomowitz Upholstery Supply.”
- Circa 1947, the small building on the eastern portion of the Site was labelled as “Dyeing and Cleaning”.
- In 1949, a Certificate of Occupancy (CO) was issued for a new building on Block 2443, Lot 13, to be used as an “Adhesives Manufacturing” factory.
- Circa 1950, the three (3) onsite buildings were labelled as “Factories”.
- Circa 1976, the eastern smaller building was listed as being occupied by “Rainbow Pigment Co.”
- Between 1977 and 2007, the two western buildings were reportedly occupied by “Factories”, while the eastern building was occupied by a “warehouse”.
- In 2007, a CO was issued for the 7-story building, to be altered for use as a 74-unit residential apartment building.

3.2 Proposed Site Redevelopment Plan

100 S 4th St LLC is not proposing any alterations to the current building layout or usage. The building will remain as is.

3.3 Summary of Previous SSDS Diagnostics Report by OBAR Systems Inc., April 2019

The following is a summary of a Diagnostics Report and Design Plan for the Site, produced by OBAR Systems Inc., on April 9, 2019 (see **Appendix B**). Relevant information ascertained from said report is below:

- The method used for diagnostic measurement and system design involved coring 2 5/8" suction holes in the concrete floors and 3/8" test holes at various distances from the suction holes. A specialized Sub Slab Diagnostic Vacuum (SSDV), capable of up to 120 cfm and a vacuum of 120 inches of water column (wci) was used with a variable speed controller to define the flow and vacuum characteristics of the soil beneath the slab. The range of applied vacuum and flow rate used for each suction point was determined by evaluating the baseline data taken in the maximum flow and vacuum test performed at the beginning of each sampling series. The number of test point locations at each suction point was determined based on the results of the first sampling series at that location. The data collected at each suction point series includes; maximum vacuum and airflow at the suction point, vacuum 1 foot away from the suction point (SSP1), vacuum at each test point at multiple vacuum speeds or flow rates, the distance each test point is from the suction point, and the speeds that each series was run at.
- The information obtained from each suction point was examined independently to identify the associated area of influence (AOI) and estimated radius of influence (ROI) for that location during the applied test conditions. The test data from all the suction points was examined collectively to determine the number of full-scale SSD system suction points required to address the areas of concern within the buildings. The test data was then used to determine the type and number of blowers required to effectively operate all of the full-scale SSD system suction points.
- Nine (9) suction points were installed in both 98 South 4th Street and 100 South 4th Street, to determine the above-mentioned ROI.
    - **Suction Point 1 (SP1)** was located on the main slab of the Session (the gym at 98b South 4th Street) tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area and to determine if communication was present between Session and Sword Smith. The primary sub slab fill encountered was sandy soils with some debris mixed in. This suction point revealed an ROI of approximately 20 feet

at 2 wci of applied vacuum and a 45cfm airflow yield. Vacuum was measured between Session and Sword Smith indicating there is no footing present between the spaces.

- **Suction Point 2 (SP2)** was located on the lower slab in the rear of the Session tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was very loose sandy soils and cinders. This suction point revealed an ROI of approximately 20 feet at 10 wci of applied vacuum and an 8cfm airflow yield.
- **Suction Point 3 (SP3)** was located the lower slab in Sword Smith (formerly located at 98c South 4th Street). The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was compacted brown soils. This suction point revealed an ROI of approximately 20-25 feet at 10 "w.c. of applied vacuum and a 10-cfm airflow yield, very similar to the lower slab in Session.
- **Suction Point 4 (SP4)** was located outside the kitchen in the Lemons and Olives (98a South 4th Street) tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was compacted sandy soils. With the kitchen exhaust fans off this suction point revealed an ROI of approximately 10 feet at 20 wci of applied vacuum and a 30cfm airflow yield. It was noted that this suction point was installed near a number of sub slab obstructions and as a result a second suction point (SP-9) was installed near the front of the space.
- **Suction Point 5 (SP5)** was located in the vacant space of the 6-story building. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was loose sandy soils. During the cleanout of the suction hole a cast iron pipe was encountered below the slab so only limited cleanout could be performed. However a series of tests was run and an ROI of approximately 15 feet at an applied vacuum of 30 wci and a 30cfm airflow yield was measured.
- **Suction Points 6 and 7 (SP6, SP7)** were located in mechanical areas on the ground floor of the six story building. The purpose of these suction points was to evaluate the ROI produced from full-scale suction points in these building areas and to determine if the data obtained at SP-5 was altered by the presence of the sub slab obstruction encountered. The primary sub slab fill encountered was loose sandy soils at both holes. An ROI of approximately 15-20 feet was measured at an applied vacuum of 10-12 wci and a 60cfm airflow yield.

- **Suction Point 8 (SP8)** was to be located in the mail room of the lobby however we could not penetrate the slab with a 3 foot long drill bit. We attempted to drill 2 other holes in the lobby area, one below the stairs and one in walkway, we could not penetrate the slab at either location.
- **Suction Point 9 (SP9)** was located near the front of the Lemons and Olives tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area and to check the results of SP4. The primary sub slab fill encountered was loose sandy soils, more typically of the rest of the building. An ROI of 15 feet at an applied vacuum of 1 wci and a 60cfm airflow yield was measured.

- Except for minor anomalies these buildings presented relatively homogenous soils resulting in ROIs ranging from 15-20 feet, at moderately applied vacuums.

3.4 Results of the IEEG Soil Vapor Intrusion Remedial Investigation (SVI RI), August 2, 2021

Please refer to **Plates 5, 6, and 7** for SVI RI sample locations and results.

The findings of the SVI RI (see **Appendix C**) are summarized as follows:

- A total of nine (9) sub-slab soil vapor points were sampled, along with 12 indoor air samples and one (1) outdoor ambient air sample.
- The concentrations of PCE in soil vapor ranged from 4.66 µg/m^3 at SV-4 (located in the stairwell, centrally located within 100 South 4th Street) up to 2,710 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). The TCE concentrations in soil vapor ranged from 5.7 µg/m^3 at SV-5b (located on the south portion of 104 South 4th Street) up to 3,260 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). In addition, concentrations of cis-1,2-DCE in soil vapor ranged from non-detect at SV-4, SV-5a, and SV-5b (located on the eastern portions of the property) up to 379 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). The concentrations of PCE, TCE, and cis-1,2 in soil vapor are lower beneath the central and eastern portions of the property, with the highest concentrations located in the southwest portion of the property. Finally, an elevated concentration of carbon tetrachloride was detected in one (1) of the nine (9) soil vapor samples at SV-5b. Based on the lack of evidence of this compound in the other soil vapor samples (or historic soil data), it appears that this detection is an anomaly, and not an indication of contamination

present beneath the property in this area. The presence of this compound will be further investigated during the second phase of the Remedial Investigation, which will include soil sampling in this area.

- The concentrations of PCE in indoor air ranged from 0.292 µg/m^3 at IA-4e (located in ground floor apartment #E, located within 100 South 4th Street) up to 2.55 µg/m^3 at IA-4c (located in ground floor apartment #C, located within 100 South 4th Street). The TCE concentrations in indoor air ranged from non-detect at IA-4d and IA-4e (located in ground floor apartments #D and #E, located within 100 South 4th Street) up to 2.14 µg/m^3 at IA-3 (located in 98c South 4th Street). In addition, concentrations of carbon tetrachloride in indoor air ranged from 0.39 µg/m^3 at IA-4a (located in ground floor apartment #A, located within 100 South 4th Street) up to 0.591 µg/m^3 at IA-4c (located in ground floor apartment #C, located within 100 South 4th Street). The concentrations of PCE and TCE in indoor air across the Site vary only marginally.
- Ambient concentrations of PCE and carbon tetrachloride were detected in the outdoor air sample OA-1, at concentrations of 0.325 µg/m^3 and 0.491 µg/m^3 respectively. These detections in outdoor air may be contributing to the indoor air detections of PCE and carbon tetrachloride, although likely to a minimal extent.

Source Area: The most prevalent COCs identified at the Site requiring mitigation, based on the NYSDOH Decision Matrices are PCE, TCE, and cis-1,2, chlorinated VOCs associated with metal-cleaning and degreasing, which may have been utilized during the property's usage as a manufacturing facility, or may be migrating onto the site from documented off-site cVOC sources to the south. Based on the distribution of the cVOCs detected in soil vapor, the potential source area for the cVOC at the Site is the southwest portion of the Site, proximal to the south adjoining BCP Site.

3.5 Adjacent BCP Site Investigation

The south adjacent property, located at 337 Berry Street and 99-105 South 5th Street, is a NYSDEC Brownfield Cleanup Program (BCP) project (No. C224233). The historical use of the subject property has been for both residential and commercial/government use. Dating back to 1887, the northern portion of the Site has been used for a wagon and auto shed, owned, or operated by the Water Purveyors Bureau and Dept. City Works, storage, and the City of N.Y. Dept. of Correction Garage, and the City of New York Landmark's Preservation Commission Salvage Warehouse. The southern portion of the Site has been used as residential, warehouse, and an auto body shop since 1887. The property is currently owned by the City of New York.

Information available for this property indicates that groundwater is located at approximately 45-feet below grade surface (bgs), and the regional groundwater flow beneath this property was to the west, towards the East River, based on the installation of four (4) monitoring wells in the area during a Remedial Investigation performed by Equity Environmental Engineering LLC in November 2016. Shallow (0-2' bgs) soil samples located along the northern portion of the property showed slightly elevated concentrations of the Chlorinated VOCs (cVOCs) 1,1,1-trichloroethane (1,1,1-TCA) and trichloroethene (TCE) at concentrations below their respective NYCRR Part 375 Unrestricted Use SCOs. No deeper soil samples were collected for VOC analysis. Concentrations of the cVOCs tetrachloroethylene (PCE) and trichloroethylene (TCE) were detected in groundwater samples collected in the northern portion of the property (MW-1) at a maximum concentration of 71.4 µg/kg and 27.2 µg/kg, respectively. Finally, elevated concentrations of the cVOCs TCE (max of 3,510 µg/m³), PCE (max of 2,870 µg/m³), and 1,1,1-TCA (max of 278 µg/m³) were detected in soil gas samples collected in the northern portion of the property.

The BCP volunteer has completed site remediation and construction at the site. The applicant currently operates a Soil Vapor Extraction (SVE) system along the northern portion of the property, which is now an open parking lot. Moreover, the newly developed 11-story mixed-use residential and commercial building, located on the southern side of the property, was constructed with a vapor barrier engineering control, along with an active Sub-Slab Depressurization System (SSDS).

A Periodic Review Report was prepared by Advanced Cleanup Technologies, Inc (ACT) in May 2019, per the approved site Management Plan (SMP). ACT was retained to perform operation, maintenance, and monitoring of the existing engineering controls at the site. The SVE system reportedly consists of four (4) PVC extraction points that extend 15-feet bgs, with 5-feet of screen. Horizontal piping is located approximately 4-feet bgs, and the piping is connected to a package treatment plant that consists of system controls, extraction monitor, and activated carbon canisters to remove VOCs from the extracted vapor. Per the report, influent and effluent samples were collected from the SVE system on March 11, 2019, and April 30, 2019. Influent concentrations of PCE were noted as 460 µg/m³ in March and 550 µg/m³ in April, while TCE was detected at 320 and 450 µg/m³, 1,1,1-TCA at 18 and 17 µg/m³, and finally Cis-1,2-dichloroethene (cis-1,2) at 5.8 and 15 µg/m³, respectively. Based on this data, it appears that, while the SVE system is running effectively, elevated concentrations of several cVOCs are still present in the subsurface soil vapor at concentrations requiring ongoing remediation.

4 INTERIM REMEDIAL MEASURES

This Interim Remedial Measures Work Plan was designed based on IEEG Sub-Slab Soil Vapor Intrusion Remedial Investigation Report (SVI RIR) dated August 2, 2021, additional site reconnaissance by IEEG, previous diagnostics data generated by OBAR Systems Inc. in April 2019, and in accordance with the NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion" document dated October 2006, NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010 (DER-10) and the subsequent updates. The IRM Work Plan consisted of the installation of a retro fitted active SSDS with the intention of depressurizing the slab beneath all three (3) onsite buildings, to mitigate the potential for sub-slab soil vapor intrusion into the indoor air.

4.1 Organizational Structure

Impact Environmental Engineering & Geology, PLLC

IEEG coordinated all Site activities implemented to achieve the interim remedial objectives defined in the IRM Work Plan. IEEG provided continual review of all quality control measures implemented by the contractors to ensure compliance with the Site's interim remedial objectives. As such, IEEG provided oversight services for the duration of the interim remedial activities.

Principal personnel from IEEG who participated in the remedial action included:

1. Kevin Kleaka, a professional geologist licensed in the State of New York is principal-in-charge of this project and as such he was responsible for all project elements and acted to ensure the success of the project.
2. Xin Yuan a professional engineer licensed in the State of New York, was the Remedial Engineer responsible for certifying that the interim remedial measures were completed in substantial conformance with the approved IRM Work Plan and/or NYSDEC-approved field changes. The Remedial Engineer has certified this IRM SSDS Construction Completion Report (CCR) that the remedial activities were observed by qualified environmental professionals under his supervision and that the remediation requirements set forth in the IRM Work Plan and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan.
3. Christopher Connolly is the Qualified Environmental Professional (QEP) for this project, and acted as the overall manager for the implementation of the interim remedial actions. In this capacity, Mr. Connolly was responsible for the overall coordination associated with implementation of IRM Work Plan. He coordinated and supervised IEEG project and field engineers/scientists, as well as subcontractors; to ensure adherence to and the successful

completion of IRM tasks; interfaced with the data validator during development of Data Usability Summary Reports and subsequent reporting and documentation of the work performed.

4. Christopher Connolly acted as the Project Scientist, responsible for direction of the field program for implementation of the interim remedial action tasks. Responsibilities included maintaining quality assurance policies related to various media sample collection, interface with the laboratory, direction of subcontractor activities, and ensuring the successful completion of all IRM field activities.
5. Dan Fruhauf acted as the Site Superintendent, keeping detailed records of all interim remedial activities and health and safety monitoring
6. Alex Keenan acted as the health and safety coordinator for the project.
7. Juliana de la Fuente was the Quality Assurance and Quality Control (QA/QC) officer and is responsible for the overall quality assurance and review of the project deliverables. She will interface with the Project Manager to address technical issues and provide quality control for the entire project.

Resumes of key personnel involved in the Remedial Action are included in **Appendix G**.

100 S 4th LLC

As a managing member of the Volunteer, 100 S 4th LLC, Mr. Ryan Howard coordinated communications with regulatory agencies, provided general oversight of all aspects of the remediation, review, and submission of all documents, publish community notifications, and address community concerns.

Alpha Analytical, Inc.

Alpha Analytical, Inc. (Alpha) was utilized for all related analytical requirements. Alpha is a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. All results have been reported in electronic format deliverables prepared in accordance with NYSDEC requirements. Formal laboratory qualifications and Quality Assurance/Quality Control (QA/QC) information packages for Alpha and any other analytical laboratories used for the project have been submitted to the NYSDEC or disposal facilities, as necessary.

4.2 Scope of Work

The installation of the active SSDS incorporated the following scope of work:

- Installation of four (4) SSDS "legs" connected to a total of 22 suction points throughout the three (3) Site buildings.
    - Leg #1 consists of six (6) suction points;
    - Leg #2 consists of five (5) suction points;
    - Leg #3 consists of six (6) suction points, and;
    - Leg #4 consists of five (5) suction points.
- Performance of transmission testing of each suction point using preexisting and newly installed permanent sub-slab soil vapor sampling points located throughout the Site (see **Plate 5** for preexisting permanent soil vapor [SV] sampling point locations, and newly installed Vapor Monitoring Points [VMP]), to determine the ROI of each suction point and the required power settings of the rooftop blowers.
- Installation of suction point vertical riser and overhead cast iron steel piping connecting the suction points together for each SSDS Leg.
- Installation of four (4) roof mounted SSDS blowers, one (1) for each leg of the system.
- Installation of failure alarms and in-line magnehelic vacuum gauges for each leg of the SSD system.
- Start-up testing was performed to verify the efficacy of the system.
- Submission of Daily Reports to the Department during all IRM-related field activities, pilot testing, SSDS installation, and startup testing (see **Appendix D**).
- Preparation of this IRM SSDS Construction Completion Report and Operation, Maintenance and Monitoring Plan (IRM SSDS CCR and OM&M) for review by the NYSDEC and NYSDOH

Details of the specific work called out above is described in the following sections.

4.2.1 Site Preparation

4.2.1.1 Mobilization

Mobilization was conducted as necessary for each phase of work at the site. These activities included:

a) Mobilization of equipment to the Site.
b) Field personnel orientation.
c) Installation of temporary perimeter fencing/barricades to delineate the work zones and act as a work site security measure,
d) Set up of decontamination facilities, which were as expected, limited due to the nature of the project.

e) Marking and staking of sampling/suction point locations and utility mark outs, where required.

4.2.1.2 Utility Markout

The presence of utilities on the Site was fully investigated prior to the performance of invasive work including excavation and drilling under this plan by using the One-Call System (811). Underground utilities may pose an electrocution, explosion, or other hazard during excavation or drilling activities. All invasive activities were performed in compliance with applicable laws and regulations including NYC Building Code to assure safety. Utility companies and other responsible authorities were contacted to locate and mark the locations. A copy of the Mark-Out Ticket was retained by the contractor prior to the start of drilling, excavation or other invasive subsurface operations. Overhead utilities were not of concern, as all work was performed on the interior of the site buildings.

The Volunteer and its contractors were solely responsible for the identification of utilities that might be affected by work under the IRM Work Plan and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this IRM Work Plan. The Volunteer and its contractors were solely responsible for safe execution of all invasive and other work performed under this IRM Work Plan. The Volunteer and its contractors obtained the local, State or Federal permits or approvals pertinent to such work that were required to perform work under this IRM Work Plan.

4.2.1.3 Equipment and Material Staging

Equipment and materials for the on-Site interim remedial measures were staged on-Site in a designated, secure area, and made safe for residential and commercial tenants/occupants.

4.2.1.4 Health and Safety Plan

Work performed in this IRM Work Plan was done in strict accordance with a site-specific Health and Safety Plan (HASP), which can be found in **Appendix D**.

4.2.1.5 Community Air Monitoring

Since the building the IRM was performed in is currently occupied by a mixture of commercial and residential tenants, IEEG employed a community air monitoring plan (CAMP), to protect the tenants from potentially harmful odors and particulates generated by the work. If the ambient air concentration of total

organic vapors proximal to the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities were to be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities would resume with continued monitoring. If the PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (pre-work conditions) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques would be employed. Work could continue with dust suppression techniques provided that PM-10 particulate levels do not exceed 150 mcg/m3 above the background level and provided that no visible dust is migrating from the work area. During the IRM ground intrusive activities (August 30, 2022, through October 12, 2022), neither the above-mentioned organic vapor nor dust thresholds were exceeded, thus no work stoppage or suppression techniques were required.

The Site-specific CAMP data can be found within Daily Status Reports, included as **Appendix D**.

4.2.1.6 Soil Management Plan

Materials generated during the installation of the SSDS suction pits, including concrete and sub-grade soils were managed in strict accordance with a site-specific Soil Management Plan (SMP), which can be found in the IRM Work Plan.

4.2.1.7 Demobilization

Demobilization included:

- Restoration of temporary access areas and areas that were disturbed to accommodate support areas (e.g., staging areas, decontamination areas, and storage areas),
- Equipment decontamination, and,
- General refuse disposal.

Equipment was decontaminated and demobilized at the completion of all field activities. In addition, all investigation and remediation derived waste was disposed of appropriately.

4.2.2 Pre-Installation Building Inspection

On August 26, 2022, prior to any ground intrusive activity or SSDS component installation, a thorough inspection of the site building interior, including building slab and sub-grade basement walls was performed

to determine the presence of any cracks or fissures that could promote vapor migration into the building. No such cracks or fissures were found that would negatively affect the operation and efficiency of the SSDS.

4.2.3 SSDS Suction Point Installation

The locations of the 22 suction points, designated SP-1 through SP-22 (see **Plate 8** - **SSDS Installation Map**) were determined based on an anticipated ROI of approximately 20-feet, based on the Diagnostics Report and Design Plan by OBAR Systems Inc., dated April 2019.

Between August 30, 2022, and October 25, 2022, the SSDS suction points were installed throughout the buildings by Clean Globe Environmental. Each suction point was first advanced with a 4-inch diameter core drill through the concrete slab, until the sub-slab soils/gravel was encountered. Soil within the hole was negligible, gravel was removed using a decontaminated stainless-steel hand auger or shop-vacuum, to a depth of approximately 2-feet below grade surface. Gravel from the suction pit was reused (no material was disposed of). The balance of the bore hole was backfilled to just below the base of the building slab with clean #2 Well gravel. (Well Gravel was pre-approved by the NYSDEC/NYSDOH) with no fines based on sieve analysis.

4.2.4 Suction Point Transmission Testing

Following the installation of the suction points, each point was tested to ensure a sufficient ROI. A vacuum was then applied using a mobile blower with variable vacuum control, temporarily attached to the suction point. Sub-slab pressure differentials were tested using a digital manometer at permanent monitoring points, either previously installed, or installed specifically for testing the suction point ROI.

4.2.5 Vertical Riser and Overhead Piping

Once the suction point locations were opened, 3-inch diameter 0.020 Slot PVC screen point with a 3” coupled cast iron riser pipe was inserted vertically into the suction point holes. Morie well gravel was placed around the screen the screen. The riser was extended up to the ceiling to connect via a “T” fitting with the overhead piping. Locations of overhead piping can be seen in **Plate 8**. The suction point was sealed with cement to ensure sub-slab soil vapor does not migrate into the indoor air. For each leg of the SSDS, suction points and riser piping were connected to common overhead 3-inch cast iron piping that was run along the ceiling line. All overhead piping was installed as high as possible (and above drop ceilings where applicable) within the building without the possibility of water traps. Overhead piping was pitched toward the suction points to drain condensation. Vertical riser piping was secured to the adjacent wall(s) with strut, strut clamps, and

metal pipe straps. Overhead piping was secured with threaded rod and swivel hoop hangers. All exposed piping was labelled with stickers indicating that the system is a vapor intrusion mitigation system.

4.2.6 Roof Mounted SSDS Blower Installation

Based on the results of the transmission tests during the installation of each suction point, between August 30, 2022, and October 25, 2022, the SSDS blower size was determined. Two (2) variable frequency OBAR GBR 89HA blowers were installed on the roof of 98 South 4th Street (for Legs #1 and #2), and two (2) variable frequency OBAR GBR 89HA blowers were installed on the roof of 104 South 4th Street (for Legs #3 and #4). Exterior piping leading from inside each building was constructed of 3-inch diameter cast iron inside to 3-inch diameter PVC outside of the building, as per FDNY regulations, and connected to the SSDS blowers (see **Appendix H** for blower specifications). To avoid entry of extracted subsurface vapors into the building, or any nearby building, the vent pipes exhaust stacks were installed to be:

a) Above the eaves of the roof (preferably above the highest eave of the building, at least 12-inches above the surface of the roof)
b) At least 10-feet above ground level
c) At least 10-feet away from any opening that is less than 2-feet below the exhaust point, and
d) At least 10-feet away from any adjoining or adjacent buildings, HVAC intakes, or supply registers.

All electrical work was performed by a licensed electrician in accordance with all local and state codes. The blowers were connected to the required individual 220 volt dedicated circuit breakers.

4.2.7 Failure Alarm and Vacuum Gauge Installation

Following the completion of each SSDS leg, electronic low vacuum alarms were installed in the cast iron piping within the buildings. The failure alarms have a red light that will illuminate, and an alarm that will sound, should the system fail (see **Appendix E** for Photographs, and **Appendix H** for SSDS Specifications). The alarms were installed in common areas of the building so that the building staff could easily gain access to them without having to enter individual apartments. U-tube Manometers were installed on each individual riser to provide visual indication of the system's ongoing operation or potential vacuum failure. The alarm system is accompanied by a sticker/label showing contact information for the property management company, should the failure alarms sound. Prior to the startup of the SSDS, building occupants/tenants were instructed on the failure alarms location, operation, and what to do and who to contact should the alarm sound.

4.2.8 SSDS Startup Testing

On November 16, 2022, prior to the initiation of the active SSDS, static sub-slab pressure readings were collected to verify the absence of vacuum or positive pressure from other potential sources. None were found. Start-up testing was then performed to verify the ROI of each individual riser, and subsequently in concert with the other sub-slab risers' readings under to establish the efficacy of each individual leg of the SSDS, as well as the entire SSDS.

The following sections describe the scope of work of the startup test on November 16, 2022.

4.2.8.1 Pre-Operation Sub-Slab Pressure Readings

Prior to SSDS operation, pressure readings were collected from existing sub-slab soil vapor points (installed as part of the SVI RI, see **Plate 5**) and additional testing ports installed as part of the suction point transmission testing (detailed in Section 4.1.2), using a digital manometer, to determine the pressure differentials beneath the building slab under static conditions.

4.2.8.2 System Efficacy Testing

Initially, the rooftop blower for each individual leg was activated and left to run for approximately 60-minutes, after which pressure differential readings were collected from associated test points in the building slab within 98c and 98b South 4th Street using a digital manometer, to ensure pressure readings of at least -0.004 wci were achieved. Blower suction rates were adjusted to ensure pressure readings will remain within the recommended levels. Once the recommended pressure readings were achieved, the blower was deactivated for a minimum of 15-minutes before testing of subsequent legs.

The Leg #4 rooftop blower was the first to be activated. It was allowed to run for approximately 60-minutes, after which pressure differential readings were collected from associated test points in the building slab within 98b and 98c South 4th Street, along with points located in the western portion of 100 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci was achieved. Blower suction rates were adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings were achieved, the Leg #1 blower was deactivated for a minimum of 15-minutes.

The Leg #1 rooftop blower was next be activated and left to run for approximately 60-minutes, after which pressure differential readings were collected from associated test points in the building slab within 98b and 98c South 4th Street, along with points located in the western portion of 100 South 4th Street, using a digital

manometer, to ensure pressure readings of at least -0.004 wci were achieved. Blower suction rates were adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings are achieved, the Leg #2 blower was deactivated for a minimum of 15-minutes.

The Leg #3 rooftop blower was next be activated and left to run for approximately 60-minutes, after which pressure differential readings were collected from associated test points in the building slab within the central and eastern portions of 100 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci were achieved. Blower suction rates were adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings were achieved, the Leg #1 blower was deactivated for a minimum of 15-minutes.

The Leg #2 rooftop blower was then activated and left to run for approximately 60-minutes, after which pressure differential readings were collected from associated test points in the building slab within the eastern portion of 100 South 4th Street and 104 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates were adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings were achieved (see **Appendix J**), the Leg #1 blower was deactivated for a minimum of 15-minutes.

Once each blower was confirmed to be running effectively, all four (4) blowers were activated. Pressure readings from across the entire Site were collected using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved in all test ports. The entire SSDS remains active as of November 18, 2022. During full SSDS operation, pressure readings were collected and recorded from test ports installed in the effluent portion of each Leg (see **Appendix J**). The results of the pressure differential readings from the vapor pins and vacuum monitoring points are below:

Table A

Location	SV-1a	VMP-1	SV-1b	SV-2a	SV-2b	SV-3a	SV-3b	VMP-4	SV-4	VMP-5	SV-5a	VMP-6	SV-5b
"WC	-0.025	-0.004	-0.005	-0.033	-0.004	-0.008	-0.010	-0.018	-0.036	-0.021	-0.059	-0.043	-0.007

Finally, effluent grab samples were collected from each of the Blower Legs testing port using lab certified clean 2.75 or 6-liter summa canisters, to determine the effluent concentrations. The summa canisters were fitted with a simple on/off (open/closed) valve, and once connected to the effluent sample port, was opened, and remain open until the cannister has a pressure reading of less than -4 psi, at which time the sample was

considered sufficient, and the valve closed. The four (4) effluent samples were analyzed for full list VOCs by USEPA test method TO-15, see **Appendix F**.

4.2.9 Post SSDS Startup Sampling

The SSDS was activated in November 2022. Post-start up sampling of sub-slab soil vapor, indoor air, and outdoor air, was performed on March 10, 2023, after deactivating the four (4) rooftop blowers for a minimum of 24 hours. The goal of the SSDS is to reduce chemical levels in the indoor air to as close to background levels as practicable. In addition, effluent samples from the test ports were collected prior to the SVI study on March 10, 2023. This sampling took place within the designated heating season, as per NYSDOH guidance. (see **Plate 5** for sample locations) and included nine (9) sub-slab soil vapor samples (designated SV-1a/b, SV-2a/b SV-3a/b, SV-4, and SV-5a/b). The sampling event mirrored the sampling performed in the previous IEEG Soil Vapor Intrusion Remedial Investigation 12 indoor air samples (designated IA-1, IA-2, IA-3, IA-4a through IA-4g, and IA-5), and one (1) outdoor ambient air sample (designated OA-1). Sub-slab soil vapor and indoor air samples were collected from the commercial/retail spaces were 8-hour samples, and those collected from residential spaces were 24-hour samples. Effluent grab samples were also collected from each of the four (4) SSDS leg testing ports, as detailed in Section 4.2.8.2. All samples were submitted to an ELAP certified Laboratory for analysis using USEPA Method TO-15 for VOCs. Pressure differential testing was also performed, the results of which are shown on **Plate 12**.

4.2.9.1 Post SSDS Startup Sampling Results

The results of the post SSDS Startup Sampling (see **Tables 2, 3**, and **4** and **Appendix F**) were as follows:

- The concentrations of PCE in soil vapor ranged from 0.77 µg/m^3 at SV-2A (located in the northern portion of 98b South 4th Street) up to 996 µg/m^3 at SV-2b (located in the south portion of 98a South 4th Street). The TCE concentrations in soil vapor ranged from 0.61 µg/m^3 at SV-2A (located in the northern portion of 98b South 4th Street) up to 1,370 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). In addition, concentrations of cis-1,2-DCE in soil vapor ranged from non-detect at SV-4, SV-5a, and SV-5b (located on the eastern portions of the property) up to 121 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). Non-CVOC matrices compound detections in sub slab soil vapor included: 1,1,1-trichloroethane between 1.04 ug/m^3 in SV-3b and 1.41 ug/m^3 in SB-3a, 1,2,3-trimethylbenzene at 1.26 ug/m^3 in SV-1b, m/p-xylenes between 1.2 ug/m^3 in SV-5a and 1.86 ug/m^3 in SV-5b, and toluene between 1.01 ug/m^3 in SV-3a and 2.43 ug/m^3 in in SV-4. The

concentrations of PCE, TCE, and cis-1,2-DCE in soil vapor are lower beneath the central and eastern portions of the property, with the highest concentrations located in the southwest portion of the property. The results of the sampling in soil vapor for the above compounds are significantly lower than samples collected prior to the installation of the SSDS.

- Elevated concentrations of carbon tetrachloride were detected in the nine (9) soil vapor samples ranging from 0.28 ug/m³ to 0.97 ug/m³. Based on the concentrations of this compound detected in ambient air samples (0.47 ug/m³), it appears that this is a background contaminant prevalent in the area. Furthermore, none of the detections of this compound resulted in anything more than a No Further Action Matrices decision.
- The concentrations of PCE in indoor air ranged from 0.31 µg/m^3 at IA-4f (located in ground floor apartment #F, located within 100 South 4th Street) up to 3.67 µg/m^3 at IA-1 (located in 98c South 4th Street). The TCE concentrations in indoor air ranged from non-detect at IA-4d, IA-4e, IA-4f, and IA-4g (located in ground floor apartments #D, #E, #F, and #G, located within 100 South 4th Street) up to 3.44 µg/m^3 at IA-3 (located in 98c South 4th Street). Several of the concentrations of TCE were close to being, or were above, the NYSDOH Air Guidance Value of 2 ug/m³. It was recommended by the NYSDOH that the system be re-evaluated to ensure a proper vacuum was being achieved, and any pathways of vapor into the building be sealed as needed. See UPDATE at the end of this section.
- Ambient concentrations of carbon tetrachloride were detected in the outdoor air sample OA-1, at a concentration of 0.47 µg/m^3. These detections in outdoor air may be contributing to the indoor air and sub-slab detections of carbon tetrachloride, although likely to a minimal extent.
- Concentrations of PCE detected in the effluent stack samples ranged from 8.48 µg/m^3 in Stack Leg #3 (located on the east of the Site) to 909 µg/m^3 in Leg Stack #1 (located on the west of the Site). Similarly, concentrations of TCE in the effluent stack samples ranged from non-detect in Stack Leg #3 (located on the east of the Site) to 897 µg/m^3 in Stack Leg #1 (located on the west of the Site). The concentrations align with the AOC being located in the southwest corner of the property, and the SSDS appears to be effectively removing contaminants from beneath the buildings.

<u>UPDATE (March 27, 2024):</u>

On multiple occasions during the winter of 2023/2024, IEEG technical and field staff mobilized to the Site to perform SSDS Operations, Maintenance, and Monitoring Work included draining standing water (condensation) from the exterior horizontal pipes via drainage ports, evaluating and levelling horizontal

piping to mitigate future condensation buildup, re-testing pressure differential readings on vacuum monitoring and soil vapor sampling pins, and conducting a round of soil vapor, indoor air, and ambient air testing. The second round of post-SSDS startup soil vapor intrusion investigation and effluent sampling was conducted on March 26 and March 27, 2024 (see **Plate 13** and **Plate 14**). The following is a summary of the findings of that testing.

Concentrations of TCE in indoor air samples have decreased significantly since the 2023 sampling event: TCE in IA-2 decreased from 1.9 ug/m³ to 0.37 ug/m³ (80.5%), TCE in IA-3 decreased from 3.44 ug/m³ to 0.27 ug/m³ (92.2%), TCE in IA-4b decreased from 2.76 ug/m³ to 0.23 ug/m³ (91.7%), and TCE in IA-4c decreased from 1.91 ug/m³ to non-detect (100%). See **Tables 5** and **6** for the full results of the 2024 post-SSDS startup SVI study and respective QAQC samples. The laboratory data and DUSR for the aforementioned sampling event is included in **Appendix F**.

Below is a table (Table B) showing the pressure differential readings collected in March 2023 and March 2024, which show the system continues to run effectively:

Table B

Date	Location	SV-1a	VMP-1	SV-1b	SV-2a	SV-2b	SV-3a	SV-3b	VMP-4	SV-4	VMP-5	SV-5a	VMP-6	SV-5b
3/23	**"WC**	-0.020	NA	-0.005	-0.006	NA	-0.032	-0.055	-0.005	-0.005	-0.008	-0.045	-0.038	-0.003
3/24	**"WC**	-0.025	-0.004	-0.005	-0.033	NA	NA	NA	-0.018	-0.036	-0.021	-0.059	-0.043	-0.007

NA = Not accessible
"WC = Inches of water column
SV = soil vapor pin location
VMP = vacuum monitoring point

An Operation, Maintenance, and Monitoring Work Plan is included as **Appendix K**.

UPDATE (April/May 2025):

Between April 24 and May 2, 2025, IEEG technical and field staff mobilized to the Site to undertake some SSDS upgrade work. This included the installation of electrically powered heat trace along the exterior rooftop horizontal piping to reduce the chances of standing water freezing during the winter, installation of piping insulation for additional cold protection, and the installation of vertical sump piping at the base of each exterior vertical riser to capture any standing water prior to it being pulled to the rooftop, an additional measure to reduce the chances of system failure due to freezing temperatures. This work has been completed, and the system efficacy will be tested in the 2025/2026 NYSDOH heating season.

4.2.9.2 Indoor Air Comparison Summary

To determine the efficacy of the operational active SSDS, the Indoor Air results from the March 2021, Soil Vapor Intrusion (SVI) Remedial Investigation, the March 2023, Post SSDS Startup SVI study, and the March 2024, annual OM&M SVI Study, were compared to the NYSDOH 2003 "Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes" (Table C1) Upper Fence criteria, and the USEPA 2001 "Building Assessment and Survey Evaluation (BASE) Database (Table C2) 90th Percentile criteria. See **Table 9**. Based on a review of the indoor air results from the three (3) referenced studies, while multiple VOC compounds were detected in several indoor air samples, the following compounds were found at concentrations above either the Table C1 Upper Fence and/or Table C2 90th Percentile criteria: acetone, ethanol, ethyl acetate, ethylbenzene, m,p-xylene, methyl ethyl ketone, o-xylene, styrene, tetrachloroethylene, tetrahydrofuran, and trichloroethene.

- Acetone was detected in sample IA-1 below the Table C1 Upper Fence Criteria but above the USEPA 90th Percentile in the March 2023 sample (110 ug/m3) and was unable to be sampled in March 2024. Acetone was also detected in IA-2 above the Table C1 Upper Fence Criteria and USEPA 90th Percentile in the March 2023 sample (179 ug/m3) but below both in the March 2024 sample (44.2 ug/m3). Acetone was not detected above the standards in the other IA samples.
- Ethanol was detected above both standards in multiple IA samples (max concentration of 3,010 ug/m3 in IA-2 from March 2023). However, in all but one case (IA-4D), the concentrations decreased significantly between the March 2023 and March 2024 sampling events.
- Ethyl Acetate was detected in samples IA-4A, IA-4C, IA-4D, IA-4G, and IA-5 at concentrations above the Table C1 Upper Fence Criteria and USEPA 90th Percentile in 2021, 2023, and 2024 sampling events. It is likely these concentrations were the result of continuing interior renovations and building maintenance at the Site.
- Ethylbenzene was detected in samples IA-4A and IA-4H above Table C1 Upper Fence Criteria and USEPA 90th Percentile in the March 2024 sampling event.
- m,p-xylene was detected in IA-4A, IA-4B, IA-4H, and IA-5 above either the Table C1 Upper Fence Criteria or USEPA 90th Percentile only in the March 2024 sampling event, potentially due to ongoing interior renovations and maintenance.
- Methyl Ethyl Ketone was detected above the Table C1 Upper Fence Criteria in IA-4C (18.7 ug/m3) in March 2023.

- o-xylene was detected in IA-4A and IA-4H above both the Table C1 Upper Fence Criteria and USEPA 90th Percentile only in the March 2024 sampling event, potentially due to ongoing interior renovations and maintenance.
- Styrene was detected in IA-1, IA-4A, and IA-5 at concentrations above the Table C1 Upper Fence Criteria in the March 2024 sampling event.
- Tetrahydrofuran was detected above the Table C1 Upper Fence Criteria in samples IA-1, IA-2, IA-4A, IA-4B, IA-4C, and IA-4H primarily in the March 2023 sampling event, and one instance in 2024.
- PCE was detected above the Table C1 Upper Fence Criteria in samples IA-1, IA-3, IA-4C, and IA-4E, in the March 2021 and March 2023 sampling events, but below the Table C1 Upper Fence Criteria in all samples in the March 2024 sampling event.
- TCE was detected above the Table C1 Upper Fence Criteria in samples IA-1, IA-2, IA-3, IA-4A, IA-4B, IA-4C, and IA-4F, in the March 2021 and/or March 2023 sampling events, but below the Table C1 Upper Fence Criteria in all samples in the March 2024 sampling event.

Based on a review of the indoor air data in Table 9, concentrations of petroleum distillate type VOCs are were found in the 2021, 2023, and 2024 data sets, and, as petroleum compounds were not considered of concern in the sub-slab soil vapor samples, are more indicative of the presence of building renovation and maintenance materials stored and used throughout the property during all sampling events. The compounds of concern found in sub-slab soil vapor samples, primarily PCE and TCE, were found in 2021 and 2023 sampling events, but were shown to have been reduced to below both Table C1 Upper Fence Criteria and USEPA 90th Percentile in the March 2024 sampling event. These results provide evidence that the functioning SSDS is operating effectively and is mitigating the migration of sub-slab soil vapor concentrations into the indoor air across the property.

4.2.10 Waste Disposal

Concrete waste (building slab) from the SSDS suction pit coring installation were transported and disposed of as construction and demolition waste at a permitted facility. The soil found beneath the building slab were very loose, and non-compacted. Limited soil was removed from the suction pits with a shop vac and were used to backfill the pits above the filtration gravel layer, below the concrete/cement pit seal at grade. No soil was disposed of as part of this IRM.

4.2.11 IRM Work Plan Deviations

1) The IRM Work Plan indicated that material waste generated from the installation of the suction pits (underlying soil) would be containerized in 55-gallon steel drums, characterized, and disposed of at a regulated facility. Due to the loose, uncompacted nature of the encountered soil, the minimal quantity generated was used as backfill for the individual SSDS suction pits atop the filtration gravel, but below the concrete seal at grade. It should be noted that all soils were field screened with a PID for evidence of volatile contamination prior to being used as backfill. No VOC detections were identified in any of the reused material. It was deemed protective of human health and the environment, due to the lack of evidence of contamination, placement below a sealed concrete building slab, along with the reduced requirement for additional backfill material to be transported to the site.

5 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of both the post SSDS installation sub-slab soil vapor sampling and corresponding indoor air sampling, the Interim Remedial Measures appear to be operating effectively and are mitigating vapor migration into the indoor air. The effectiveness is further displayed by the results of the effluent stack samples, showing the removal of COCs from the sub-slab environment, and by the vacuum pressure readings which show the sub-slab is being adequately depressurized.

In order to ensure the adequate ongoing efficacy of the SSDS, IEEG will be performing annual SSDS Operations, Maintenance, and Monitoring (OM&M) to determine if the system requires any upgrades and/or modifications (such as those performed in April and May 2025), to allow the system to run at its most efficient. The OM&M will also include pressure differential testing and indoor air sampling. An OM&M Work Plan will be submitted to the department under separate cover.

6 REFERENCES

1. IEEG Soil Vapor Intrusion Remedial Investigation Report, August 2, 2021
2. OBAR Systems, Inc., Diagnostics Report and Design Plan, April 2019
3. New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates.

IRM CCR

PLATES

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

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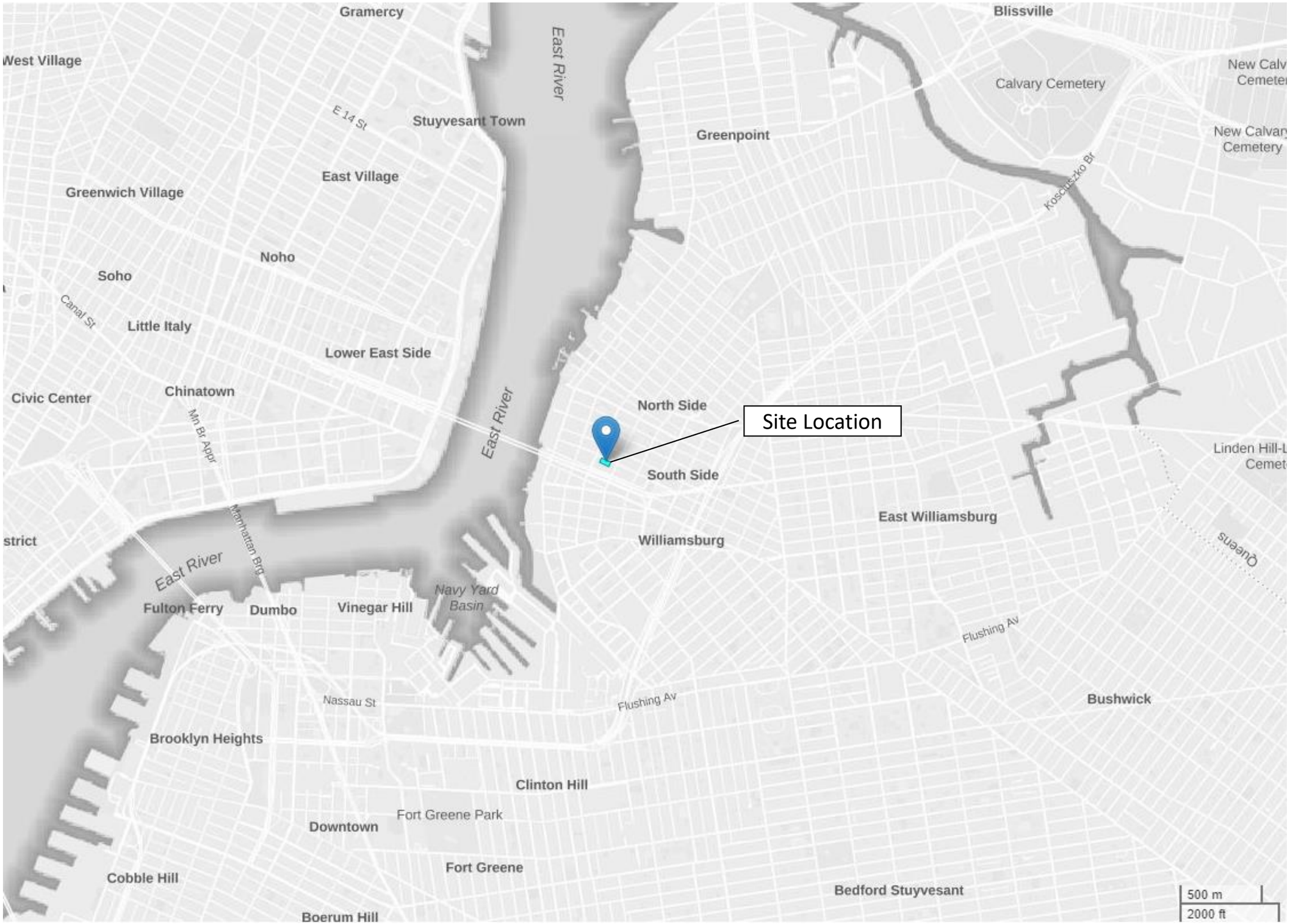

Legend

Notes:

Base map: NYCOER SPEED Map

SITE LOCATION MAP

100 South 4th Street, Brooklyn, NY

Plate 1

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Legend

Notes:

Base Map: NYC OASIS Map

SITE AREA MAP

100 South 4th Street, Brooklyn, NY

Plate 2

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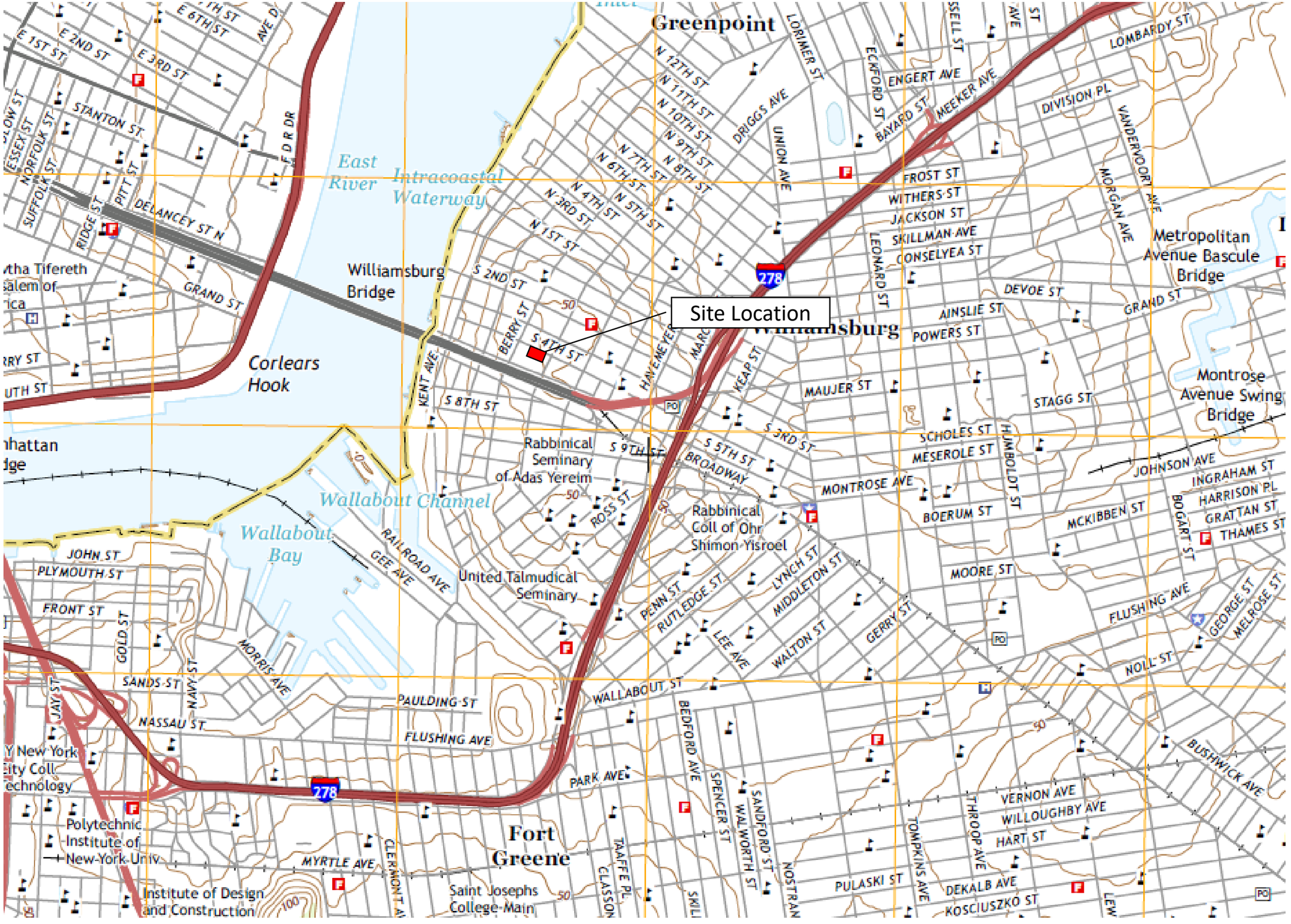

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Notes:

Base Map: USGS Brooklyn Quadrangle Topographic Map

SITE TOPOGRAPHIC MAP

100 South 4th Street, Brooklyn, NY

Plate 3

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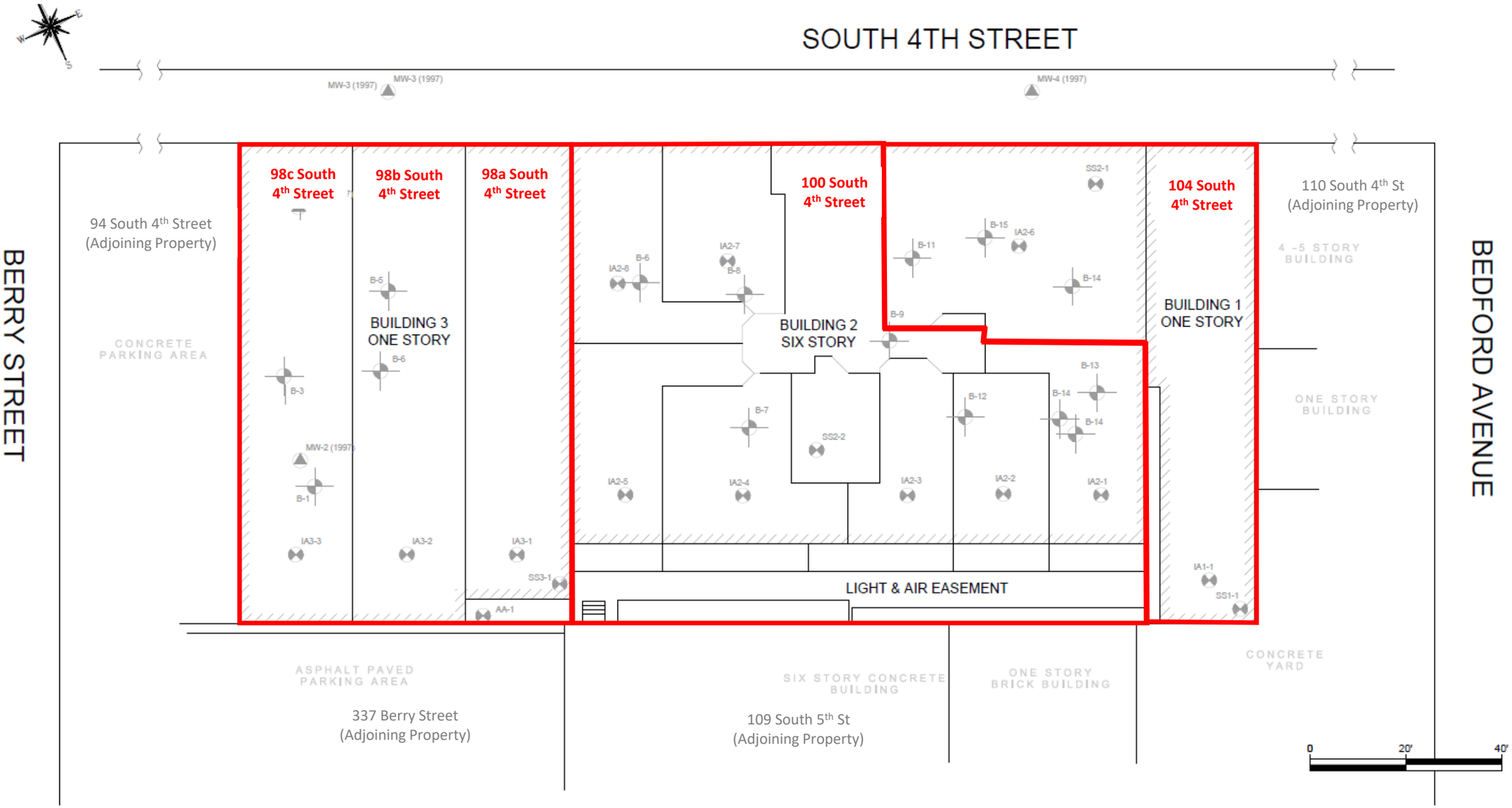

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Property Boundaries

Notes:

SITE PLAN

100 South 4th Street, Brooklyn, NY

Plate 4

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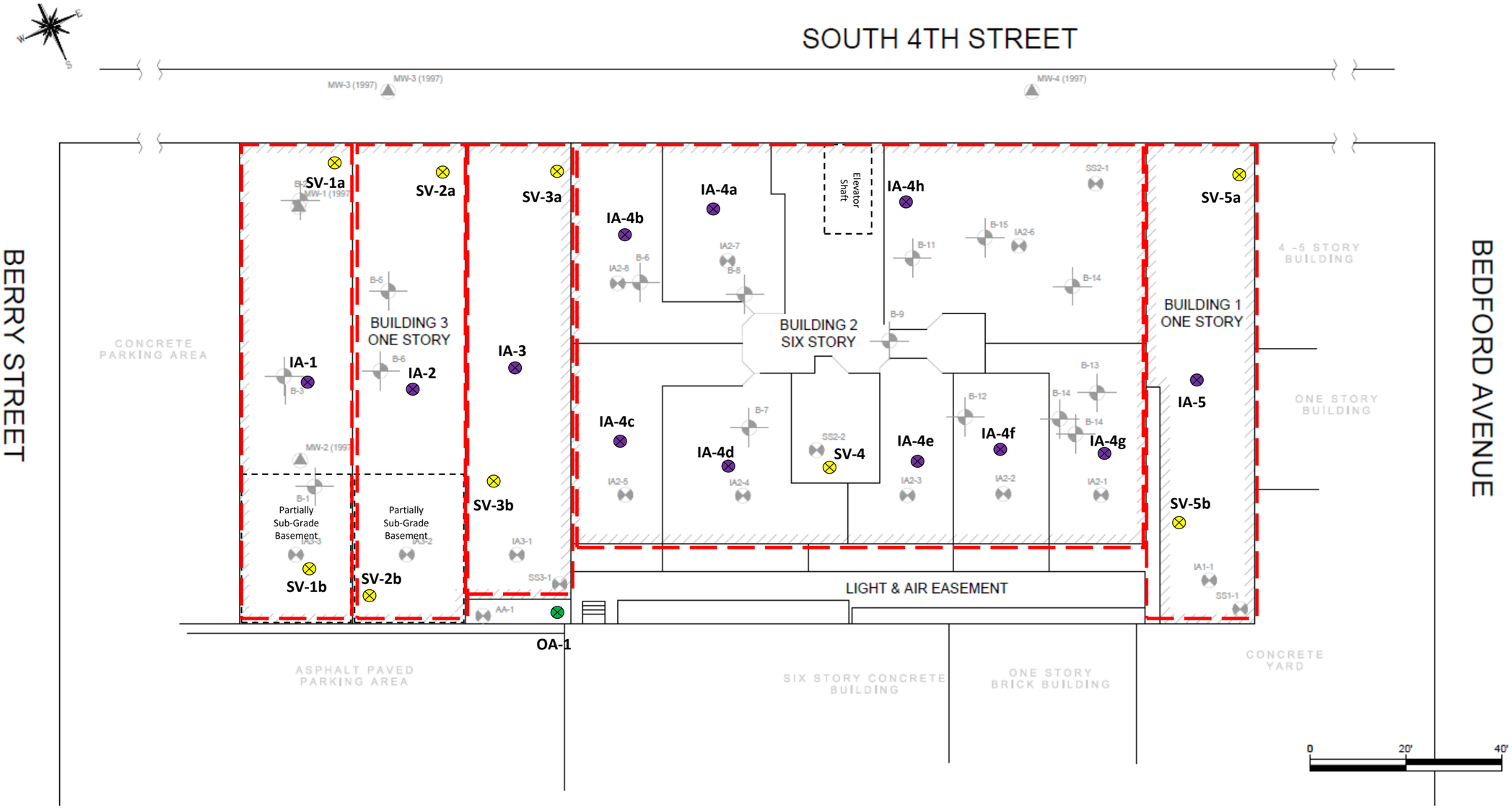

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

SVI Sample Point Locations

100 South 4th Street, Brooklyn, NY

Plate 5

PROJECT #	13817
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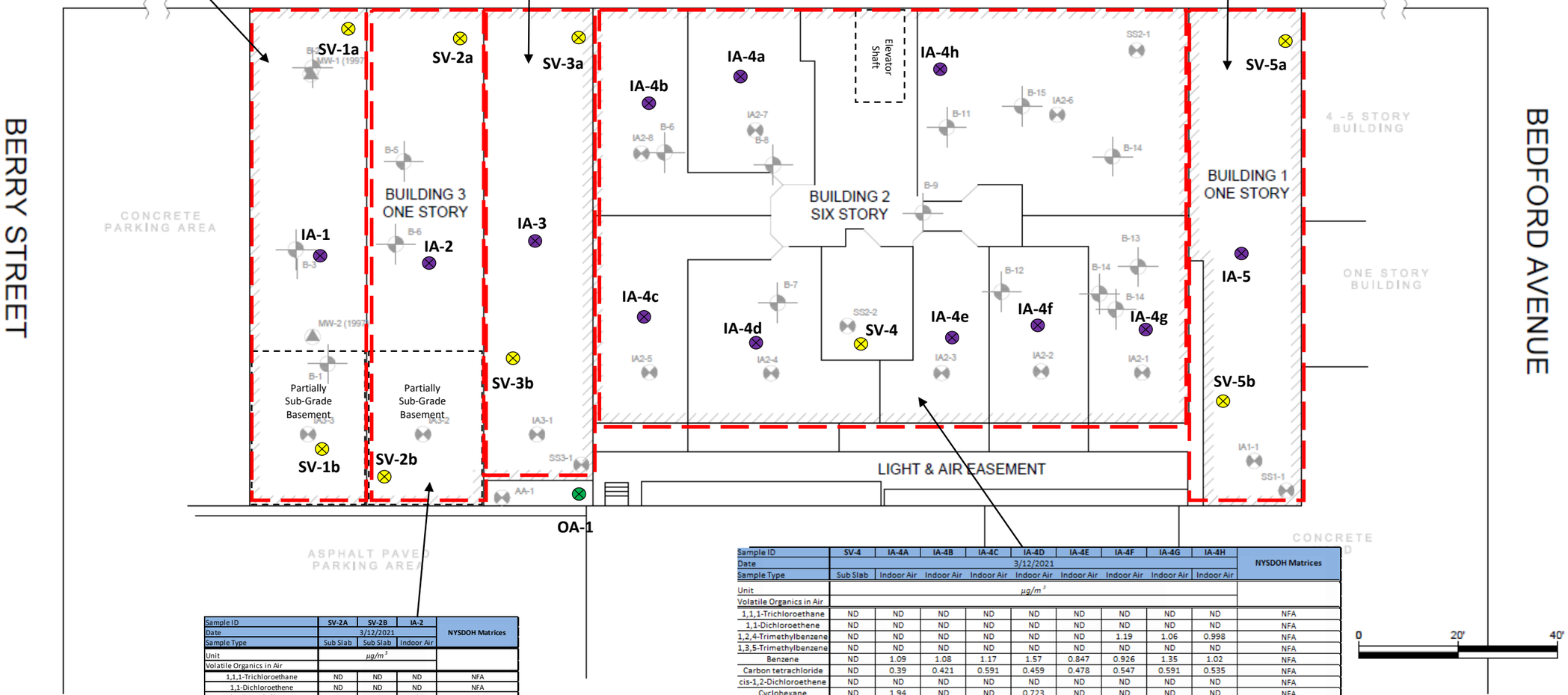
Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices Decision
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	7.09	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	0.837	ND	0.879	NFA
Carbon tetrachloride	ND	ND	0.396	NFA
cis-1,2-Dichloroethene	7.65	**88**	ND	NFA/MITIGATE
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	4.04	ND	NFA
Heptane	ND	ND	ND	NFA
Hexane	0.782	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	ND	7.43	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	3.87	ND	NFA
Tetrachloroethene	46	**1,240**	1.11	NFA/MITIGATE
Toluene	2	5	2.09	NFA
Trichloroethene	**120**	**1000**	0.435	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	3.79	1.58	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	1.64	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	2.02	1.16	NFA
Carbon tetrachloride	ND	ND	0.403	NFA
cis-1,2-Dichloroethene	20	24.1	ND	NFA
Cyclohexane	ND	2.34	ND	NFA
Ethylbenzene	11.9	6.39	ND	NFA
Heptane	ND	0.84	ND	NFA
Hexane	ND	1.56	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	19.8	11.3	1.91	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	11.2	6.52	ND	NFA
Tetrachloroethene	460	138	2.09	NFA
Toluene	12	8.03	2.08	NFA
Trichloroethene	**967**	**321**	2.14	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	1.39	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	1.05	NFA
Carbon tetrachloride	ND	**2.68**	0.585	NFA/IDENTIFY SOURCES and RESAMPLE or MITIGATE
cis-1,2-Dichloroethene	ND	ND	ND	NFA
Cyclohexane	0.747	0.826	ND	NFA
Ethylbenzene	13.1	15.8	ND	NFA
Heptane	ND	ND	0.828	NFA
Hexane	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	21.6	26.4	1.98	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	12.5	14.9	ND	NFA
Tetrachloroethene	9.56	59.8	1.04	NFA
Toluene	13.1	14.9	2.8	NFA
Trichloroethene	7.9	**5.7**	0.296	NFA/MONITOR
Vinyl chloride	**ND**	**ND**	ND	NFA



Sample ID	SV-2A	SV-2B	IA-2	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	1.25	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	1.04	NFA
Carbon tetrachloride	ND	ND	0.421	NFA
cis-1,2-Dichloroethene	**5.35**	**379**	ND	NFA/MITIGATE
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	15.3	ND	1.23	NFA
Heptane	ND	ND	ND	NFA
Hexane	ND	ND	0.73	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	25.4	ND	4.6	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	14.3	ND	1.32	NFA
Tetrachloroethene	**5.2**	**2710**	0.787	NFA/MITIGATE
Toluene	15	7.88	2.36	NFA
Trichloroethene	16.5	**3260**	0.408	MONITOR/MITIGATE
Vinyl chloride	**0.537**	**ND**	ND	NFA

Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/12/2021									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	$\mu g/m^3$									
Volatile Organics in Air										
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	1.19	1.06	0.998	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Benzene	ND	1.09	1.08	1.17	1.57	0.847	0.926	1.35	1.02	NFA
Carbon tetrachloride	ND	0.39	0.421	0.591	0.459	0.478	0.547	0.591	0.535	NFA
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Cyclohexane	ND	1.94	ND	ND	0.723	ND	ND	ND	ND	NFA
Ethylbenzene	1.99	ND	1.13	ND	ND	ND	1.54	ND	ND	NFA
Heptane	ND	35.1	1.75	2.73	8.57	ND	1.45	1.08	1.88	NFA/MONITOR/IDENTIFY SOURCES and RESAMPLE or MITIGATE
Hexane	ND	0.871	ND	0.765	0.885	ND	0.737	0.712	ND	NFA
Isooctane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
m,p-Xylene	3.53	1.92	4.43	1.85	2.14	ND	5.99	2.53	2.06	NFA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
o-Xylene	1.87	ND	1.3	ND	ND	ND	1.74	0.934	ND	NFA
Tetrachloroethene	4.66	1.04	1.02	2.55	0.387	0.292	0.448	0.57	0.502	NFA
Toluene	2.22	5.31	2.58	3	3.73	1.62	3.84	3.04	2.48	NFA
Trichloroethene	21	0.344	0.908	1.23	ND	ND	0.516	0.333	0.253	NFA/MONITOR/MITIGATE
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

All results are in µg/m3: micrograms per cubic meter
ND – Not detected
NFA – No further action

SVI Sample Analysis NYSDOH Exceedances

100 South 4th Street, Brooklyn, NY

Plate 6

PROJECT #	13817
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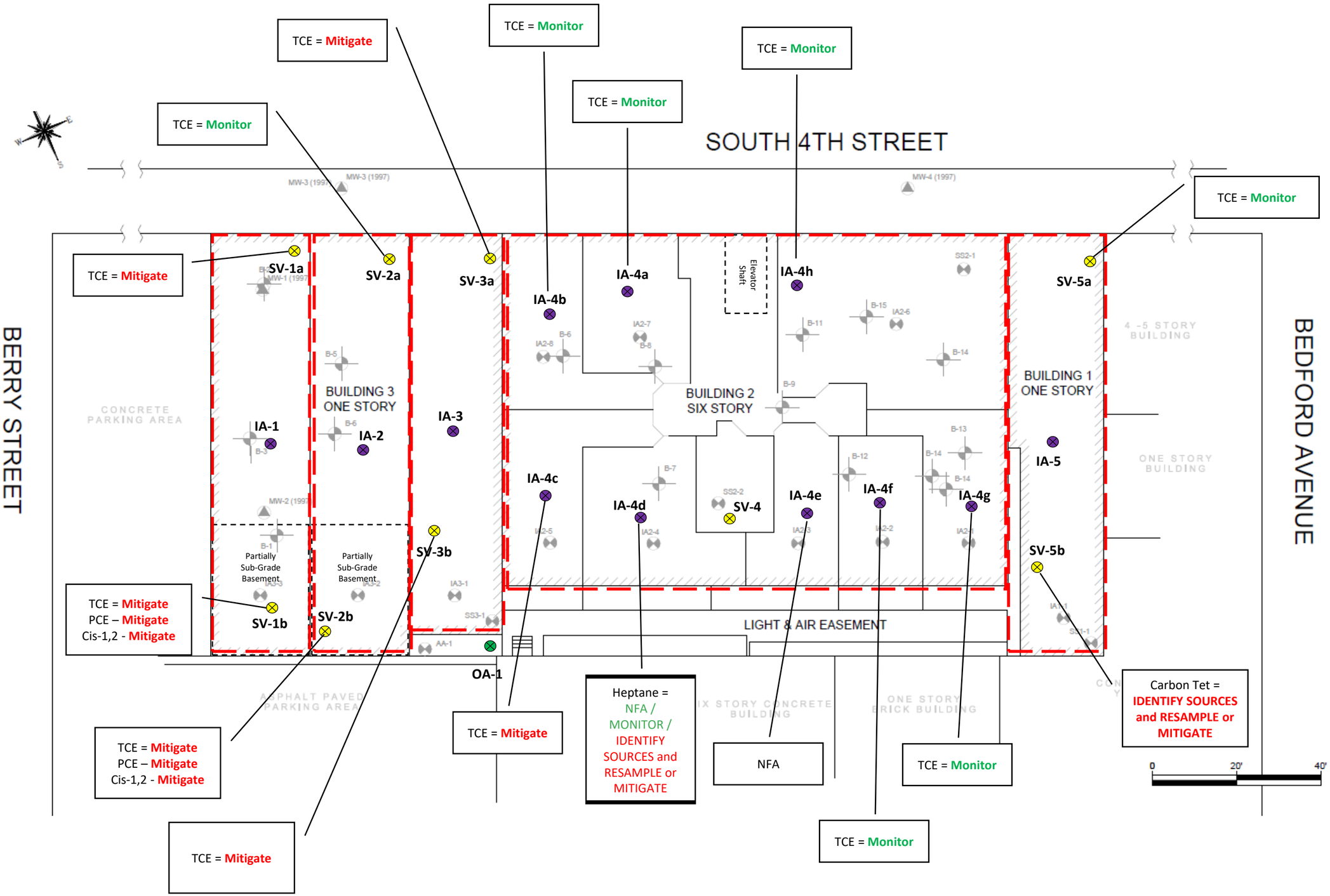

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

SVI Decision Matrices Results Map

100 South 4th Street, Brooklyn, NY

Plate 7

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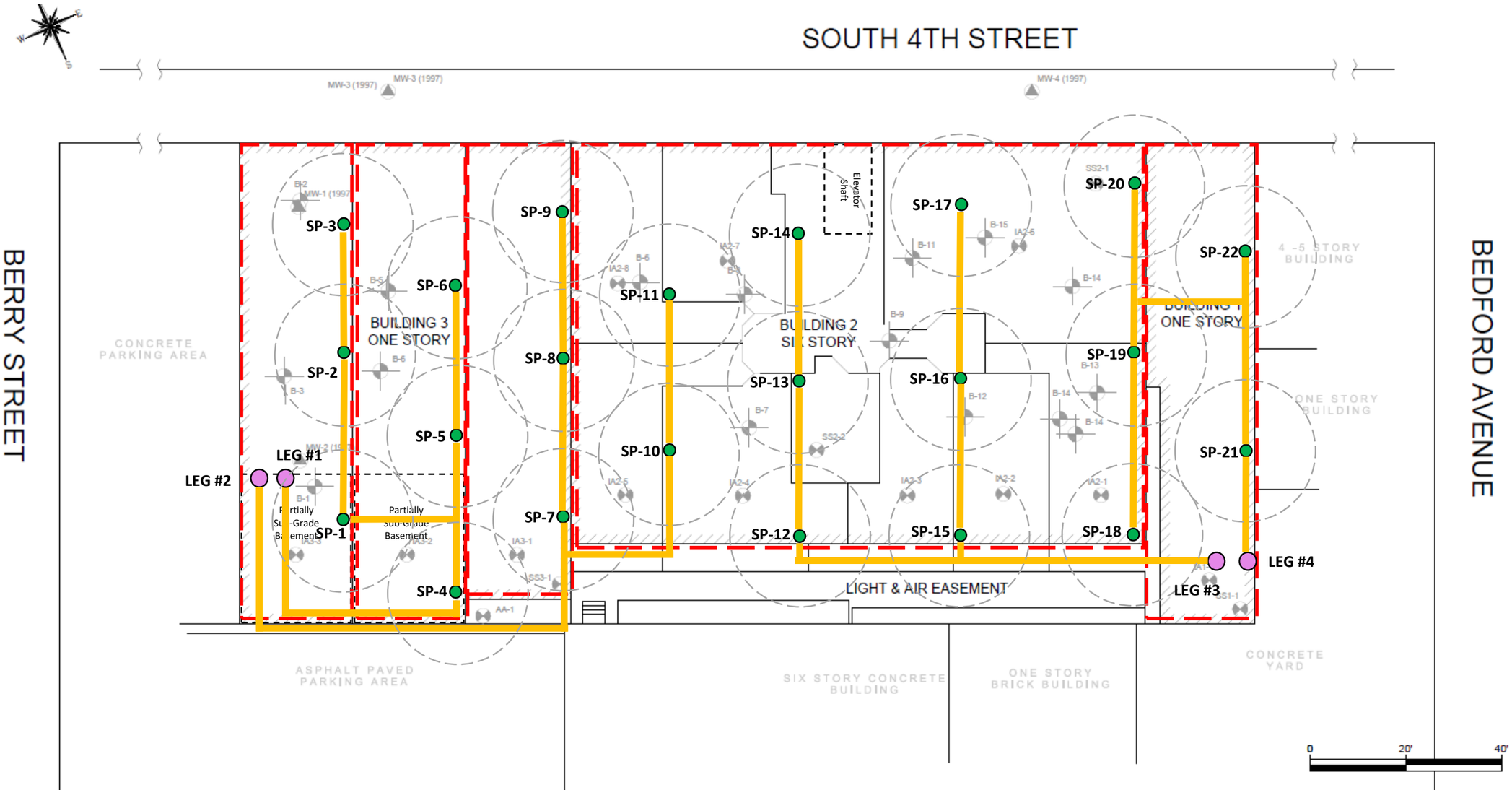

Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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BRADLEY JOHN SUMMERVILLE
091879
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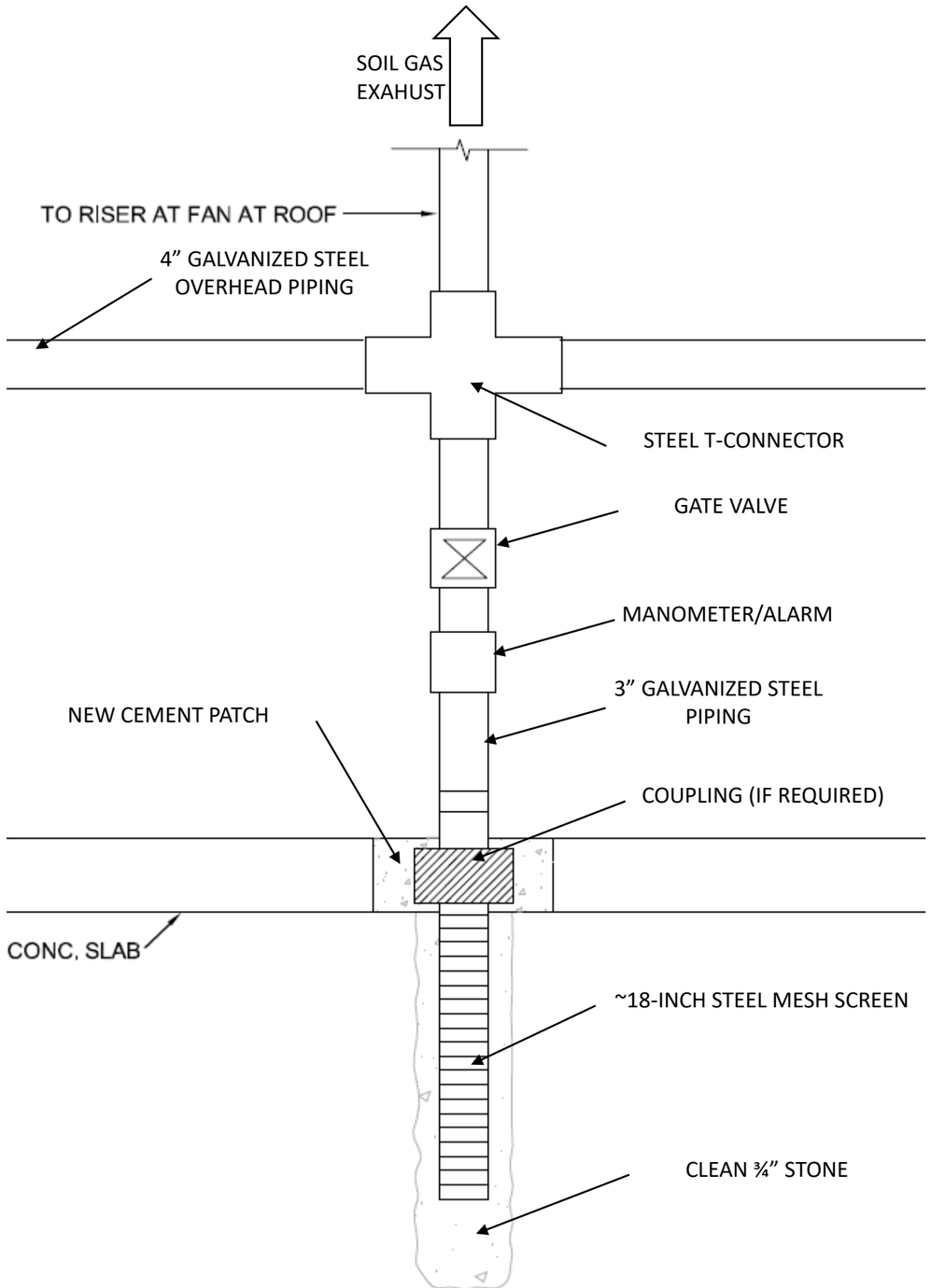
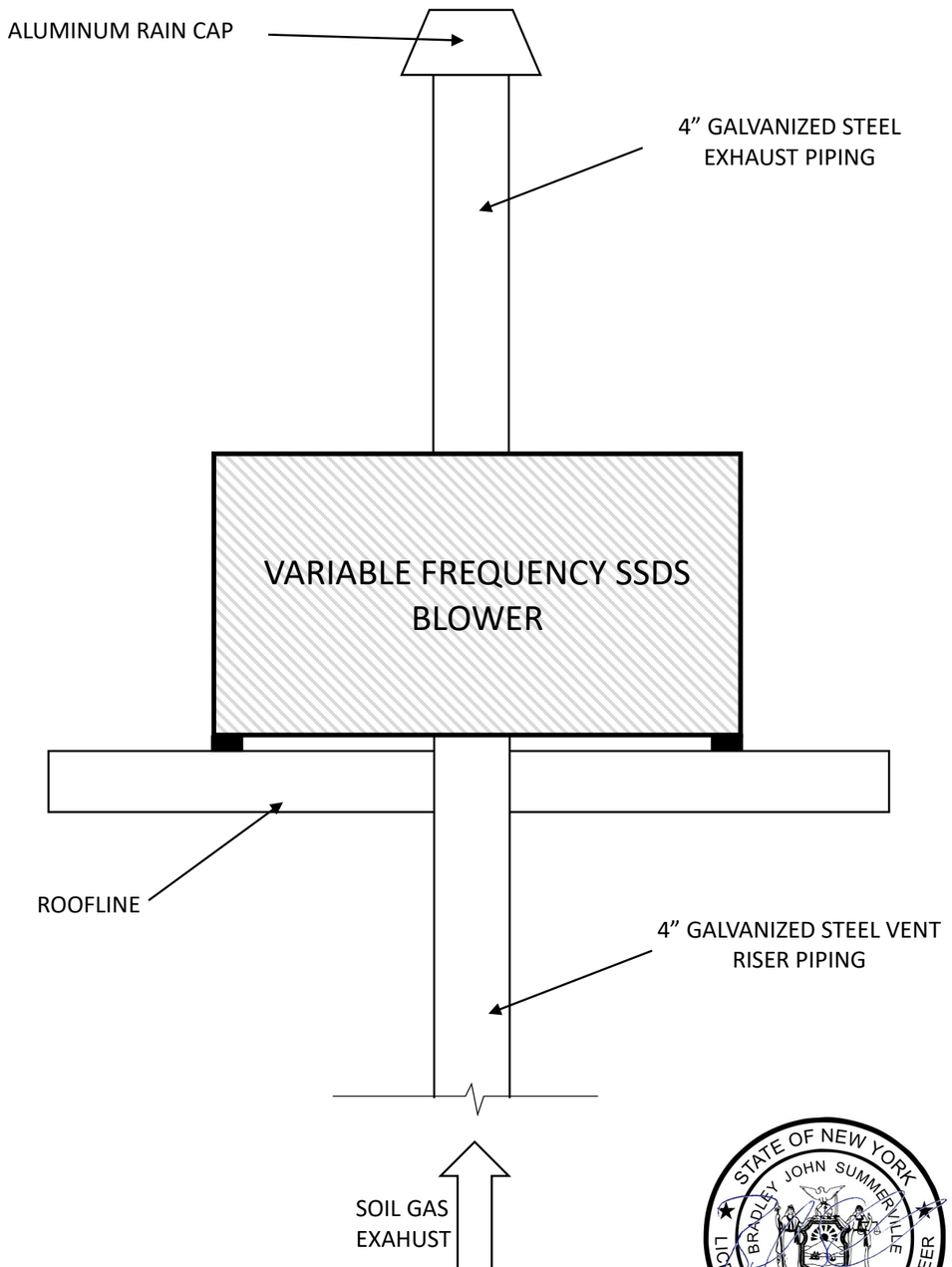


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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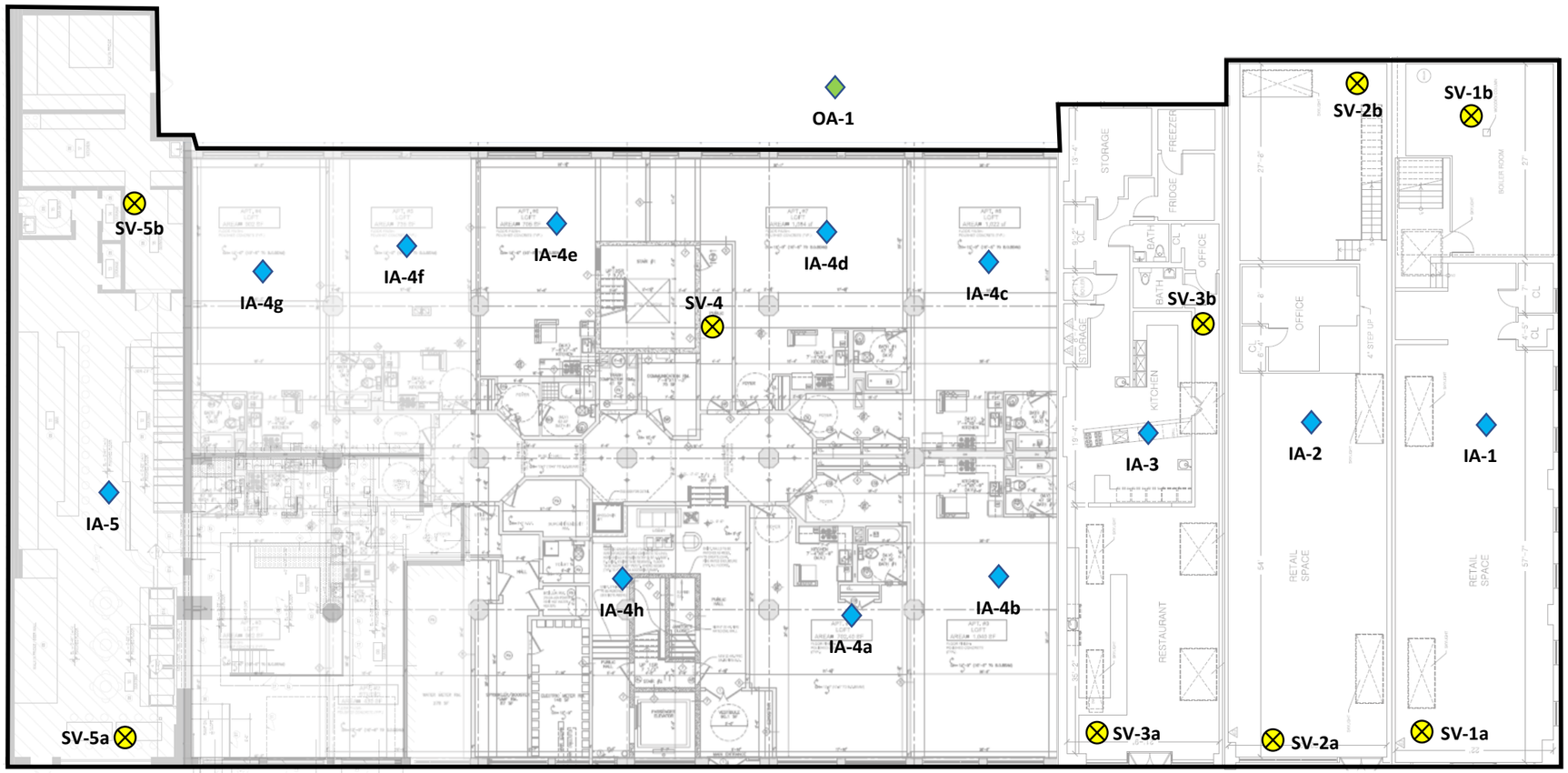

Legend

- Permanent Sub-Slab Monitoring Point
- Indoor Air Sample Location
- Outdoor Air Sample Location

Notes:

2023 SVI Sample Point Locations

100 South 4th Street,
Brooklyn, NY

Plate 10

PROJECT #	13817
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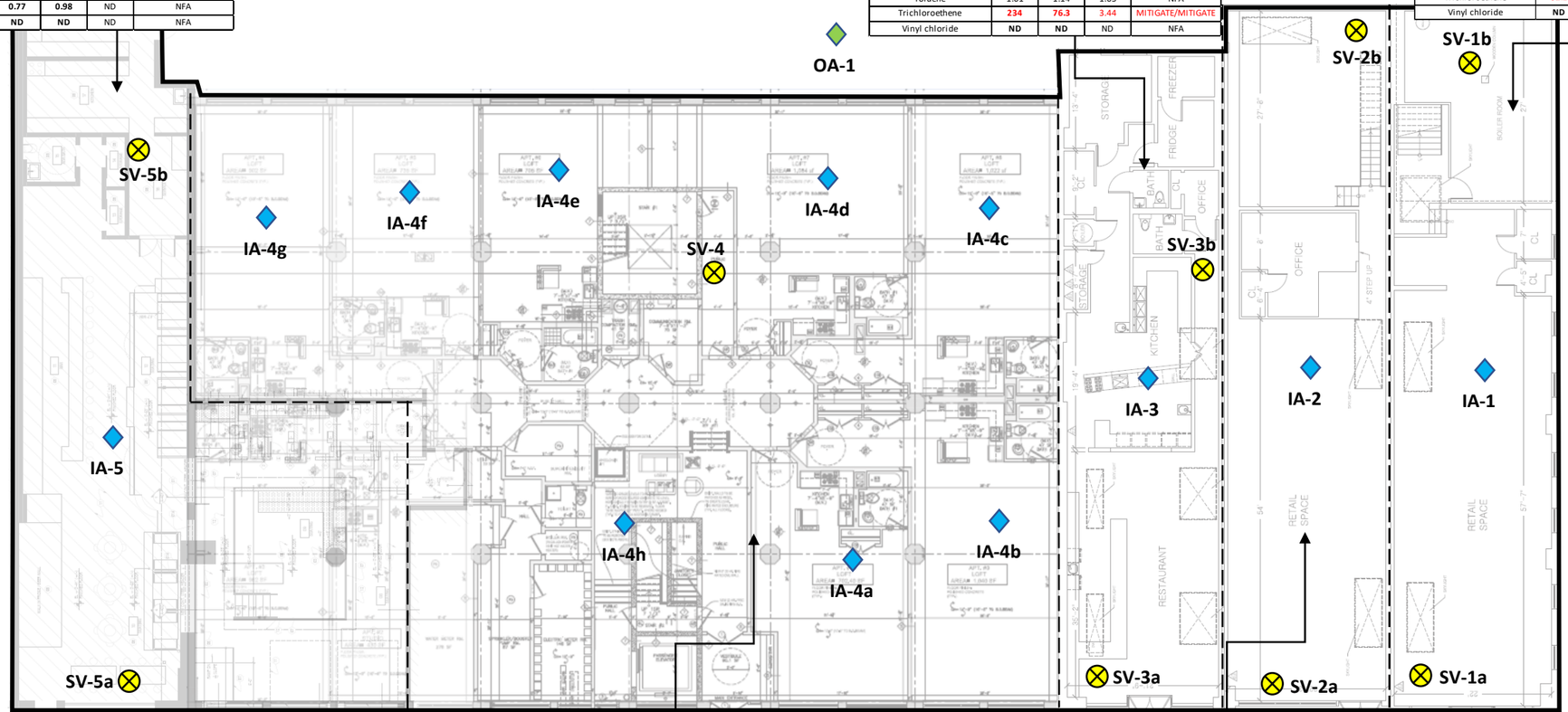
Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	1.34	NFA
Carbon tetrachloride	**0.49**	**0.97**	**0.38**	NFA
cis-1,2-Dichloroethene	**ND**	**ND**	ND	NFA
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	1.26	NFA
Heptane	ND	ND	1.07	NFA
Hexane	ND	ND	1.06	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	1.2	1.86	4.64	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	1.49	NFA
Tetrachloroethene	**0.57**	**3.44**	**0.37**	NFA
Toluene	1.76	2.26	3.92	NFA
Trichloroethene	**0.77**	**0.98**	ND	NFA
Vinyl chloride	**ND**	**ND**	ND	NFA

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	**ND**	**ND**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	1.03	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	ND	NFA
Carbon tetrachloride	0.59	0.52	0.48	NFA
cis-1,2-Dichloroethene	4.99	1.64	ND	NFA
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	ND	NFA
Heptane	ND	ND	ND	NFA
Hexane	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	ND	NFA
Tetrachloroethene	49	26.7	2.98	NFA
Toluene	1.01	1.14	1.65	NFA
Trichloroethene	**234**	**76.3**	3.44	MITIGATE/MITIGATE
Vinyl chloride	**ND**	**ND**	ND	NFA

Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	**3.78**	**3.22**	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.26	**8.06**	NFA
1,3,5-Trimethylbenzene	ND	ND	**2.16**	NFA
Benzene	ND	ND	ND	NFA
Carbon tetrachloride	**0.3**	**0.28**	**0.47**	NFA
cis-1,2-Dichloroethene	**3.15**	**121**	ND	NFA/MITIGATE
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	ND	NFA
Heptane	ND	ND	ND	NFA
Hexane	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	ND	1.36	2.63	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	1.15	NFA
Tetrachloroethene	**16**	**996**	**3.67**	NFA/MONITOR
Toluene	1	1	2.39	NFA
Trichloroethene	**61.2**	**1,370**	**1.06**	MITIGATE/MITIGATE
Vinyl chloride	**ND**	**ND**	ND	NFA



Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/10/2023									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	*µg/m 3*									
Volatile Organics in Air										
1,1,1-Trichloroethane	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.07	**3.58**	1.05	ND	ND	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	**0.51**	0.5	**0.38**	**0.36**	**0.33**	0.4	**0.45**	**0.48**	**0.35**	NFA
cis-1,2-Dichloroethene	**ND**	ND	**0.34**	ND	ND	ND	ND	ND	ND	NFA
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Ethylbenzene	ND	ND	**2.56**	ND	ND	ND	ND	ND	ND	NFA
Heptane	ND	ND	ND	1.85	ND	ND	ND	ND	ND	NFA
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
m,p-Xylene	1.52	2.15	**8.90**	2.2	ND	1.15	ND	1.32	1.08	NFA
Methylene chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
o-Xylene	**ND**	ND	**2.54**	ND	ND	ND	ND	ND	ND	NFA
Tetrachloroethene	**0.92**	**0.64**	**2.24**	**1.54**	0.696	10.2	**0.31**	**0.52**	**0.89**	NFA/IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Toluene	2.43	3.49	3.01	3.75	1.200	6.5	1.62	2.38	2.16	NFA
Trichloroethene	**2.41**	**0.67**	2.76	1.91	ND	ND	ND	ND	0.2	NFA/IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Vinyl chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Sample ID	SV-2A	IA-2	NYSDOH Matrices
Date	3/10/2023		
Sample Type	Sub Slab	Indoor Air	
Unit	*µg/m 3*		
Volatile Organics in Air			
1,1,1-Trichloroethane	ND	ND	NFA
1,1-Dichloroethene	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.21	NFA
1,3,5-Trimethylbenzene	ND	ND	NFA
Benzene	ND	ND	NFA
Carbon tetrachloride	**0.31**	**0.37**	NFA
cis-1,2-Dichloroethene	**0.9**	ND	NFA
Cyclohexane	ND	ND	NFA
Ethylbenzene	ND	ND	NFA
Heptane	ND	ND	NFA
Hexane	ND	ND	NFA
Isooctane	N/A	N/A	-
m,p-Xylene	ND	ND	NFA
Methylene chloride	ND	ND	NFA
Naphthalene	N/A	N/A	-
o-Xylene	ND	ND	NFA
Tetrachloroethene	**0.77**	**2.07**	NFA
Toluene	1.35	1.99	NFA
Trichloroethene	**0.61**	1.9	IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Vinyl chloride	**0.537**	ND	NFA

Legend

- Permanent Sub-Slab Monitoring Point
- Indoor Air Sample Location
- Outdoor Air Sample Location

Notes:

2023 SVI Sample Point Locations

100 South 4th Street, Brooklyn, NY

Plate 11

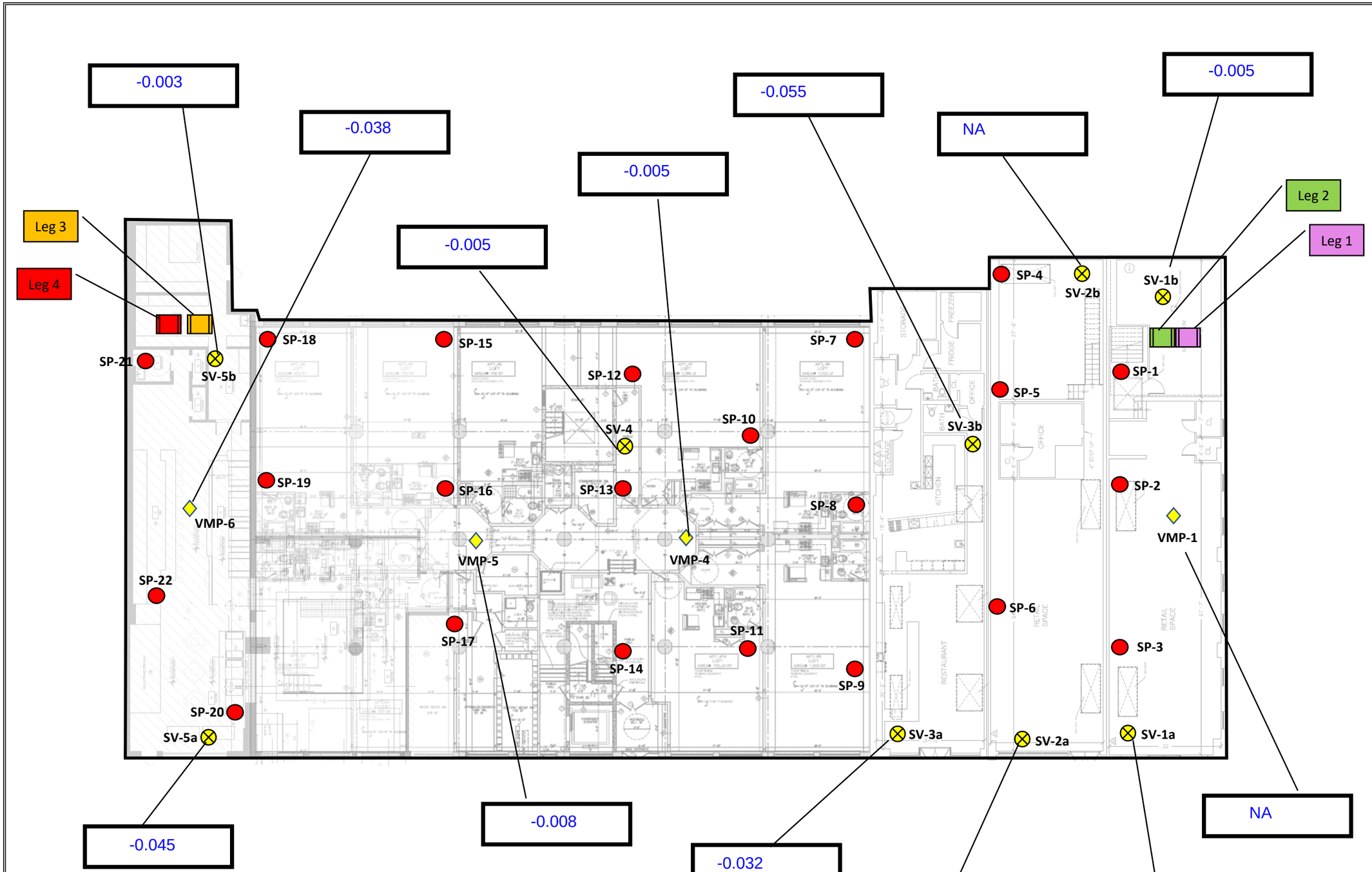
PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	7/12/24
Revisions	

N

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

2023 Post SSDS Startup Vacuum Readings

100 South 4th Street, Brooklyn, NY

Plate 12

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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BOHEMIA, NEW YORK 11716
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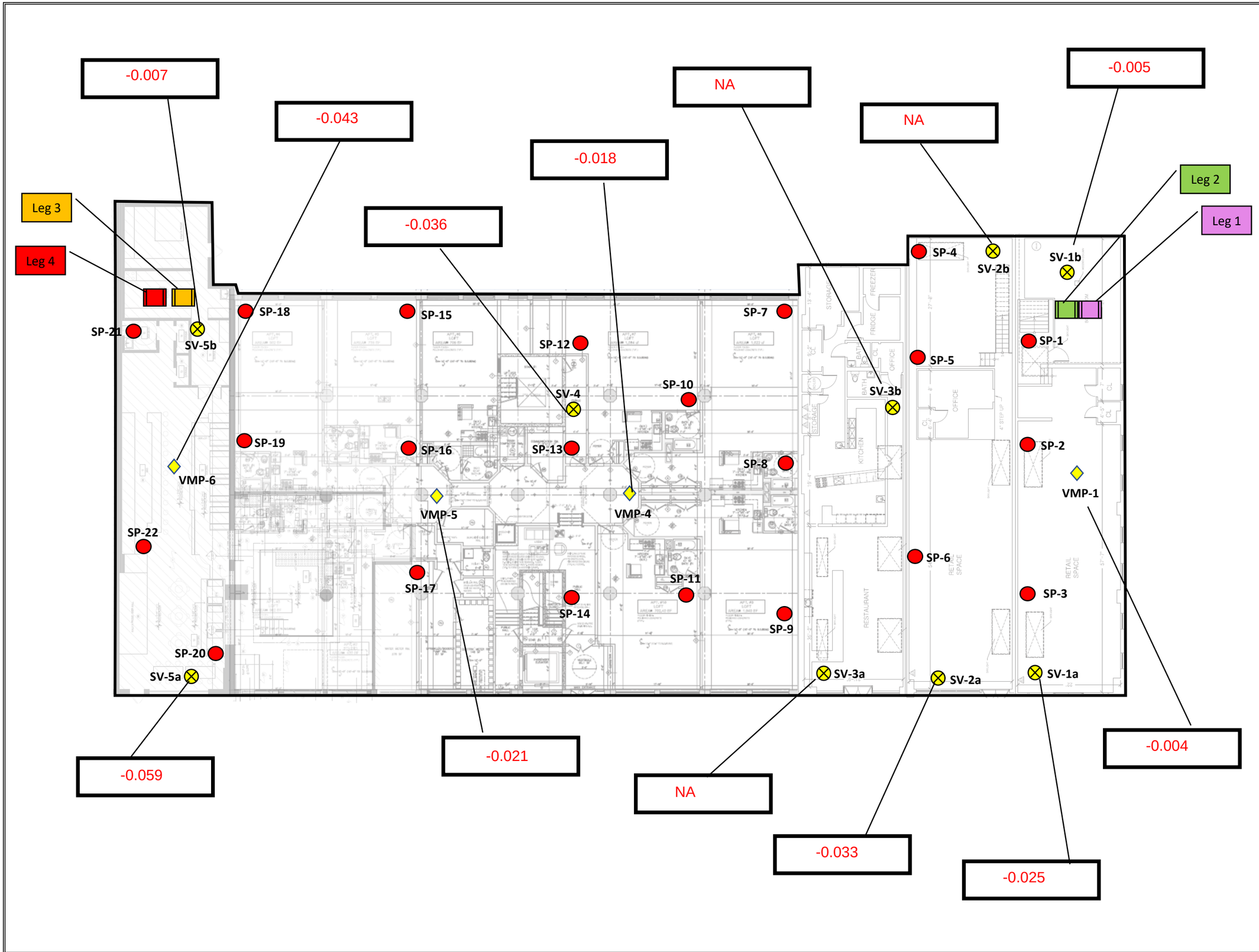

Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

2024 Post SSDS Startup Vacuum Readings

100 South 4th Street,
Brooklyn, NY

Plate 13

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	9/15/25
Revisions	

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IMPACT ENVIRONMENTAL CLOSURES, INC.

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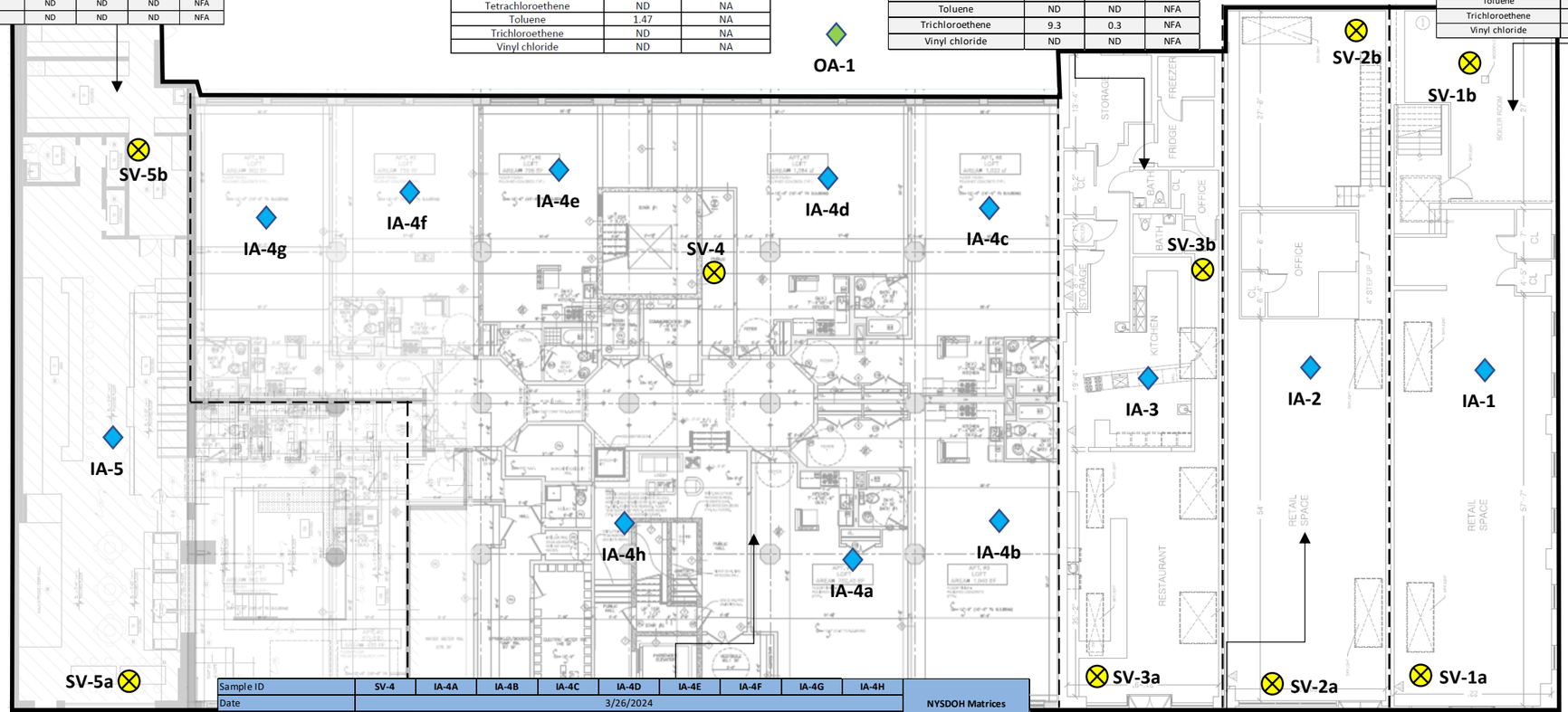
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	1.2	NFA
Carbon tetrachloride	ND	ND	0.5	NFA
cis-1,2-Dichloroethene	ND	ND	ND	NFA
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	4.3	NFA
Heptane	ND	ND	1.1	NFA
Hexane	ND	ND	ND	NFA
Isooctane	ND	ND	ND	NFA
m,p-Xylene	ND	ND	20.7	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	ND	ND	ND	NFA
o-Xylene	ND	ND	6.0	NFA
Tetrachloroethene	ND	ND	0.7	NFA
Toluene	ND	ND	3.6	NFA
Trichloroethene	ND	ND	ND	NFA
Vinyl chloride	ND	ND	ND	NFA

Sample ID	OA-1	NYSDOH Matrices
Date	3/27/2024	
Sample Type	OUTDOOR AIR	
Unit	*µg/m 3*	
Volatile Organics in Air		
1,1,1-Trichloroethane	ND	NA
1,1-Dichloroethene	ND	NA
1,2,4-Trimethylbenzene	ND	NA
1,3,5-Trimethylbenzene	ND	NA
Benzene	ND	NA
Carbon tetrachloride	0.44	NA
cis-1,2-Dichloroethene	ND	NA
Cyclohexane	ND	NA
Ethylbenzene	ND	NA
Heptane	ND	NA
Hexane	ND	NA
Isooctane	ND	NA
m,p-Xylene	ND	NA
Methylene chloride	ND	NA
Naphthalene	ND	NA
o-Xylene	ND	NA
Tetrachloroethene	ND	NA
Toluene	1.47	NA
Trichloroethene	ND	NA
Vinyl chloride	ND	NA

Sample ID	SV-3A	IA-3	NYSDOH Matrices
Date	3/26/2024		
Sample Type	Sub Slab	Indoor Air	
Unit	*µg/m 3*		
Volatile Organics in Air			
1,1,1-Trichloroethane	ND	ND	NFA
1,1-Dichloroethene	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	2.9	NFA
1,3,5-Trimethylbenzene	ND	ND	NFA
Benzene	ND	1.2	NFA
Carbon tetrachloride	ND	0.4	NFA
cis-1,2-Dichloroethene	ND	ND	NFA
Cyclohexane	ND	ND	NFA
Ethylbenzene	ND	ND	NFA
Heptane	ND	ND	NFA
Hexane	ND	ND	NFA
Isooctane	ND	ND	NFA
m,p-Xylene	ND	4.1	NFA
Methylene chloride	ND	ND	NFA
Naphthalene	ND	ND	NFA
o-Xylene	ND	1.4	NFA
Tetrachloroethene	7.7	1.0	NFA
Toluene	ND	ND	NFA
Trichloroethene	9.3	0.3	NFA
Vinyl chloride	ND	ND	NFA

Sample ID	SV-1A	SV-1B	NYSDOH Matrices
Date	3/26/2024		
Sample Type	Sub Slab	Sub Slab	
Unit	*µg/m 3*		
Volatile Organics in Air			
1,1,1-Trichloroethane	7.3	ND	NFA
1,1-Dichloroethene	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	NFA
Benzene	ND	ND	NFA
Carbon tetrachloride	ND	ND	NFA
cis-1,2-Dichloroethene	1.7	61.8	MITIGATE
Cyclohexane	ND	ND	NFA
Ethylbenzene	ND	ND	NFA
Heptane	ND	ND	NFA
Hexane	ND	ND	NFA
Isooctane	ND	ND	NFA
m,p-Xylene	ND	ND	NFA
Methylene chloride	ND	ND	NFA
Naphthalene	ND	ND	NFA
o-Xylene	ND	ND	NFA
Tetrachloroethene	31.5	1900.0	MITIGATE
Toluene	ND	ND	NFA
Trichloroethene	44.3	1110.0	MITIGATE
Vinyl chloride	ND	ND	NFA



Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/26/2024									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	*µg/m 3*									
Volatile Organics in Air										
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	ND	0.5	0.41	0.52	0.47	0.5	0.44	0.47	0.47	NFA
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Ethylbenzene	15.3	9.29	4.73	1.68	1.99	ND	ND	ND	12.2	NFA
Heptane	ND	2.77	ND	2.24	ND	ND	ND	ND	ND	NFA
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Isooctane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
m,p-Xylene	63.4	49.5	18.60	7.68	8.51	1.75	1.81	1.47	59	NFA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
o-Xylene	16.7	13.2	4.99	2.33	2.35	ND	ND	ND	15.3	NFA
Tetrachloroethene	ND	0.39	0.49	0.35	0.500	0.4	0.35	0.64	0.33	NFA
Toluene	ND	7.34	3.99	5.69	2.010	1.2	1.39	ND	2.31	NFA
Trichloroethene	ND	ND	0.23	ND	ND	ND	ND	0.21	ND	NFA
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Sample ID	SV-2A	IA-2	NYSDOH Matrices
Date	3/26/2024		
Sample Type	Sub Slab	Indoor Air	
Unit	*µg/m 3*		
Volatile Organics in Air			
1,1,1-Trichloroethane	ND	ND	NFA
1,1-Dichloroethene	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	2.68	NFA
1,3,5-Trimethylbenzene	ND	ND	NFA
Benzene	ND	1.2	NFA
Carbon tetrachloride	ND	0.51	NFA
cis-1,2-Dichloroethene	ND	ND	NFA
Cyclohexane	ND	ND	NFA
Ethylbenzene	ND	ND	NFA
Heptane	ND	ND	NFA
Hexane	ND	ND	NFA
Isooctane	ND	ND	NFA
m,p-Xylene	ND	3.85	NFA
Methylene chloride	ND	ND	NFA
Naphthalene	ND	ND	NFA
o-Xylene	ND	1.26	NFA
Tetrachloroethene	2.71	1.08	NFA
Toluene	ND	7.76	NFA
Trichloroethene	5.64	0.4	NFA
Vinyl chloride	ND	ND	NFA

Legend

- Permanent Sub-Slab Monitoring Point
- Indoor Air Sample Location
- Outdoor Air Sample Location

Notes:

2024 SVI Sample Point Locations

100 South 4th Street, Brooklyn, NY

Plate 14

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

IRM CCR

TABLES

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Table 1
Post Installation SSDS Quality Control Sample Summary
100 South 4th Street, Brooklyn, NY

Lab Sample Id				CN58290		CN58313		CN58308		CN58311	
Collection Date				03/10/2023		03/10/2023		03/10/2023		03/10/2023	
Client Id				SV-DUP 1		SV-DUP 2		IA-DUP 1		IA-DUP 2	
Matrix				AIR		AIR		AIR		AIR	
SDG: GCN58289		NY	NY								
Project: 100 SOUTH 4TH	**Units**	**Soil Vapor (IA)**	**Soil Vapor (SS)**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles (TO15) - TO15											
1,1,1,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	ug/m3	3	100	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	7.62	1	< 1.00	1
1,2-Dibromoethane(EDB)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-dichloropropane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	1.92	1	< 1.00	1
1,3-Butadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene	ug/m3			< 1.00	1	< 1.00	1	3.02	1	< 1.00	1
4-Isopropyltoluene	ug/m3			< 1.00	1	< 1.00	1	1.43	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone	ug/m3			39.6	1	18.7	1	110	1	24	1
Acrylonitrile	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	ug/m3	0.2	6	0.31	0.2	0.48	0.2	0.35	0.2	0.33	0.2
Chlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform	ug/m3			< 1.00	1	4.26	1	< 1.00	1	1.29	1
Chloromethane	ug/m3			< 1.00	1	< 1.00	1	1.11	1	1.17	1
Cis-1,2-Dichloroethene	ug/m3	0.2	6	0.73	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
cis-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dibromochloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	ug/m3			2.32	1	2.47	1	2.24	1	2.27	1
Ethanol	ug/m3			668	1	154	1	490	1	450	1
Ethyl acetate	ug/m3			1.04	1	1.54	1	3.19	1	1.03	1
Ethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Heptane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexachlorobutadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isopropylalcohol	ug/m3			38.3	1	7.98	1	1600	1	3.81	1
Isopropylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
m,p-Xylene	ug/m3	6	200	< 1.00	1	1.28	1	3.01	1	1.13	1
Methyl Ethyl Ketone	ug/m3			3.63	1	5.92	1	2.28	1	2.25	1
Methyl tert-butyl ether(MTBE)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride	ug/m3	3	100	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3
n-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
o-Xylene	ug/m3	2	60	< 1.00	1	< 1.00	1	1.16	1	< 1.00	1
Propylene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
sec-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene	ug/m3			< 1.00	1	< 1.00	1	4.81	1	< 1.00	1
Tetrachloroethene	ug/m3	3	100	0.7	0.25	0.9	0.25	3.2	0.25	0.89	0.25
Tetrahydrofuran	ug/m3			8.69	1	12.5	1	1.57	1	1.36	1
Toluene	ug/m3	10	300	1.35	1	2.33	1	2.18	1	2.19	1
Trans-1,2-Dichloroethene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	ug/m3	0.2	6	1.46	0.2	2.24	0.2	0.99	0.2	< 0.20	0.2
Trichlorofluoromethane	ug/m3			1.21	1	1.27	1	1.2	1	1.28	1
Trichlorotrifluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
RL Exceeds NYSDOH Matrices
Result Exceeds NYSDOH Matrices
NY Soil Vapor (IA) = NYSDOH Indoor Air Matrix Lower Limit
NY Soil Vapor (SS) = NYSDOH Sub-Slab Matrix Lower Limit

Table 2
SVI Summary Table
98, 100, and 104 South 4th Street, Brooklyn, NY

Lab Sample Id				CN58292		CN58295		CN58305		CN58291		CN58293		CN58302		CN58304		CN58300		CN58303		CN58306		CN58310	
Collection Date				03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023	
Client Id				SV-1A		SV-1B		IA-1		SV-2A		IA-2		SV-3A		SV-3B		IA-3		SV-4		IA-4A		IA-4B	
Matrix				AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR	
SDG: GCN58289		NY	NY																						
Project: 100 SOUTH 4TH	**Units**	**Soil Vapor (IA)**	**Soil Vapor (SS)**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles (TO15) - TO15																									
1,1,1,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	ug/m3	3	100	3.78	1	3.22	1	< 1.00	1	< 1.00	1	< 1.00	1	1.41	1	1.04	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane	ug/m3			2.65	1	1.28	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	ug/m3	2	60	< 1.00	1	1.26	1	8.06	1	< 1.00	1	1.21	1	< 1.00	1	< 1.00	1	1.03	1	< 1.00	1	1.07	1	3.58	1
1,2-Dibromoethane(EDB)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-dichloropropane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	2.16	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Butadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene	ug/m3			< 1.00	1	< 1.00	1	3.17	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	2.8	1
4-Isopropyltoluene	ug/m3			< 1.00	1	< 1.00	1	1.59	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone	ug/m3			18.1	1	18.2	1	110	1	36.3	1	179	1	10.4	1	12.8	1	60.1	1	18.4	1	23	1	80.7	1
Acrylonitrile	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	ug/m3	0.2	6	0.3	0.2	0.28	0.2	0.47	0.2	0.31	0.2	0.37	0.2	0.59	0.2	0.52	0.2	0.48	0.2	0.51	0.2	0.5	0.2	0.38	0.2
Chlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform	ug/m3			1.94	1	4.39	1	< 1.00	1	< 1.00	1	1.01	1	52.7	1	23.8	1	3.6	1	4.69	1	< 1.00	1	2.7	1
Chloromethane	ug/m3			< 1.00	1	< 1.00	1	1.25	1	< 1.00	1	1.11	1	< 1.00	1	< 1.00	1	1.27	1	< 1.00	1	1.41	1	1.31	1
Cis-1,2-Dichloroethene	ug/m3	0.2	6	3.15	0.2	121	0.2	< 0.20	0.2	0.9	0.2	< 0.20	0.2	4.99	0.2	1.64	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	0.34	0.2
cis-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dibromochloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	ug/m3			2.3	1	2.33	1	2.35	1	2.35	1	2.36	1	2.49	1	2.41	1	2.43	1	2.45	1	2.44	1	2.54	1
Ethanol	ug/m3			66.3	1	50.5	1	463	1	650	1	3010	1	103	5.01	117	1	1160	1	150	1	116	1	267	1
Ethyl acetate	ug/m3			1.27	1	1.98	1	2.95	1	< 1.00	1	< 1.00	1	< 1.00	1	1.18	1	1.53	1	1.55	1	< 1.00	1	1.87	1
Ethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	2.56	1
Heptane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexachlorobutadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isopropylalcohol	ug/m3			202	1	165	15	1750	1	38.8	1	351	1	18.1	1	24.3	1	135	1	7.54	1	5.11	1	12	1
Isopropylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
m,p-Xylene	ug/m3	6	200	< 1.00	1	1.36	1	2.63	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.52	1	2.15	1	8.9	1
Methyl Ethyl Ketone	ug/m3			2.75	1	2.25	1	2.75	1	3.33	1	1.66	1	2.34	1	2.98	1	1.82	1	6.19	1	6.22	1	4.24	1
Methyl tert-butyl ether(MTBE)	ug/m3			1.08	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride	ug/m3	3	100	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3
n-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
o-Xylene	ug/m3	2	60	< 1.00	1	< 1.00	1	1.15	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	2.54	1
Propylene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
sec-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene	ug/m3			< 1.00	1	< 1.00	1	4.85	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	2.07	1	< 1.00	1
Tetrachloroethene	ug/m3	3	100	15.7	0.25	996	3.75	3.67	0.25	0.77	0.25	2.07	0.25	49	0.25	26.7	0.25	2.98	0.25	0.92	0.25	0.64	0.25	2.24	0.25
Tetrahydrofuran	ug/m3			5.1	1	5.39	1	1.66	1	8.16	1	1.02	1	3.92	1	5.39	1	< 1.00	1	12.9	1	1.54	1	3.65	1
Toluene	ug/m3	10	300	1.3	1	1.33	1	2.39	1	1.35	1	1.99	1	1.01	1	1.14	1	1.65	1	2.43	1	3.49	1	3.01	1
Trans-1,2-Dichloroethene	ug/m3			< 1.00	1	3.36	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	ug/m3	0.2	6	61.2	0.2	1370	2.98	1.06	0.2	1.61	0.2	1.9	0.2	234	0.99	76.3	0.2	3.44	0.2	2.41	0.2	0.67	0.2	2.76	0.2
Trichlorofluoromethane	ug/m3			1.24	1	1.21	1	1.32	1	1.25	1	1.24	1	2.49	1	1.73	1	2.31	1	1.36	1	1.3	1	1.45	1
Trichlorotrifluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
RL Exceeds NYSDOH Matrices
Result Exceeds NYSDOH Matrices
NY Soil Vapor (IA) = NYSDOH Indoor Air Matrix Lower Limit
NY Soil Vapor (SS) = NYSDOH Sub-Slab Matrix Lower Limit

Table 2
SVI Summary Table
98, 100, and 104 South 4th Street, Brooklyn, NY

Lab Sample Id				CN58312		CN58296		CN58289		CN58298		CN58301		CN58294		CN58299		CN58309		CN58297		CN58307	
Collection Date				03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023		03/10/2023	
Client Id				IA-4C		IS-4D		IA-4E		IA-4F		IA-4G		IA-4H		SV-5A		SV-5B		IA-5		OA-1	
Matrix				AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR	
SDG: GCN58289		NY	NY																				
Project: 100 SOUTH 4TH	**Units**	**Soil Vapor (IA)**	**Soil Vapor (SS)**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles (TO15) - TO15																							
1,1,1,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	ug/m3	3	100	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	ug/m3	2	60	1.05	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dibromoethane(EDB)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	1.05	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-dichloropropane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Butadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Isopropyltoluene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.02	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone	ug/m3			61.5	1	7.38	1	74.3	1	62.9	1	36.6	1	23.4	1	11.1	1	12	1	26.6	1	4.04	1
Acrylonitrile	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.34	1	< 1.00	1
Bromodichloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	ug/m3	0.2	6	0.36	0.2	0.33	0.2	0.4	0.2	0.45	0.2	0.48	0.2	0.35	0.2	0.49	0.2	0.97	0.2	0.38	0.2	0.47	0.2
Chlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform	ug/m3			2.66	1	< 1.00	1	1.4	1	< 1.00	1	4.68	1	1.22	1	6.98	1	8.1	1	4.42	1	< 1.00	1
Chloromethane	ug/m3			1.22	1	1.09	1	1.23	1	1.11	1	1.54	1	1.11	1	< 1.00	1	< 1.00	1	1.21	1	1.12	1
Cis-1,2-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
cis-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dibromochloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	ug/m3			2.34	1	2.23	1	2.49	1	2.26	1	2.3	1	2.15	1	2.52	1	2.63	1	2.42	1	2.4	1
Ethanol	ug/m3			335	1	85.9	1	2180	1	126	1	352	1	439	1	87.4	1	78.7	1	2600	1	18.2	1
Ethyl acetate	ug/m3			4.07	1	< 1.00	1	6.88	1	< 1.00	1	1.29	1	1.08	1	< 1.00	1	< 1.00	1	3.41	1	< 1.00	1
Ethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.26	1	< 1.00	1
Heptane	ug/m3	6	200	1.85	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.07	1	< 1.00	1
Hexachlorobutadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.06	1	< 1.00	1
Isopropylalcohol	ug/m3			28.7	1	2.68	1	9.7	1	3.73	1	7.69	1	3.81	1	12.3	1	9.7	1	11.9	1	4.57	1
Isopropylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
m,p-Xylene	ug/m3	6	200	2.2	1	< 1.00	1	1.15	1	< 1.00	1	1.32	1	1.08	1	1.2	1	1.86	1	4.64	1	< 1.00	1
Methyl Ethyl Ketone	ug/m3			18.7	1	1.72	1	1.33	1	1.22	1	1.99	1	2.17	1	3.09	1	2.81	1	1.66	1	< 1.00	1
Methyl tert-butyl ether(MTBE)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride	ug/m3	3	100	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3
n-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
o-Xylene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.49	1	< 1.00	1
Propylene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.44	1	< 1.00	1	< 1.00	1
sec-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	4.02	1	< 1.00	1
Tetrachloroethene	ug/m3	3	100	1.54	0.25	0.69	0.25	10.2	0.25	0.31	0.25	0.52	0.25	0.89	0.25	0.57	0.25	3.44	0.25	0.37	0.25	< 0.25	0.25
Tetrahydrofuran	ug/m3			27.7	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	1.29	1	5.54	1	5.72	1	< 1.00	1	< 1.00	1
Toluene	ug/m3	10	300	3.75	1	1.2	1	6.52	1	1.62	1	2.38	1	2.16	1	1.76	1	2.26	1	3.92	1	1.18	1
Trans-1,2-Dichloroethene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	ug/m3	0.2	6	1.91	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	0.2	0.2	0.77	0.2	0.98	0.2	< 0.20	0.2	< 0.20	0.2
Trichlorofluoromethane	ug/m3			1.41	1	1.18	1	1.24	1	1.25	1	1.46	1	1.25	1	1.67	1	2.07	1	3.19	1	1.27	1
Trichlorotrifluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
RL Exceeds NYSDOH Matrices
Result Exceeds NYSDOH Matrices
NY Soil Vapor (IA) = NYSDOH Indoor Air Matrix Lower Limit
NY Soil Vapor (SS) = NYSDOH Sub-Slab Matrix Lower Limit

Table 3

SSDS Effluent Stack Sample Summary Table

98, 100, and 104 South 4th Street, Brooklyn, NY

LOCATION		SSVS LEG 1 STACK EFFLUENT			SSVS LEG 2 STACK EFFLUENT		SSVS LEG 3 STACK EFFLUENT		SSVS LEG 4 STACK EFFLUENT		
SAMPLING DATE			11/17/2022		11/17/2022		11/17/2022		11/17/2022		
LAB SAMPLE ID			L2265474-01		L2265474-02		L2265474-03		L2265474-04		
SAMPLE TYPE			SOIL_VAPOR		SOIL_VAPOR		SOIL_VAPOR		SOIL_VAPOR		
SAMPLE DEPTH (ft.)											
	CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
Volatile Organics in Air											
Dichlorodifluoromethane	75-71-8	ug/m3	2.91	U	20.3	U	0.989	U	6.18	U	
Chloromethane	74-87-3	ug/m3	1.21	U	8.49	U	0.584		2.58	U	
1,2-Dichloro-1,1,2,2-tetrafluoroethar	76-14-2	ug/m3	4.11	U	28.7	U	1.4	U	8.74	U	
Vinyl chloride	75-01-4	ug/m3	1.5	U	10.5	U	0.511	U	3.2	U	
1,3-Butadiene	106-99-0	ug/m3	1.3	U	9.09	U	0.442	U	2.77	U	
Bromomethane	74-83-9	ug/m3	2.28	U	16	U	0.777	U	4.85	U	
Chloroethane	75-00-3	ug/m3	1.55	U	10.8	U	0.528	U	3.3	U	
Ethyl Alcohol	64-17-5	ug/m3	51.6		194	U	9.42	U	58.8	U	
Vinyl bromide	593-60-2	ug/m3	2.57	U	18	U	0.874	U	5.47	U	
Acetone	67-64-1	ug/m3	28.5		48.9	U	22.1		35.2		
Trichlorofluoromethane	75-69-4	ug/m3	3.3	U	23.1	U	1.17		7.02	U	
iso-Propyl Alcohol	67-63-0	ug/m3	3.61	U	25.3	U	1.23	U	8.82		
1,1-Dichloroethene	75-35-4	ug/m3	2.33	U	16.3	U	0.793	U	4.96	U	
tert-Butyl Alcohol	75-65-0	ug/m3	4.46	U	31.2	U	1.52	U	9.46	U	
Methylene chloride	75-09-2	ug/m3	5.11	U	35.8	U	1.74	U	10.8	U	
3-Chloropropene	107-05-1	ug/m3	1.84	U	12.9	U	0.626	U	3.91	U	
Carbon disulfide	75-15-0	ug/m3	1.83	U	12.8	U	0.623	U	3.89	U	
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/m3	4.51	U	31.5	U	1.53	U	9.58	U	
trans-1,2-Dichloroethene	156-60-5	ug/m3	2.33	U	16.3	U	0.793	U	4.96	U	
1,1-Dichloroethane	75-34-3	ug/m3	2.38	U	16.6	U	0.809	U	5.06	U	
Methyl tert butyl ether	1634-04-4	ug/m3	2.12	U	14.8	U	0.721	U	4.51	U	
2-Butanone	78-93-3	ug/m3	81.1		102		60.8		50.7		
cis-1,2-Dichloroethene	156-59-2	ug/m3	36.2		16.3	U	0.793	U	4.96	U	
Ethyl Acetate	141-78-6	ug/m3	5.3	U	37.1	U	1.8	U	11.2	U	
Chloroform	67-66-3	ug/m3	14.8		20.1	U	5.96		24.6		
Tetrahydrofuran	109-99-9	ug/m3	599		5160		55.7		1090		
1,2-Dichloroethane	107-06-2	ug/m3	2.38	U	16.6	U	0.809	U	5.06	U	
n-Hexane	110-54-3	ug/m3	2.07	U	14.5	U	0.705	U	4.41	U	
1,1,1-Trichloroethane	71-55-6	ug/m3	14.3		22.4	U	1.09	U	6.82	U	
Benzene	71-43-2	ug/m3	1.88	U	13.1	U	0.639	U	3.99	U	
Carbon tetrachloride	56-23-5	ug/m3	3.7	U	25.9	U	1.26	U	7.86	U	
Cyclohexane	110-82-7	ug/m3	2.02	U	14.1	U	0.688	U	4.3	U	
1,2-Dichloropropane	78-87-5	ug/m3	2.72	U	19	U	0.924	U	5.78	U	
Bromodichloromethane	75-27-4	ug/m3	3.94	U	27.5	U	1.34	U	8.37	U	
Xylene (Total)	1330-20-7	ug/m3	2.55	U	17.9	U	0.869	U	5.43	U	
1,4-Dioxane	123-91-1	ug/m3	2.12	U	14.8	U	0.721	U	4.5	U	
Trichloroethene	79-01-6	ug/m3	897		22.1	U	40.6		13.9		
2,2,4-Trimethylpentane	540-84-1	ug/m3	2.75	U	19.2	U	0.934	U	5.84	U	
Heptane	142-82-5	ug/m3	2.41	U	16.8	U	0.82	U	5.12	U	
cis-1,3-Dichloropropene	10061-01-5	ug/m3	2.67	U	18.7	U	0.908	U	5.67	U	
4-Methyl-2-pentanone	108-10-1	ug/m3	6.02	U	42.2	U	2.05	U	12.8	U	
trans-1,3-Dichloropropene	10061-02-6	ug/m3	2.67	U	18.7	U	0.908	U	5.67	U	
1,1,2-Trichloroethane	79-00-5	ug/m3	3.21	U	22.4	U	1.09	U	6.82	U	
Toluene	108-88-3	ug/m3	2.22	U	15.5	U	0.799		4.71	U	
1,2-Dichloroethene (total)	540-59-0	ug/m3	36.2		16.3	U	0.793	U	4.96	U	
2-Hexanone	591-78-6	ug/m3	2.41	U	16.8	U	0.82	U	5.12	U	
1,3-Dichloropropene, Total	542-75-6	ug/m3	2.67	U	18.7	U	0.908	U	5.67	U	
Dibromochloromethane	124-48-1	ug/m3	5.01	U	35	U	1.7	U	10.6	U	
1,2-Dibromoethane	106-93-4	ug/m3	4.52	U	31.6	U	1.54	U	9.61	U	
Tetrachloroethene	127-18-4	ug/m3	909		102		8.48		51.6		
Chlorobenzene	108-90-7	ug/m3	2.71	U	18.9	U	0.921	U	5.76	U	
Ethylbenzene	100-41-4	ug/m3	2.55	U	17.9	U	0.869	U	5.43	U	
p/m-Xylene	179601-23-1	ug/m3	5.13	U	35.7	U	1.74	U	10.9	U	
Bromoform	75-25-2	ug/m3	6.08	U	42.5	U	2.07	U	12.9	U	
Styrene	100-42-5	ug/m3	2.5	U	17.5	U	0.852	U	5.32	U	
1,1,2,2-Tetrachloroethane	79-34-5	ug/m3	4.04	U	28.2	U	1.37	U	8.58	U	
o-Xylene	95-47-6	ug/m3	2.55	U	17.9	U	0.869	U	5.43	U	
4-Ethyltoluene	622-96-8	ug/m3	2.89	U	20.2	U	0.983	U	6.15	U	
1,3,5-Trimethylbenzene	108-67-8	ug/m3	2.89	U	20.2	U	0.983	U	6.15	U	
1,2,4-Trimethylbenzene	95-63-6	ug/m3	2.89	U	20.2	U	0.983	U	6.15	U	
Benzyl chloride	100-44-7	ug/m3	3.04	U	21.3	U	1.04	U	6.47	U	
1,3-Dichlorobenzene	541-73-1	ug/m3	3.54	U	24.7	U	1.2	U	7.52	U	
1,4-Dichlorobenzene	106-46-7	ug/m3	3.54	U	24.7	U	1.2	U	7.52	U	
1,2-Dichlorobenzene	95-50-1	ug/m3	3.54	U	24.7	U	1.2	U	7.52	U	
1,2,4-Trichlorobenzene	120-82-1	ug/m3	4.36	U	30.5	U	1.48	U	9.28	U	
Hexachlorobutadiene	87-68-3	ug/m3	6.27	U	43.8	U	2.13	U	13.3	U	

* Comparison is not performed on parameters with non-numeric criteria.

TEST: No Criteria Report -

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected

Table 4.1
98c South 4th Street - NYSDOH Decision Matrices Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	**3.78**	**3.22**	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.26	**8.06**	NFA
1,3,5-Trimethylbenzene	ND	ND	**2.16**	NFA
Benzene	ND	ND	ND	NFA
Carbon tetrachloride	**0.3**	**0.28**	**0.47**	NFA
cis-1,2-Dichloroethene	**3.15**	**121**	ND	NFA/MITIGATE
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	ND	NFA
Heptane	ND	ND	ND	NFA
Hexane	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	ND	1.36	2.63	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	1.15	NFA
Tetrachloroethene	**16**	**996**	**3.67**	NFA/MONITOR
Toluene	1	1	2.39	NFA
Trichloroethene	**61.2**	**1,370**	**1.06**	MITIGATE/MITIGATE
Vinyl chloride	**ND**	**ND**	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected N/A - Not Analyzed

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.2
98c South 4th Street - NYSDOH Decision Matrices Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	SV-2A	IA-2	NYSDOH Matrices
Date	3/10/2023		
Sample Type	Sub Slab	Indoor Air	
Unit	*µg/m 3*		
Volatile Organics in Air			
1,1,1-Trichloroethane	ND	ND	NFA
1,1-Dichloroethene	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.21	NFA
1,3,5-Trimethylbenzene	ND	ND	NFA
Benzene	ND	ND	NFA
Carbon tetrachloride	**0.31**	**0.37**	NFA
cis-1,2-Dichloroethene	**0.9**	ND	NFA
Cyclohexane	ND	ND	NFA
Ethylbenzene	ND	ND	NFA
Heptane	ND	ND	NFA
Hexane	ND	ND	NFA
Isooctane	N/A	N/A	-
m,p-Xylene	ND	ND	NFA
Methylene chloride	ND	ND	NFA
Naphthalene	N/A	N/A	-
o-Xylene	ND	ND	NFA
Tetrachloroethene	**0.77**	**2.07**	NFA
Toluene	1.35	1.99	NFA
Trichloroethene	**0.61**	1.9	IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Vinyl chloride	**0.537**	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected N/A - Not Analyzed

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air - conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

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Table 4.3
98c South 4th Street - NYSDOH Decision Matrices Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	**ND**	**ND**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	1.03	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	ND	NFA
Carbon tetrachloride	0.59	0.52	0.48	NFA
cis-1,2-Dichloroethene	4.99	1.64	ND	NFA
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	ND	NFA
Heptane	ND	ND	ND	NFA
Hexane	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	ND	NFA
Tetrachloroethene	49	26.7	2.98	NFA
Toluene	1.01	1.14	1.65	NFA
Trichloroethene	**234**	**76.3**	3.44	MITIGATE/ MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected N/A - Not Analyzed

NFA: No Further Actions recomended to address human exposures

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MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

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Table 4.4
98c South 4th Street - NYSDOH Decision Matrices Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/10/2023									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	*µg/m 3*									
Volatile Organics in Air										
1,1,1-Trichloroethane	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	1.07	**3.58**	1.05	ND	ND	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	**0.51**	0.5	**0.38**	**0.36**	**0.33**	0.4	**0.45**	**0.48**	**0.35**	NFA
cis-1,2-Dichloroethene	**ND**	ND	**0.34**	ND	ND	ND	ND	ND	ND	NFA
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Ethylbenzene	ND	ND	**2.56**	ND	ND	ND	ND	ND	ND	NFA
Heptane	ND	ND	ND	1.85	ND	ND	ND	ND	ND	NFA
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Isooctane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
m,p-Xylene	1.52	2.15	**8.90**	2.2	ND	1.15	ND	1.32	1.08	NFA
Methylene chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
o-Xylene	**ND**	ND	**2.54**	ND	ND	ND	ND	ND	ND	NFA
Tetrachloroethene	**0.92**	**0.64**	**2.24**	**1.54**	0.696	10.2	**0.31**	**0.52**	**0.89**	NFA/IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Toluene	2.43	3.49	3.01	3.75	1.200	6.5	1.62	2.38	2.16	NFA
Trichloroethene	**2.41**	**0.67**	2.76	1.91	ND	ND	ND	ND	0.2	NFA/IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE
Vinyl chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected N/A - Not Analyzed

NFA: No Further Actions recomended to address human exposures

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Table 4.5

98c South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/10/2023			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	*µg/m 3*			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
1,2,4-Trimethylbenzene	ND	ND	ND	NFA
1,3,5-Trimethylbenzene	ND	ND	ND	NFA
Benzene	ND	ND	1.34	NFA
Carbon tetrachloride	**0.49**	**0.97**	**0.38**	NFA
cis-1,2-Dichloroethene	**ND**	**ND**	ND	NFA
Cyclohexane	ND	ND	ND	NFA
Ethylbenzene	ND	ND	1.26	NFA
Heptane	ND	ND	1.07	NFA
Hexane	ND	ND	1.06	NFA
Isooctane	N/A	N/A	N/A	-
m,p-Xylene	1.2	1.86	4.64	NFA
Methylene chloride	ND	ND	ND	NFA
Naphthalene	N/A	N/A	N/A	-
o-Xylene	ND	ND	1.49	NFA
Tetrachloroethene	**0.57**	**3.44**	**0.37**	NFA
Toluene	1.76	2.26	3.92	NFA
Trichloroethene	**0.77**	**0.98**	ND	NFA
Vinyl chloride	**ND**	**ND**	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

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Table 4.6

98c South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	**OA-1**	**NYSDOH Matrices**
Date	3/10/2023	
Sample Type	OUTDOOR AIR	
Unit	*µg/m 3*	
Volatile Organics in Air		
1,1,1-Trichloroethane	ND	NA
1,1-Dichloroethene	ND	NA
1,2,4-Trimethylbenzene	ND	NA
1,3,5-Trimethylbenzene	ND	NA
Benzene	ND	NA
Carbon tetrachloride	0.47	NA
cis-1,2-Dichloroethene	ND	NA
Cyclohexane	ND	NA
Ethylbenzene	ND	NA
Heptane	ND	NA
Hexane	ND	NA
Isooctane	N/A	-
m,p-Xylene	ND	NA
Methylene chloride	ND	NA
Naphthalene	N/A	-
o-Xylene	ND	NA
Tetrachloroethene	ND	NA
Toluene	1.18	NA
Trichloroethene	ND	NA
Vinyl chloride	ND	NA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected N/A - Not Analyzed

NFA: No Further Actions recomended to address human exposures

Table 5

SSDS Effluent Stack Sample Summary Table - 2024

98, 100, and 104 South 4th Street, Brooklyn, NY

	Lab Sample Id			CQ39445		CQ39446		CQ39447		CQ39448	
	Collection Date			03/26/2024		03/26/2024		03/26/2024		03/26/2024	
	Client Id			SSDS STACK #1		SSDS STACK #2		SSDS STACK #3		SSDS STACK #4	
	Matrix			AIR		AIR		AIR		AIR	
SDG: GCQ39445											
Project: 100 S 4TH ST	CAS	Units		Result	RL	Result	RL	Result	RL	Result	RL
Volatiles (TO15) - TO15											
1,1,1,2-Tetrachloroethane	630-20-6	ppbv		< 0.146	0.146	< 0.146	0.146	< 0.146	0.146	< 0.146	0.146
1,1,1,2-Tetrachloroethane	630-20-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	71-55-6	ppbv		**2.72**	0.183	< 0.183	0.183	< 0.183	0.183	< 0.183	0.183
1,1,1-Trichloroethane	71-55-6	ug/m3		**14.8**	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	79-34-5	ppbv		< 0.146	0.146	< 0.146	0.146	< 0.146	0.146	< 0.146	0.146
1,1,2,2-Tetrachloroethane	79-34-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	79-00-5	ppbv		< 0.183	0.183	< 0.183	0.183	< 0.183	0.183	< 0.183	0.183
1,1,2-Trichloroethane	79-00-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane	75-34-3	ppbv		< 0.247	0.247	< 0.247	0.247	< 0.247	0.247	< 0.247	0.247
1,1-Dichloroethane	75-34-3	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene	75-35-4	ppbv		< 0.051	0.051	< 0.051	0.051	< 0.051	0.051	< 0.051	0.051
1,1-Dichloroethene	75-35-4	ug/m3		< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	120-82-1	ppbv		< 0.135	0.135	< 0.135	0.135	< 0.135	0.135	< 0.135	0.135
1,2,4-Trichlorobenzene	120-82-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	95-63-6	ppbv		< 0.204	0.204	< 0.204	0.204	< 0.204	0.204	< 0.204	0.204
1,2,4-Trimethylbenzene	95-63-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dibromoethane(EDB)	106-93-4	ppbv		< 0.130	0.13	< 0.130	0.13	< 0.130	0.13	< 0.130	0.13
1,2-Dibromoethane(EDB)	106-93-4	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	95-50-1	ppbv		< 0.166	0.166	< 0.166	0.166	< 0.166	0.166	< 0.166	0.166
1,2-Dichlorobenzene	95-50-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane	107-06-2	ppbv		< 0.247	0.247	< 0.247	0.247	< 0.247	0.247	< 0.247	0.247
1,2-Dichloroethane	107-06-2	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-dichloropropane	78-87-5	ppbv		< 0.217	0.217	< 0.217	0.217	< 0.217	0.217	< 0.217	0.217
1,2-dichloropropane	78-87-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	76-14-2	ppbv		< 0.143	0.143	< 0.143	0.143	< 0.143	0.143	< 0.143	0.143
1,2-Dichlorotetrafluoroethane	76-14-2	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	108-67-8	ppbv		< 0.204	0.204	< 0.204	0.204	< 0.204	0.204	< 0.204	0.204
1,3,5-Trimethylbenzene	108-67-8	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Butadiene	106-99-0	ppbv		< 0.452	0.452	< 0.452	0.452	< 0.452	0.452	< 0.452	0.452
1,3-Butadiene	106-99-0	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	541-73-1	ppbv		< 0.166	0.166	< 0.166	0.166	< 0.166	0.166	< 0.166	0.166
1,3-Dichlorobenzene	541-73-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	106-46-7	ppbv		< 0.166	0.166	< 0.166	0.166	< 0.166	0.166	< 0.166	0.166
1,4-Dichlorobenzene	106-46-7	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane	123-91-1	ppbv		< 0.278	0.278	< 0.278	0.278	< 0.278	0.278	< 0.278	0.278
1,4-Dioxane	123-91-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	591-78-6	ppbv		< 0.244	0.244	< 0.244	0.244	< 0.244	0.244	< 0.244	0.244
2-Hexanone(MBK)	591-78-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene	622-96-8	ppbv		< 0.204	0.204	< 0.204	0.204	< 0.204	0.204	< 0.204	0.204
4-Ethyltoluene	622-96-8	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Isopropyltoluene	99-87-6	ppbv		< 0.182	0.182	< 0.182	0.182	< 0.182	0.182	< 0.182	0.182
4-Isopropyltoluene	99-87-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	108-10-1	ppbv		< 0.244	0.244	< 0.244	0.244	< 0.244	0.244	< 0.244	0.244
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone	67-64-1	ppbv		**1.84**	0.421	**4.37**	0.421	**6.87**	0.421	**10.2**	0.421
Acetone	67-64-1	ug/m3		**4.37**	1	**10.4**	1	**16.3**	1	**24.2**	1
Acrylonitrile	107-13-1	ppbv		< 0.461	0.461	< 0.461	0.461	< 0.461	0.461	< 0.461	0.461
Acrylonitrile	107-13-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene	71-43-2	ppbv		< 0.313	0.313	< 0.313	0.313	< 0.313	0.313	< 0.313	0.313
Benzene	71-43-2	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzyl chloride	100-44-7	ppbv		< 0.193	0.193	< 0.193	0.193	< 0.193	0.193	< 0.193	0.193
Benzyl chloride	100-44-7	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane	75-27-4	ppbv		< 0.149	0.149	< 0.149	0.149	< 0.149	0.149	< 0.149	0.149
Bromodichloromethane	75-27-4	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform	75-25-2	ppbv		< 0.097	0.097	< 0.097	0.097	< 0.097	0.097	< 0.097	0.097
Bromoform	75-25-2	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane	74-83-9	ppbv		< 0.258	0.258	< 0.258	0.258	< 0.258	0.258	< 0.258	0.258
Bromomethane	74-83-9	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide	75-15-0	ppbv		< 0.321	0.321	< 0.321	0.321	< 0.321	0.321	< 0.321	0.321
Carbon Disulfide	75-15-0	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	56-23-5	ppbv		**0.105**	0.032	**0.08**	0.032	**0.078**	0.032	**0.086**	0.032
Carbon Tetrachloride	56-23-5	ug/m3		**0.66**	0.2	**0.5**	0.2	**0.49**	0.2	**0.54**	0.2
Chlorobenzene	108-90-7	ppbv		< 0.217	0.217	< 0.217	0.217	< 0.217	0.217	< 0.217	0.217
Chlorobenzene	108-90-7	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane	75-00-3	ppbv		< 0.379	0.379	< 0.379	0.379	< 0.379	0.379	< 0.379	0.379
Chloroethane	75-00-3	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform	67-66-3	ppbv		**2.87**	0.205	**0.46**	0.205	**0.692**	0.205	**4.38**	0.205
Chloroform	67-66-3	ug/m3		**14**	1	**2.24**	1	**3.38**	1	**21.4**	1
Chloromethane	74-87-3	ppbv		< 0.485	0.485	< 0.485	0.485	< 0.485	0.485	< 0.485	0.485
Chloromethane	74-87-3	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cis-1,2-Dichloroethene	156-59-2	ppbv		**5.91**	0.051	**0.074**	0.051	< 0.051	0.051	< 0.051	0.051
Cis-1,2-Dichloroethene	156-59-2	ug/m3		**23.4**	0.2	**0.29**	0.2	< 0.20	0.2	< 0.20	0.2
cis-1,3-Dichloropropene	10061-01-5	ppbv		< 0.221	0.221	< 0.221	0.221	< 0.221	0.221	< 0.221	0.221
cis-1,3-Dichloropropene	10061-01-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected

Table 5

SSDS Effluent Stack Sample Summary Table - 2024

98, 100, and 104 South 4th Street, Brooklyn, NY

	Lab Sample Id			CQ39445		CQ39446		CQ39447		CQ39448	
	Collection Date			03/26/2024		03/26/2024		03/26/2024		03/26/2024	
	Client Id			SSDS STACK #1		SSDS STACK #2		SSDS STACK #3		SSDS STACK #4	
	Matrix			AIR		AIR		AIR		AIR	
SDG: GCQ39445											
Project: 100 S 4TH ST	CAS	Units		Result	RL	Result	RL	Result	RL	Result	RL
Cyclohexane	110-82-7	ppbv		< 0.291	0.291	< 0.291	0.291	< 0.291	0.291	< 0.291	0.291
Cyclohexane	110-82-7	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dibromochloromethane	124-48-1	ppbv		< 0.118	0.118	< 0.118	0.118	< 0.118	0.118	< 0.118	0.118
Dibromochloromethane	124-48-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	75-71-8	ppbv		**0.424**	0.202	**0.488**	0.202	**0.472**	0.202	**0.487**	0.202
Dichlorodifluoromethane	75-71-8	ug/m3		**2.1**	1	**2.41**	1	**2.33**	1	**2.41**	1
Ethanol	64-17-5	ppbv		**2.54**	0.531	**13.2**	0.531	**37.8**	0.531	**103**	0.531
Ethanol	64-17-5	ug/m3		**4.78**	1	**24.9**	1	**71.2**	1	**194**	1
Ethyl acetate	141-78-6	ppbv		< 0.278	0.278	< 0.278	0.278	< 0.278	0.278	< 0.278	0.278
Ethyl acetate	141-78-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Ethylbenzene	100-41-4	ppbv		< 0.230	0.23	< 0.230	0.23	< 0.230	0.23	< 0.230	0.23
Ethylbenzene	100-41-4	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Heptane	142-82-5	ppbv		< 0.244	0.244	< 0.244	0.244	< 0.244	0.244	< 0.244	0.244
Heptane	142-82-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexachlorobutadiene	87-68-3	ppbv		< 0.094	0.094	< 0.094	0.094	< 0.094	0.094	< 0.094	0.094
Hexachlorobutadiene	87-68-3	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane	110-54-3	ppbv		< 0.284	0.284	< 0.284	0.284	< 0.284	0.284	< 0.284	0.284
Hexane	110-54-3	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isooctane	540-84-1	ppbv		< 0.215	0.215	< 0.215	0.215	< 0.215	0.215	< 0.215	0.215
Isooctane	540-84-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isopropylalcohol	67-63-0	ppbv		**0.605**	0.407	**2.45**	0.407	**3.73**	0.407	**3.24**	0.407
Isopropylalcohol	67-63-0	ug/m3		**1.49**	1	**6.02**	1	**9.16**	1	**7.96**	1
Isopropylbenzene	98-82-8	ppbv		< 0.204	0.204	< 0.204	0.204	< 0.204	0.204	< 0.204	0.204
Isopropylbenzene	98-82-8	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
m,p-Xylene	179601-23-1	ppbv		< 0.230	0.23	< 0.230	0.23	< 0.230	0.23	< 0.230	0.23
m,p-Xylene	179601-23-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methyl Ethyl Ketone	78-93-3	ppbv		**1.31**	0.339	**0.356**	0.339	**0.489**	0.339	**0.456**	0.339
Methyl Ethyl Ketone	78-93-3	ug/m3		**3.86**	1	**1.05**	1	**1.44**	1	**1.34**	1
Methyl tert-butyl ether(MTBE)	1634-04-4	ppbv		< 0.278	0.278	< 0.278	0.278	< 0.278	0.278	< 0.278	0.278
Methyl tert-butyl ether(MTBE)	1634-04-4	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride	75-09-2	ppbv		< 0.863	0.863	< 0.863	0.863	< 0.863	0.863	< 0.863	0.863
Methylene Chloride	75-09-2	ug/m3		< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3
n-Butylbenzene	104-51-8	ppbv		< 0.182	0.182	< 0.182	0.182	< 0.182	0.182	< 0.182	0.182
n-Butylbenzene	104-51-8	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Naphthalene	91-20-3	ppbv		< 0.200	0.2	< 0.200	0.2	< 0.200	0.2	< 0.200	0.2
Naphthalene	91-20-3	ug/m3		< 1.05	1.05	< 1.05	1.05	< 1.05	1.05	< 1.05	1.05
o-Xylene	95-47-6	ppbv		< 0.230	0.23	< 0.230	0.23	< 0.230	0.23	< 0.230	0.23
o-Xylene	95-47-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Propylene	115-07-1	ppbv		< 0.581	0.581	< 0.581	0.581	< 0.581	0.581	< 0.581	0.581
Propylene	115-07-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
sec-Butylbenzene	135-98-8	ppbv		< 0.182	0.182	< 0.182	0.182	< 0.182	0.182	< 0.182	0.182
sec-Butylbenzene	135-98-8	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene	100-42-5	ppbv		< 0.235	0.235	< 0.235	0.235	< 0.235	0.235	< 0.235	0.235
Styrene	100-42-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Tetrachloroethene	127-18-4	ppbv		**135**	0.184	**1.96**	0.037	**0.467**	0.037	**0.377**	0.037
Tetrachloroethene	127-18-4	ug/m3		**915**	1.25	**13.3**	0.25	**3.17**	0.25	**2.56**	0.25
Tetrahydrofuran	109-99-9	ppbv		**1**	0.339	**0.39**	0.339	< 0.339	0.339	< 0.339	0.339
Tetrahydrofuran	109-99-9	ug/m3		**2.95**	1	**1.15**	1	< 1.00	1	< 1.00	1
Toluene	108-88-3	ppbv		< 0.266	0.266	**0.347**	0.266	< 0.266	0.266	< 0.266	0.266
Toluene	108-88-3	ug/m3		< 1.00	1	**1.31**	1	< 1.00	1	< 1.00	1
Trans-1,2-Dichloroethene	156-60-5	ppbv		< 0.252	0.252	< 0.252	0.252	< 0.252	0.252	< 0.252	0.252
Trans-1,2-Dichloroethene	156-60-5	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	10061-02-6	ppbv		< 0.221	0.221	< 0.221	0.221	< 0.221	0.221	< 0.221	0.221
trans-1,3-Dichloropropene	10061-02-6	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	79-01-6	ppbv		**193**	0.185	**5.09**	0.037	**1.37**	0.037	**0.555**	0.037
Trichloroethene	79-01-6	ug/m3		**1040**	0.99	**27.3**	0.2	**7.36**	0.2	**2.98**	0.2
Trichlorofluoromethane	75-69-4	ppbv		**0.221**	0.178	**0.228**	0.178	**0.223**	0.178	**0.488**	0.178
Trichlorofluoromethane	75-69-4	ug/m3		**1.24**	1	**1.28**	1	**1.25**	1	**2.74**	1
Trichlorotrifluoroethane	76-13-1	ppbv		< 0.131	0.131	< 0.131	0.131	< 0.131	0.131	< 0.131	0.131
Trichlorotrifluoroethane	76-13-1	ug/m3		< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride	75-01-4	ppbv		< 0.078	0.078	< 0.078	0.078	< 0.078	0.078	< 0.078	0.078
Vinyl Chloride	75-01-4	ug/m3		< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected

Table 6
2024 SVI Summary Table and QAQC Samples
98, 100, and 104 South 4th Street, Brooklyn, NY

Lab Sample Id				CQ38533		CQ38534		CQ38535		CQ39450		CQ38536		CQ39451		CQ38540		CQ38524		CQ38525		CQ38526		CQ38527		CQ38528	
Collection Date				3/27/2024		3/27/2024		3/27/2024		3/27/2024		3/27/2024		3/27/2024		3/26/2024		3/26/2024		3/26/2024		3/26/2024		3/26/2024		3/26/2024	
Client Id				SV-1A		SV-1B		SV-2A		IA-2		SV-3A		IA-3		SV-4		IA-4A		IA-4B		IA-4C		IA-4D		IA-4E	
Matrix				Air		Air		Air		Air		Air		Air		Air		Air		Air		Air		Air		Air	
SDG: GCN58289		NY	NY																								
Project: 100 SOUTH 4TH	**Units**	**Soil Vapor (IA)**	**Soil Vapor (SS)**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles (TO15) - TO15																											
1,1,1,2-Tetrachloroethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	ug/m3	3	100	7.25	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane	ug/m3			< 5.02	5.02	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 5.02	5.02	< 1.00	1	< 5.02	5.02	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene	ug/m3	0.2	6	< 1.00	1	< 1.00	1	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	ug/m3	2	60	< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	2.68	1	< 5.01	5.01	2.87	1	< 5.01	5.01	1.02	1	< 1.00	1	2.12	1	< 1.00	1	< 1.00	1
1,2-Dibromoethane(EDB)	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane	ug/m3			< 5.02	5.02	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 5.02	5.02	< 1.00	1	< 5.02	5.02	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-dichloropropane	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	ug/m3	2	60	< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Butadiene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	3.05	1	< 5.01	5.01	3.72	1	< 5.01	5.01	< 1.00	1	1.08	1	2.05	1	< 1.00	1	< 1.00	1
4-Isopropyltoluene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	1.04	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone	ug/m3			16.3	5.01	15.4	5.01	8.88	5.01	44.2	1	9	5.01	24	1	54.1	5.01	71.2	1	65.3	1	39.2	1	33.7	1	9.97	1
Acrylonitrile	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene	ug/m3	2	60	< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	1.2	1	< 5.01	5.01	1.15	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzyl chloride	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	ug/m3	0.2	6	< 1.00	1	< 1.00	1	< 1.00	1	0.51	0.2	< 1.00	1	0.44	0.2	< 1.00	1	0.5	0.2	0.41	0.2	0.52	0.2	0.47	0.2	0.45	0.2
Chlorobenzene	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform	ug/m3			< 4.98	4.98	< 4.98	4.98	< 4.98	4.98	2.39	1	24.3	4.98	1.31	1	< 4.98	4.98	< 1.00	1	1.61	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloromethane	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	1.02	1	< 4.99	4.99	1.03	1	< 4.99	4.99	1.43	1	1.36	1	1.85	1	1.32	1	1.17	1
Cis-1,2-Dichloroethene	ug/m3	0.2	6	1.72	1	61.8	1	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
cis-1,3-Dichloropropene	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane	ug/m3	2	60	< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dibromochloromethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	1.95	1	< 4.99	4.99	2.09	1	< 4.99	4.99	2.5	1	2.15	1	2.44	1	2.57	1	2.41	1
Ethanol	ug/m3			237	5.01	11.1	5.01	20	5.01	2240	1	7.98	5.01	418	1	237	5.01	175	1	224	1	186	1	1060	1	49.3	1
Ethyl acetate	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	7.45	1	1.86	1	5.15	1	6.55	1	< 1.00	1
Ethylbenzene	ug/m3	2	60	< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	15.3	4.99	9.29	1	4.73	1	1.68	1	1.99	1	< 1.00	1
Heptane	ug/m3	6	200	< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	2.77	1	< 1.00	1	2.24	1	< 1.00	1	< 1.00	1
Hexachlorobutadiene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane	ug/m3	6	200	< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isooctane	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Isopropylalcohol	ug/m3			57.2	5.01	5.77	5.01	< 5.01	5.01	26.5	1	< 5.01	5.01	20.9	1	98.3	5.01	31	1	60.7	1	82.3	1	127	1	10.1	1
Isopropylbenzene	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
m,p-Xylene	ug/m3	6	200	< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	3.85	1	< 4.99	4.99	4.07	1	63.4	4.99	49.5	1	18.6	1	7.68	1	8.51	1	1.75	1
Methyl Ethyl Ketone	ug/m3			9.31	5.01	6.45	5.01	11.1	5.01	3.83	1	14.1	5.01	13.1	1	< 5.01	5.01	1.94	1	2.43	1	4.13	1	< 1.00	1	< 1.00	1
Methyl tert-butyl ether(MTBE)	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride	ug/m3	3	100	< 15.0	15	< 15.0	15	< 15.0	15	< 3.00	3	< 15.0	15	< 3.00	3	< 15.0	15	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3	< 3.00	3
Naphthalene	ug/m3			< 5.23	5.23	< 5.23	5.23	< 5.23	5.23	< 1.05	1.05	< 5.23	5.23	1.19	1.05	< 5.23	5.23	< 1.05	1.05	< 1.05	1.05	< 1.05	1.05	< 1.05	1.05	< 1.05	1.05
n-Butylbenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
o-Xylene	ug/m3	2	60	< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	1.26	1	< 4.99	4.99	1.38	1	16.7	4.99	13.2	1	4.99	1	2.33	1	2.35	1	< 1.00	1
Propylene	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
sec-Butylbenzene	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene	ug/m3			< 4.98	4.98	< 4.98	4.98	< 4.98	4.98	< 1.00	1	< 4.98	4.98	< 1.00	1	< 4.98	4.98	3.74	1	< 1.00	1	1.26	1	< 1.00	1	< 1.00	1
Tetrachloroethene	ug/m3	3	100	31.5	1.25	1900	3.75	2.71	1.25	1.08	0.25	7.66	1.25	0.98	0.25	< 1.25	1.25	0.39	0.25	0.49	0.25	0.35	0.25	0.5	0.25	0.35	0.25
Tetrahydrofuran	ug/m3			< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 5.01	5.01	< 1.00	1	< 1.00	1	2.27	1	< 1.00	1	< 1.00	1
Toluene	ug/m3	10	300	< 5.01	5.01	< 5.01	5.01	< 5.01	5.01	7.76	1	< 5.01	5.01	20	1	< 5.01	5.01	7.34	1	3.99	1	5.69	1	2.01	1	1.21	1
Trans-1,2-Dichloroethene	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	1.05	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	ug/m3			< 4.99	4.99	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 4.99	4.99	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	ug/m3	0.2	6	44.3	0.99	1110	2.98	5.64	0.99	0.37	0.2	9.29	0.99	0.27	0.2	< 0.99	0.99	< 0.20	0.2	0.23	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2
Trichlorofluoromethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	1.1	1	< 5.00	5	1.18	1	< 5.00	5	1.33	1	1.22	1	1.38	1	1.27	1	1.25	1
Trichlorotrifluoroethane	ug/m3			< 5.00	5	< 5.00	5	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 5.00	5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride	ug/m3	0.2	6	< 1.00	1	< 1.00	1	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 1.00	1	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
RL Exceeds NYSDOH Matrices
Result Exceeds NYSDOH Matrices
NY Soil Vapor (IA) = NYSDOH Indoor Air Matrix Lower Limit
NY Soil Vapor (SS) = NYSDOH Sub-Slab Matrix Lower Limit

Table 6
2024 SVI Summary Table and QAQC Samples
98, 100, and 104 South 4th Street, Brooklyn, NY

Lab Sample Id				CQ38529		CQ38530		CQ38531		CQ38537		CQ38538		CQ39452		CQ39454		CQ38539		CQ38541		CQ39453		CQ38532	
Collection Date				3/26/2024		3/26/2024		3/26/2024		3/27/2024		3/27/2024		3/27/2024		3/26/2024		3/27/2024		3/26/2024		3/27/2024		3/26/2024	
Client Id				IA-4F		IA-4G		IA-4I		SV-5A		SV-5B		IA-5		OA-1		SV-DUP		SV-DUP		IA-DUP		IA-DUP	
Matrix				Air		Air		Air		Air		Air		Air		Air		Air		Air		Air		Air	
SDG: GCN58289		NY	NY																						
Project: 100 SOUTH 4TH	**Units**	**Soil Vapor (IA)**	**Soil Vapor (SS)**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles (TO15) - TO15																									
1,1,1,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	ug/m3	3	100	< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	6.65	5	< 5.00	5	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,1-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 1.00	1	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 1.00	1
1,1-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 1.00	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2	< 1.00	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2
1,2,4-Trichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	4.13	1	1.89	1
1,2-Dibromoethane(EDB)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,2-Dichloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 1.00	1	< 5.02	5.02	< 5.02	5.02	< 1.00	1	< 1.00	1
1,2-dichloropropane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	1.14	1	< 1.00	1
1,3-Butadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
1,4-Dioxane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
2-Hexanone(MBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	6.55	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
4-Ethyltoluene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	6.39	1	1.88	1
4-Isopropyltoluene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone(MIBK)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
Acetone	ug/m3			37.5	1	56	1	46.3	1	18.4	5.01	12.2	5.01	45.3	1	5.58	1	14	5.01	60.8	5.01	32.3	1	39.4	1
Acrylonitrile	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Benzene	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	1.23	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	1.12	1	< 1.00	1
Benzyl chloride	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Bromodichloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Bromoform	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Bromomethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Carbon Disulfide	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Carbon Tetrachloride	ug/m3	0.2	6	0.44	0.2	0.47	0.2	0.47	0.2	< 1.00	1	< 1.00	1	0.48	0.2	0.44	0.2	< 1.00	1	< 1.00	1	0.45	0.2	0.49	0.2
Chlorobenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Chloroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Chloroform	ug/m3			< 1.00	1	1.73	1	< 1.00	1	10.1	4.98	< 4.98	4.98	1.03	1	< 1.00	1	< 4.98	4.98	< 4.98	4.98	< 1.00	1	< 1.00	1
Chloromethane	ug/m3			1.22	1	1.29	1	1.3	1	< 4.99	4.99	< 4.99	4.99	1.1	1	1.01	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	1.76	1
Cis-1,2-Dichloroethene	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 1.00	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2	1.17	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2
cis-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
Cyclohexane	ug/m3	2	60	< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
Dibromochloromethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Dichlorodifluoromethane	ug/m3			2.24	1	2.53	1	2.43	1	< 4.99	4.99	< 4.99	4.99	2.13	1	2.08	1	< 4.99	4.99	< 4.99	4.99	2.08	1	2.5	1
Ethanol	ug/m3			205	1	951	1	311	1	18.7	5.01	19.8	5.01	405	1	14.4	1	201	5.01	281	5.01	708	1	188	1
Ethyl acetate	ug/m3			< 1.00	1	2.88	1	2.12	1	< 5.01	5.01	< 5.01	5.01	2.82	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	5.55	1
Ethylbenzene	ug/m3	2	60	< 1.00	1	< 1.00	1	12.2	1	< 4.99	4.99	< 4.99	4.99	4.27	1	< 1.00	1	< 4.99	4.99	17.1	4.99	< 1.00	1	1.6	1
Heptane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	1.06	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	2.28	1
Hexachlorobutadiene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Hexane	ug/m3	6	200	< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Isooctane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
Isopropylalcohol	ug/m3			29.2	1	88.2	1	127	1	< 5.01	5.01	< 5.01	5.01	47.9	1	3	1	44.7	5.01	116	5.01	138	1	85	1
Isopropylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
m,p-Xylene	ug/m3	6	200	1.81	1	1.47	1	59	1	9.5	4.99	5.51	4.99	20.7	1	< 1.00	1	< 4.99	4.99	67.7	4.99	3.94	1	7.51	1
Methyl Ethyl Ketone	ug/m3			< 1.00	1	1.35	1	< 1.00	1	16.2	5.01	20.3	5.01	1.18	1	< 1.00	1	8.19	5.01	6.37	5.01	1.28	1	4.1	1
Methyl tert-butyl ether(MTBE)	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
Methylene Chloride	ug/m3	3	100	< 3.00	3	< 3.00	3	< 3.00	3	< 15.0	15	< 15.0	15	< 3.00	3	< 3.00	3	< 15.0	15	< 15.0	15	< 3.00	3	< 3.00	3
Naphthalene	ug/m3			1.28	1.05	< 1.05	1.05	< 1.05	1.05	< 5.23	5.23	< 5.23	5.23	< 1.05	1.05	< 1.05	1.05	< 5.23	5.23	< 5.23	5.23	< 1.05	1.05	< 1.05	1.05
n-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
o-Xylene	ug/m3	2	60	< 1.00	1	< 1.00	1	15.3	1	< 4.99	4.99	< 4.99	4.99	5.99	1	< 1.00	1	< 4.99	4.99	18.3	4.99	1.5	1	2.25	1
Propylene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1
sec-Butylbenzene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Styrene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.98	4.98	< 4.98	4.98	1.12	1	< 1.00	1	< 4.98	4.98	< 4.98	4.98	< 1.00	1	1.02	1
Tetrachloroethene	ug/m3	3	100	0.35	0.25	0.64	0.25	0.33	0.25	< 1.25	1.25	< 1.25	1.25	0.72	0.25	< 0.25	0.25	30.1	1.25	< 1.25	1.25	1.46	0.25	0.33	0.25
Tetrahydrofuran	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	< 1.00	1	< 5.01	5.01	< 5.01	5.01	< 1.00	1	2.32	1
Toluene	ug/m3	10	300	1.39	1	< 1.00	1	2.31	1	< 5.01	5.01	< 5.01	5.01	3.63	1	1.47	1	< 5.01	5.01	< 5.01	5.01	4.22	1	5.65	1
Trans-1,2-Dichloroethene	ug/m3			< 1.00	1	< 1.00	1	1.06	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1	< 4.99	4.99	< 4.99	4.99	< 1.00	1	< 1.00	1
Trichloroethene	ug/m3	0.2	6	< 0.20	0.2	0.21	0.2	< 0.20	0.2	< 0.99	0.99	< 0.99	0.99	< 0.20	0.2	< 0.20	0.2	42.9	0.99	< 0.99	0.99	0.46	0.2	< 0.20	0.2
Trichlorofluoromethane	ug/m3			1.22	1	1.81	1	1.41	1	< 5.00	5	< 5.00	5	1.5	1	1.12	1	< 5.00	5	< 5.00	5	1.08	1	1.27	1
Trichlorotrifluoroethane	ug/m3			< 1.00	1	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1	< 5.00	5	< 5.00	5	< 1.00	1	< 1.00	1
Vinyl Chloride	ug/m3	0.2	6	< 0.20	0.2	< 0.20	0.2	< 0.20	0.2	< 1.00	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2	< 1.00	1	< 1.00	1	< 0.20	0.2	< 0.20	0.2

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
RL Exceeds NYSDOH Matrices
Result Exceeds NYSDOH Matrices
NY Soil Vapor (IA) = NYSDOH Indoor Air Matrix Lower Limit
NY Soil Vapor (SS) = NYSDOH Sub-Slab Matrix Lower Limit

Table 7
NYSDOH and USEPA Indoor Air Comparison Summary Table
98, 100, and 104 South 4th Street, Brooklyn, NY

Collection Date				Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24
Client Id				IA-1	IA-1	IA-1	IA-2	IA-2	IA-2	IA-3	IA-3	IA-3	IA-4A	IA-4A	IA-4A
Matrix				AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR
SDG: GCN58289		NYSDOH	USEPA												
Project: 100 SOUTH 4TH	**Units**	**Upper Fence**	**BASE**		**Result**			**Result**			**Result**			**Result**	
Volatiles (TO15) - TO15															
1,1,1,2-Tetrachloroethane	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/m3	2.5	20.6	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/m3	0.4	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/m3	0.4	<1.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/m3	0.4	<0.7	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ug/m3	0.4	<1.4	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/m3	0.5	<6.8	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/m3	9.8	9.5	ND	8.06	NS	1.25	1.21	2.68	1.64	1.03	2.87	ND	1.07	1.02
1,2-Dibromoethane(EDB)	ug/m3	0.4	<1.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/m3	0.5	<1.2	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/m3	0.4	<0.9	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	ug/m3	0.4	<1.6	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	ug/m3	0.4	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/m3	3.9	3.7	ND	2.16	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ug/m3	~	<3	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	0.5	<2.4	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/m3	1.2	5.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone(MBK)	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	ug/m3	~	3.6	ND	3.17	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ug/m3	~	~	ND	1.59	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone(MIBK)	ug/m3	~	6	ND	ND	NS	ND	ND	1.04	ND	ND	ND	ND	ND	ND
Acetone	ug/m3	115	98.9	ND	110	NS	47	179	44.2	18.2	60.1	24	36.3	23	71.2
Acrylonitrile	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/m3	13	9.4	0.879	ND	NS	1.04	ND	1.2	1.16	ND	1.15	1.09	ND	ND
Bromodichloromethane	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ug/m3	~	<1.7	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/m3	~	4.2	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ug/m3	1.3	<1.3	0.396	0.47	NS	0.421	0.37	0.51	0.403	0.48	0.44	0.39	0.5	0.5
Chlorobenzene	ug/m3	0.4	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/m3	0.4	<1.1	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/m3	1.2	1.1	ND	ND	NS	ND	1.01	2.39	2.08	3.6	1.31	ND	ND	ND
Chloromethane	ug/m3	4.2	3.7	0.888	1.25	NS	0.964	1.11	1.02	0.989	1.27	1.03	1.1	1.41	1.43
Cis-1,2-Dichloroethene	ug/m3	0.4	<1.2	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/m3	0.4	<2.3	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ug/m3	6.3	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	1.94	ND	ND
Dibromochloromethane	ug/m3	~	16.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/m3	10	<6.8	1.99	2.35	NS	2.08	2.36	1.95	2.13	2.43	2.09	2.02	2.44	2.5
Ethanol	ug/m3	1300	210	28.6	463	NS	447	3010	2240	203	1160	418	889	116	175
Ethyl acetate	ug/m3	~	5.4	ND	2.95	NS	ND	ND	ND	ND	1.53	ND	2.64	ND	7.45
Ethylbenzene	ug/m3	6.4	5.7	ND	ND	NS	1.23	ND	ND	ND	ND	ND	ND	ND	9.29
Heptane	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	35.1	ND	2.77
Hexachlorobutadiene	ug/m3	0.5	<6.8	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ug/m3	~	12	ND	ND	NS	0.73	ND	ND	ND	ND	ND	0.871	ND	ND
Isopropylalcohol	ug/m3	~	~	3.37	1750	NS	6.02	351	26.5	6.22	135	20.9	230	5.11	31
Isopropylbenzene	ug/m3	0.8	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	ug/m3	11	22.2	ND	2.63	NS	4.6	ND	3.85	1.91	ND	4.07	1.92	2.15	49.5
Methyl Ethyl Ketone	ug/m3	16	~	ND	2.75	NS	ND	1.66	3.83	ND	1.82	13.1	ND	6.22	1.94
Methyl tert-butyl ether(MTBE)	ug/m3	~	11.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/m3	16	10	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ug/m3	1.1	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ug/m3	7.1	7.9	ND	1.15	NS	1.32	ND	1.26	ND	ND	1.38	ND	ND	13.2
Propylene	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ug/m3	1.2	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/m3	1.4	~	ND	4.85	NS	ND	ND	ND	ND	ND	ND	ND	2.07	3.74
Tetrachloroethene	ug/m3	2.5	15.9	1.11	3.67	NS	0.787	2.07	1.08	2.09	2.98	0.98	1.04	0.64	0.39
Tetrahydrofuran	ug/m3	0.8	~	ND	1.66	NS	ND	1.02	ND	ND	ND	ND	ND	1.54	ND
Toluene	ug/m3	57	43	2.09	2.39	NS	2.36	1.99	7.76	2.08	1.65	20	5.31	3.49	7.34
Trans-1,2-Dichloroethene	ug/m3	~	~	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	1.05
trans-1,3-Dichloropropene	ug/m3	~	<1.3	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ug/m3	0.5	4.2	0.435	1.06	NS	0.408	1.9	0.37	2.14	3.44	0.27	0.344	0.67	ND
Trichlorofluoromethane	ug/m3	12	18.1	ND	1.32	NS	1.26	1.24	1.1	1.29	2.31	1.18	1.27	1.3	1.33
Trichlorotrifluoroethane	ug/m3	~	3.5	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/m3	0.4	<1.9	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
Result Exceeds NYSDOH / USEPA Guidance
NYSDOH = NYSDOH Indoor Air Table C-1 Upper Fence Limit
USEPA = USEPA 2001 "BASE" Table C2 90th Percentile Criteria

Table 7
NYSDOH and USEPA Indoor Air Comparison Summary Table
98, 100, and 104 South 4th Street, Brooklyn, NY

Collection Date				Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24
Client Id				IA-4B	IA-4B	IA-4B	IA-4C	IA-4C	IA-4C	IA-4D	IS-4D	IA-4D	IA-4E	IA-4E	IA-4E
Matrix				AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR
SDG: GCN58289		NYSDOH	USEPA												
Project: 100 SOUTH 4TH	**Units**	**Upper Fence**	**BASE**		**Result**			**Result**			**Result**			**Result**	
Volatiles (TO15) - TO15															
1,1,1,2-Tetrachloroethane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/m3	2.5	20.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/m3	0.4	<1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/m3	0.4	<0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ug/m3	0.4	<1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/m3	0.5	<6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/m3	9.8	9.5	ND	3.58	ND	ND	1.05	2.12	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	ug/m3	0.4	<1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/m3	0.5	<1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/m3	0.4	<0.9	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	ug/m3	0.4	<1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/m3	3.9	3.7	ND	ND	ND	ND	ND	ND	0.763	ND	ND	ND	ND	ND
1,3-Butadiene	ug/m3	~	<3	ND	ND	ND	ND	ND	ND	ND	ND	0.763	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	0.5	<2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/m3	1.2	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone(MBK)	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	ug/m3	~	3.6	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone(MIBK)	ug/m3	~	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/m3	115	98.9	15.6	80.7	65.3	67.5	61.5	39.2	31.4	7.38	33.7	11.5	74.3	9.97
Acrylonitrile	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/m3	13	9.4	1.08	ND	ND	1.17	ND	ND	1.57	ND	ND	0.847	ND	ND
Bromodichloromethane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ug/m3	~	<1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/m3	~	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ug/m3	1.3	<1.3	0.421	0.38	0.41	0.591	0.36	0.52	0.459	0.33	0.47	0.478	0.4	0.45
Chlorobenzene	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/m3	0.4	<1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/m3	1.2	1.1	ND	2.7	1.61	4.68	2.66	ND	ND	ND	ND	ND	1.4	ND
Chloromethane	ug/m3	4.2	3.7	1	1.31	1.36	1.33	1.22	1.85	1.67	1.09	1.32	0.975	1.23	1.17
Cis-1,2-Dichloroethene	ug/m3	0.4	<1.2	ND	0.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/m3	0.4	<2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ug/m3	6.3	~	ND	ND	ND	ND	ND	ND	0.723	ND	ND	ND	ND	ND
Dibromochloromethane	ug/m3	~	16.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/m3	10	<6.8	2.05	2.54	2.15	2.5	2.34	2.44	2.26	2.23	2.57	2.49	2.49	2.41
Ethanol	ug/m3	1300	210	196	267	224	1810	335	186	433	85.9	1060	105	2180	49.3
Ethyl acetate	ug/m3	~	5.4	ND	1.87	1.86	13.8	4.07	5.15	3.57	ND	6.55	ND	6.88	ND
Ethylbenzene	ug/m3	6.4	5.7	1.13	2.56	4.73	ND	ND	1.68	ND	ND	1.99	ND	ND	ND
Heptane	ug/m3	~	~	1.75	ND	ND	2.73	1.85	2.24	8.57	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/m3	0.5	<6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ug/m3	~	12	ND	ND	ND	0.765	ND	ND	0.885	ND	ND	ND	ND	ND
Isopropylalcohol	ug/m3	~	~	35.2	12	60.7	91.4	28.7	82.3	61.9	2.68	127	23.9	9.7	10.1
Isopropylbenzene	ug/m3	0.8	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	ug/m3	11	22.2	4.43	8.9	18.6	1.85	2.2	7.68	2.14	ND	8.51	ND	1.15	1.75
Methyl Ethyl Ketone	ug/m3	16	~	ND	4.24	2.43	ND	18.7	4.13	ND	1.72	ND	ND	1.33	ND
Methyl tert-butyl ether(MTBE)	ug/m3	~	11.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/m3	16	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ug/m3	1.1	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ug/m3	7.1	7.9	1.3	2.54	4.99	ND	ND	2.33	ND	ND	2.35	ND	ND	ND
Propylene	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ug/m3	1.2	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/m3	1.4	~	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ug/m3	2.5	15.9	1.02	2.24	0.49	2.55	1.54	0.35	0.387	0.69	0.5	0.292	10.2	0.35
Tetrahydrofuran	ug/m3	0.8	~	ND	3.65	ND	ND	27.7	2.27	ND	ND	ND	ND	ND	ND
Toluene	ug/m3	57	43	2.58	3.01	3.99	3	3.75	5.69	3.73	1.2	2.01	1.62	6.52	1.21
Trans-1,2-Dichloroethene	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/m3	~	<1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ug/m3	0.5	4.2	0.908	2.76	0.23	1.23	1.91	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ug/m3	12	18.1	1.27	1.45	1.22	2.28	1.41	1.38	1.47	1.18	1.27	1.83	1.24	1.25
Trichlorotrifluoroethane	ug/m3	~	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/m3	0.4	<1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
Result Exceeds NYSDOH / USEPA Guidance
NYSDOH = NYSDOH Indoor Air Table C-1 Upper Fence Limit
USEPA = USEPA 2001 "BASE" Table C2 90th Percentile Criteria

Table 7
NYSDOH and USEPA Indoor Air Comparison Summary Table
98, 100, and 104 South 4th Street, Brooklyn, NY

Collection Date				Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24	Mar-21	Mar-23	Mar-24
Client Id				IA-4F	IA-4F	IA-4F	IA-4G	IA-4G	IA-4G	IA-4H	IA-4H	IA-4H	IA-5	IA-5	IA-5
Matrix				AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR	AIR
SDG: GCN58289		NYSDOH	USEPA												
Project: 100 SOUTH 4TH	**Units**	**Upper Fence**	**BASE**		**Result**			**Result**			**Result**			**Result**	
Volatiles (TO15) - TO15															
1,1,1,2-Tetrachloroethane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/m3	2.5	20.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/m3	0.4	<1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/m3	0.4	<0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ug/m3	0.4	<1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/m3	0.5	<6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/m3	9.8	9.5	1.19	ND	ND	1.06	ND	ND	0.998	ND	ND	1.39	ND	ND
1,2-Dibromoethane(EDB)	ug/m3	0.4	<1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/m3	0.5	<1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/m3	0.4	<0.9	ND	1.05	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	ug/m3	0.4	<1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/m3	3.9	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ug/m3	~	<3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	0.5	<2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/m3	1.2	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone(MBK)	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	ug/m3	~	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ug/m3	~	~	ND	ND	ND	ND	1.02	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone(MIBK)	ug/m3	~	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/m3	115	98.9	44.2	62.9	37.5	62.7	36.6	56	24.7	23.4	46.3	24.2	26.6	45.3
Acrylonitrile	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/m3	13	9.4	0.926	ND	ND	1.35	ND	ND	1.02	ND	ND	1.05	1.34	1.23
Bromodichloromethane	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ug/m3	~	<1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/m3	~	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ug/m3	1.3	<1.3	0.547	0.45	0.44	0.591	0.48	0.47	0.535	0.35	0.47	0.585	0.38	0.48
Chlorobenzene	ug/m3	0.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/m3	0.4	<1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/m3	1.2	1.1	ND	ND	ND	ND	4.68	1.73	ND	1.22	ND	ND	4.42	1.03
Chloromethane	ug/m3	4.2	3.7	1.03	1.11	1.22	1.23	1.54	1..29	1.08	1.11	1.3	0.983	1.21	1.1
Cis-1,2-Dichloroethene	ug/m3	0.4	<1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/m3	0.4	<2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ug/m3	6.3	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ug/m3	~	16.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/m3	10	<6.8	2.49	2.26	2.24	2.48	2.3	2.53	2.46	2.15	2.43	2.43	2.42	2.13
Ethanol	ug/m3	1300	210	205	126	205	784	352	951	288	439	311	903	2600	405
Ethyl acetate	ug/m3	~	5.4	3.68	ND	ND	8.61	1.29	2.88	2.52	1.08	2.12	8.9	3.41	2.82
Ethylbenzene	ug/m3	6.4	5.7	1.54	ND	ND	ND	ND	ND	ND	ND	12.2	ND	1.26	4.27
Heptane	ug/m3	~	~	1.45	ND	ND	1.08	ND	ND	1.88	ND	ND	0.828	1.07	1.06
Hexachlorobutadiene	ug/m3	0.5	<6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ug/m3	~	12	0.737	ND	ND	0.712	ND	ND	ND	ND	ND	ND	1.06	ND
Isopropylalcohol	ug/m3	~	~	45.2	3.73	29.2	93.9	7.69	88.2	52.1	3.81	127	117	11.9	47.9
Isopropylbenzene	ug/m3	0.8	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	ug/m3	11	22.2	5.99	ND	1.81	2.53	1.32	1.47	2.06	1.08	59	1.98	4.64	20.7
Methyl Ethyl Ketone	ug/m3	16	~	ND	1.22	ND	ND	1.99	1.35	ND	2.17	ND	ND	1.66	1.18
Methyl tert-butyl ether(MTBE)	ug/m3	~	11.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/m3	16	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ug/m3	1.1	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ug/m3	7.1	7.9	1.74	ND	ND	0.934	ND	ND	ND	ND	15.3	ND	1.49	5.99
Propylene	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ug/m3	1.2	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/m3	1.4	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.02	1.12
Tetrachloroethene	ug/m3	2.5	15.9	0.448	0.31	0.35	0.57	0.52	0.64	0.502	0.89	0.33	0.529	0.37	0.72
Tetrahydrofuran	ug/m3	0.8	~	ND	ND	ND	ND	ND	ND	ND	1.29			ND	
Toluene	ug/m3	57	43	3.84	1.62	1.39	3.04	2.38	ND	2.48	2.16	2.31	2.8	3.92	3.63
Trans-1,2-Dichloroethene	ug/m3	~	~	ND	ND	ND	ND	ND	ND	ND	ND	1.06	ND	ND	ND
trans-1,3-Dichloropropene	ug/m3	~	<1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ug/m3	0.5	4.2	0.516	ND	ND	0.333	ND	0.21	0.253	0.2	ND	0.296	ND	ND
Trichlorofluoromethane	ug/m3	12	18.1	2.42	1.25	1.22	4.9	1.46	1.81	2.5	1.25	1.41	6.24	3.19	1.5
Trichlorotrifluoroethane	ug/m3	~	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/m3	0.4	<1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/m3 = micrograms per square meter
ppbv = parts per billion by volume
RL = Reporting Limit
U = Compound not detected
Result Detected
Result Exceeds NYSDOH / USEPA Guidance
NYSDOH = NYSDOH Indoor Air Table C-1 Upper Fence Limit
USEPA = USEPA 2001 "BASE" Table C2 90th Percentile Criteria

IRM CCR

APPENDIX

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

IRM CCR

Appendix A

Agency Correspondence

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

From: Zheng, Wendi Y (DEC)
To: Christopher Connolly
Cc: Kevin Kleaka, PG; Hal Benjamin; Maycock, Cris-Sandra (DEC); O"Connell, Jane H (DEC)
Subject: Re: 100 South 4th (C224260) - Import of Material
Date: Monday, September 12, 2022 2:48:53 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image284324.png
image318521.png

Chris,
The Department has reviewed the request dated August 30, 2022 to import approximately 50 cubic yards of virgin sand from US Silica P.O. Box 254 (Permit ID No. 01-2018) located at Mauricetown in New Jersey. The material will be used for the SSDS backfill. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be used above or below the demarcation layer.

Testing in accordance with DER-10, the Interim Remedial Measures Work Plan and approval by the Department is required for any additional material imported from this source. Should you have any questions please contact me.

Thank you,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Monday, September 12, 2022 12:46 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Yes, it is my understanding that the material is only sourced from the Maurice River Township facility. For which we have the permit #.

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425
EPA Waste Wise Partner

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Monday, September 12, 2022 12:44 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Subject: Re: 100 South 4th (C224260) - Import of Material

Hi Chris,
To confirm, processing facility moved the material to Maurice River Township facility and the material is only being imported from Maurice River Township facility?

Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Monday, September 12, 2022 11:59 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Hi Wendi,
Just following up to see if the permit # for the Maurice River Township facility is sufficient.

Best,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425
EPA Waste Wise Partner

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Friday, September 9, 2022 3:03 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Wendi,
According to my contact at US Silica, the Commercial Township facility is just a processing facility. The Maurice River Township (Port Elizabeth) facility is where the material comes from.
Does this help?

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425
EPA Waste Wise Partner

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>

Sent: Friday, September 9, 2022 12:56 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
Is there a permit ID number for the Commercial Township permit? Please present a document that shows a permit ID number for this facility. The permit for Maurice River is acceptable as there is a permit ID number.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Friday, September 09, 2022 10:26 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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See attached the Mining Permits, and associated Resolutions.
Best,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Thursday, September 8, 2022 11:00 AM
To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
These are stormwater discharge permits. Please submit mine registration certificates.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Thursday, September 08, 2022 10:38 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Hi Wendi, will the attached permits suffice?

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Thursday, September 8, 2022 7:42 AM
To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Thanks Chris. Could US Silica provide a permit that shows their permit # NJG0161012 and expiration date?

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Wednesday, September 07, 2022 2:59 PM
To: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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I got this response from my contact at US Silica:
Hi Chris,

I was informed by the Plant Manager that on the permit it states "resource extraction" which means all of our material is from virgin ground. We do not recycle the sand.

Hope this helps.

Wendy Windhurst
Customer Service Support, U.S. Silica Company
ISP Customer Support: 844.GOT.SAND opt. 2
(844.468.7263 opt. 2)

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Christopher Connolly <cconnolly@impactenvironmental.com>

Sent: Wednesday, September 7, 2022 11:25 AM
To: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

NJG0161012	46641	US SILICA PORT ELIZABETH	ESTELLE MANOR RD Maurice River Twp, NJ 08329	Maurice River Twp	Cumberland	363230.09	180566.43	Southern	David Pepe	05/31/19	Sand & Gravel Stormwater (GP) (RSG)	Approved	JAMES J DAMBROSIO US SILICA PORT ELIZABETH PO BOX 254 - 9035 NOBLE ST Mauricetown, NJ 08329 Phone: 8567850720105 Email: dambrosio@ussilica.com

See above, take from the NJDEP Active Permit list from 2020. I have contacted the facility directly, and am waiting for the relevant information to be sent over.

Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Sent: Wednesday, September 7, 2022 10:57 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

If the source cannot provide documentation that it is a permitted virgin source, the material would have to be tested to demonstrate meeting the applicable SCOs for import.

Jane H. O'Connell, P.G.
Regional Remediation Engineer, Division of Environmental Remediation

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4599 | F: (718) 482-6358 | M: (917) 817-1845 | jane.oconnell@dec.ny.gov
www.dec.ny.gov |

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Wednesday, September 7, 2022 9:34 AM
To: cconnolly@impactenvironmental.com
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Is there a license number registered with NJ? US Silica has one for their other blocks and lots. See attachment you provided on 9/6.

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Wednesday, September 07, 2022 9:29 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Having spoken to a representative from US Silica, they cannot find a mining permit with an ID #. They told me they have not had to provide this information before, and sent me all they have on file.
I apologize. Is there a chance we can move forwards with using the material with what was provided? It is my understanding that Filpro material is used commonly in DEC jobs due to its inert qualities.

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Wednesday, September 7, 2022 7:48 AM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
For the Township of Commercial Permit for US Silica Company at 905 Noble Street in NJ, is there a permit that shows an ID number?

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Tuesday, September 06, 2022 3:04 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>

Subject: RE: 100 South 4th (C224260) - Import of Material

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Good afternoon,
Please find attached the facility permits. Please let us know when you can approve the material.

Regards,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Tuesday, August 30, 2022 3:06 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
Please submit the permit for the facility the stone is coming from.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Tuesday, August 30, 2022 12:46 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>
Subject: 100 South 4th (C224260) - Import of Material

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Good afternoon Wendi,
Please see attached the requested import form.
We would like to begin using this material today to fill the suction points. Can you provide approval?

Many thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425
170 Keyland Court, Bohemia, NY 11716
Our email policies

Christopher Connolly

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Thursday, July 15, 2021 10:21 AM
To: Christopher Connolly
Cc: Kevin Kleaka, PG; O'Connell, Jane H (DEC); O'Neil, Eamonn M (HEALTH); McLaughlin, Scarlett E (HEALTH); heidi@holterbosch.net; ryan.howard@Prosit.nyc
Subject: RE: Site No. C224260- Former El Puente
Attachments: ConsultantHOL.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Chris,
Please see the comments provided on the 6/14 submittal of the draft SVI Report. The revised RIWP should be submitted within 30 days of this email. Please let me know if you have any questions.

- 5.1.2 Indoor/Outdoor Air Sample Results- Please include the quantitative data for chlorinated solvents.

- Appendices- Include any NYSDEC/NYSDOH correspondences, CAMP data, photologs, and waste disposal manifests if any as separate appendices.

- On September 4, 2008 Governor David A. Paterson signed legislation adding a new section to the Environmental Conservation Law (ECL 27-2405) to require property owners or owners' agents (such as landlords) to notify all of their tenants and occupants of any test results related to indoor air contamination associated with soil vapor intrusion that they receive from certain persons and entities. Plans should be made to disseminate results in accordance with this tenant notification law. Attached is a template of the tenant notification letter. Please fill out and send us to review within 15 days of this email before sending it out.

- A figure showing the location and concentrations of all exceedances for the 2021 soil vapor intrusion sampling results should be included in the report. Please include the NYSDOH matrices also on the figure.

- Trichloroethene (TCE) was detected at a concentration of 2.14 micrograms per cubic meter (ug/m3) in the indoor air and at 3260 ug/m3 in the sub-slab of Building No. 3. TCE was also detected in Building No. 2 at a concentration of 1.23 ug/m3 in the indoor air and at 21 ug/m3 in the sub-slab. Based on the sampling results and the presence of site-related contaminants at the concentrations detected, we agree with the recommendation that interim remedial measures (IRM) are needed to address exposures at the on-site buildings. The Department suggests the installation of sub-slab depressurization systems (SSDS) in all three buildings to address this exposure pathway. The IRM work plan should be submitted within 30 days of this email.

- Include a section of the schedule for Phase 2 of the remedial investigation for soil and groundwater.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Monday, June 14, 2021 10:51 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; O'Neil, Eamonn M (HEALTH) <Eamonn.ONeil@health.ny.gov>; McLaughlin, Scarlett E (HEALTH) <scarlett.mclaughlin@health.ny.gov>; heidi@holterbosch.net; ryan.howard@Prosit.nyc
Subject: RE: Site No. C224260- Former El Puente

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good morning Wendi,
Please find attached the monthly progress report for May 2021.

In addition, the SVI Remedial Investigation Report has been uploaded via the NYSDEC FTS.

Kind regards,

Chris Connolly

CHRISTOPHER CONNOLLY | Project Manager
O: 631-269-8800 x152 C: 631-664-4425
170 Keyland Court, Bohemia, NY 11716
Our email policies

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Friday, June 11, 2021 12:56 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; O'Neil, Eamonn M (HEALTH) <Eamonn.ONeil@health.ny.gov>; McLaughlin, Scarlett E (HEALTH) <scarlett.mclaughlin@health.ny.gov>
Subject: Site No. C224260- Former El Puente

Good Afternoon,
As a reminder, please submit the monthly progress report.

Wendi Zheng
Project Manager
New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-7541 | wendi.zheng@dec.ny.gov
www.dec.ny.gov

IRM CCR

Appendix B

OBAR Systems Inc., Diagnostics Report and Design Plan, April 2019

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

DIAGNOSTIC REPORT AND SYSTEM DESIGN

DRAFT

Site Address:

98-100 South 4th Street, Brooklyn, New York

Prepared for:

Peter J Andresen

Director of Development & Construction

Meadow Partners

130 East 59th St

Suite 1300

Prepared by:

Mr. Daniel Nuzzetti

Project Engineer

OBAR Systems, Inc.

2969 Route 23

Newfoundland, NJ 07435

April 9, 2019

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2969 Route 23 South Newfoundland, NJ 07435 / 1-800-949-OBAR / www.obarsystems.com

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Table 2 - Suction Point 2
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Drawings

SSD1 – Diagnostic Locations
SSD2 – System Design
SSD3 - System Design with ROIs
SSD4 – System Details

Attachments / Cut Sheets

Attachment 1 – Blowers
Attachment 2 – Pipe and supports
Attachment 3 – Ball Valve
Attachment 4- Pipe Hangers

1. Background

Obar Systems was contacted to provide a proposal for building diagnostics and a sub slab depressurization system design for the building located at 98-100 South 4th Street in Brooklyn, New York. In accordance with the March 28, 2019 Obar Systems Diagnostic and Design Proposal, building diagnostics were performed on April 4th 2019.

2. General Building Information

This report and its appendices apply to the building located at 98-100 South 4th Street, Brooklyn, New York. The building is divided into two sections, a single story commercial strip mall, with 3 tenants measuring 6,600 square feet and a 6 story residential building measuring approximately 11,000 square feet.

3. Mitigation Concepts

Volatile Organic Compounds (VOCs) located in the soil are drawn into the building by the negative pressure of the building relative to the surrounding soil. As a gas, the VOCs enter the structure through cracks and openings and can migrate through the concrete floor and walls. A common remedy to reverse the intrusion process is Sub Slab Depressurization (SSD), which is a system that depressurizes the soil under the slab. The concept is that by creating a vacuum beneath the slab, the soil gases will be drawn into the system where they can be discharged to a safe location. During the commissioning sampling the environmental consultant should sample the systems' discharge to determine if treatment is required.

4. Diagnostic Method

The method used for diagnostic measurement and system design involved coring 2 5/8" suction holes in the concrete floors and 3/8" test holes at various distances from the suction holes. A specialized Sub Slab Diagnostic Vacuum (SSDV), capable of up to 120 cfm and a vacuum of 120 inches of water column ("w.c.) was used with a variable speed controller to define the flow and vacuum characteristics of the soil beneath the slab. The data obtained during the diagnostic investigation has been provided in the attached tables. The range of applied vacuum and flow rate used for each suction point was determined by evaluating the baseline data taken in the maximum flow and vacuum test performed at the beginning of each sampling series. The number of test point locations at each suction point was determined based on the results of the first sampling series at that location. The data collected at each suction point series includes; maximum vacuum and airflow at the suction point, vacuum 1 foot away from the suction point (SSP1), vacuum at each test point at multiple vacuum speeds or flow rates, the distance each test point is from the suction point, and the speeds that each series was run at.

5. Data Analysis and System Design

The information obtained from each suction point was examined independently to identify the associated area of influence (AOI) and estimated radius of influence (ROI) for that location during

the applied test conditions. The test data from all the suction points was examined collectively to determine the number of full-scale SSD system suction points required to address the areas of concern within the buildings. The test data was then used to determine the type and number of blowers required to effectively operate all of the full-scale SSD system suction points.

5.1. Analysis of data Series

For locations of all suction points and test points see the attached drawings, for full test results see the attached data tables.

5.1.1. Suction Point 1

Suction Point 1 (SP1) was located on the main slab of the Session tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area and to determine if communication was present between Session and Sword Smith. The primary sub slab fill encountered was sandy soils with some debris mixed in. This suction point revealed an ROI of approximately 20 feet at 2 inches of water column ("w.c.) of applied vacuum and a 45cfm airflow yield. Vacuum was measured between Session and Sword Smith indicating there is no footing present between the spaces. For full results see Data Table 1.

5.1.2. Suction Point 2

Suction Point 2 (SP2) was located on the lower slab in the rear of the Session tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was very loose sandy soils and cinders. This suction point revealed an ROI of approximately 20 feet at 10 inches of water column ("w.c.) of applied vacuum and an 8cfm airflow yield. For full results see Data Table 2.

5.1.3. Suction Point 3

Suction Point 3 (SP3) was located the lower slab in Sword Smith. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was compacted brown soils. This suction point revealed an ROI of approximately 20-25 feet at 10 "w.c. of applied vacuum and a 10 cfm airflow yield, very similar to the lower slab in Session. For full results see Data Table 3.

5.1.4. Suction Point 4

Suction Point 4 (SP4) was located outside the kitchen in the Lemons and Olives tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was compacted sandy soils. With the kitchen exhaust fans off this suction point revealed an ROI of approximately 10 feet at 20 "w.c. of applied vacuum and a 30cfm airflow yield. It was noted that this suction point was installed near a number of sub slab obstructions and as a result a second suction point (SP-9) was installed near the front of the space. For full results see Data Table 4.

5.1.5. Suction Point 5

Suction Point 5 (SP5) was located in the vacant space of the 6 story building. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area. The primary sub slab fill encountered was loose sandy soils. During the cleanout of the suction hole a cast iron pipe was encountered below the slab so only limited cleanout could be performed. However a series of tests was run and an ROI of approximately 15 feet at an applied vacuum of 30 "w.c. and a 30cfm airflow yield was measured. For full results see Data Table 5.

5.1.6. Suction Points 6 and 7

Suction Points 6 and 7 (SP6, SP7) were located in mechanical areas on the ground floor of the six story building. The purpose of these suction points was to evaluate the ROI produced from full-scale suction points in these building areas and to determine if the data obtained at SP-5 was altered by the presence of the sub slab obstruction encountered. The primary sub slab fill encountered was loose sandy soils at both holes. An ROI of approximately 15-20 feet was measured at an applied vacuum of 10-12 "w.c. and a 60cfm airflow yield. For full results see Data Tables 6 and 7.

5.1.7. Suction Point 8

Suction Point 8 (SP8) was to be located in the mail room of the lobby however we could not penetrate the slab with a 3 foot long drill bit. We attempted to drill 2 other holes in the lobby area, one below the stairs and one in walkway, we could not penetrate the slab at either location.

5.1.8. Suction Point 9

Suction Point 9 (SP9) was located near the front of the Lemons and Olives tenant space. The purpose of this suction point was to evaluate the ROI produced from full-scale suction points in this building area and to check the results of SP4. The primary sub slab fill encountered was loose sandy soils, more typically of the rest of the building. An ROI of 15 feet at an applied vacuum of 1 "w.c. and a 60cfm airflow yield was measured. For full results see Data Table 9.

5.2. Collective Analysis

The full-scale SSDS design was developed by using the diagnostic test results to produce a map that projects the estimated ROIs around suction points installed in locations that cover the areas of concern. The SSDS suction point ROI was estimated by examining the vacuum data measured during the diagnostic survey at nearby test points. The required system operating vacuums were determined by using values measured at the diagnostic head and the SSPs, along with performance tables for the Sub Slab Diagnostic Vacuum.

In general, when selecting the full-scale blowers, the vacuum measured at the SP is used as the system design target when it is more than 10 times greater than the SSP vacuum. The SSP vacuum is used as the target when the SP vacuum is less than 5 times the SSP vacuum. Professional judgment and experience is used to determine required system vacuum when diagnostic testing results are between the above two ranges. Except for minor anomalies these buildings presented relatively homogenous soils resulting in ROIs ranging from 15-20 feet, at moderately applied

vacuums.

5.3. Proposed Sub Slab Depressurization System Configurations

4 mitigation systems and 22 suction points are being proposed to depressurize the entire commercial area of the building, the residential common areas (except for the lobby) and the vacant space on the east end of the building. The proposed areas to be depressurized are shown on the attached drawings. The following blower configurations are being proposed. The blowers are fully tunable and will be tuned for optimal vacuum coverage and maximum efficiency during the commissioning.

System #	Fan Type	# of suction points
1	GBR89	6
2	GBR89	6
3	GBR89	5
4	GBR89	5

6. Mitigation System Components

6.1. System Blowers

Blowers will be installed on the roof of the building. Blowers will be installed on Obar roof mounts with rubber roof blocks. Blower exhausts will terminate 10 feet from any intake or opening into the building they are not at least 2 feet above.

6.2. Suction Points

Suction points will be installed by coring 3 ½ inch holes through the slab and excavating sub slab material. The soil will be containerized for testing and disposal, testing and disposal is to be handled by others, it is estimated that 3 55-gallon drums will be required. Suction points will be back filled with crushed stone following clean out.

6.3. System Piping

All system piping and fittings within the building will be 2 and 3 cast iron pipe with no hub cast iron fittings. Overhead piping will be installed in the locations shown on the attached drawing. All overhead piping will be installed as high as possible (above drop ceilings where applicable) within the building and without the possibility of water traps. All overhead piping must have pitch back to suction points in order to drain condensation. Each suction point will have a vertical riser pipe that connects into the overhead piping. Vertical riser pipes will be secured to the wall and concreted into the slab. Cut sheets for the pipe and fittings are attached.

6.4. Ball Valves

Each suction point riser will be fitted with a ball valve for balancing system airflow. The cut sheet for the ball valve is attached.

6.5. Pipe Hangers

All pipes will be supported according to local code requirements. Overhead pipe will be secured with threaded rod, and swivel loop hangers. Vertical pipe will be secured to the walls with strut, strut clamps, and metal pipe straps. Cut sheets for acceptable pipe hanging hardware are attached.

6.6. Test Ports

Sub Slab test ports will be installed within the system's radius of influence to confirm sub slab vacuum. Approximately 12 permanent sub slab test ports will be installed throughout the building. Riser test ports will be installed in each riser pipe for vacuum and airflow sampling.

6.7. Electrical

All electrical work will be performed by a licensed electrician in accordance with all state and local codes. The fans will required 220 volts and must be on dedicated breakers.

6.8. Alarm Panel and Gauges

The system's alarm panel will feature Magnehelic vacuum gauges for each of the blower systems. The panel will also have a red light that will illuminate and an audible alarm that will sound in case of a system failure. If desired, remote monitoring can be installed that provides various levels of detail.

6.9. Sealing

There are two pits measuring 4'x3' and 2'x2' in the gas meter room of the residential building that require sealing. The bottom of the pits will be capped with concrete to prevent vapor intrusion through the exposed soil.

6.10. System Labels

All exposed system piping will be labeled with a sticker indicating that the system is a vapor intrusion mitigation system. A sticker with the contact information of the installer will be located on the alarm panel.

6.11. Permits

Building and electrical permits will be filed for prior to installing the SSDS. The associated permit costs will be added to the final system cost.

7. Post Installation

7.1. As Built Drawings

As-built drawings will be provided that show system locations, the monitoring and alarm location, and sub-slab vacuum monitoring test port locations.

7.2. System Start Up and Commissioning

Upon system start up the mitigation fans will be tuned for optimal efficiency. The systems' applied vacuum and airflow will be measured and reported. The sub slab pressure differentials at the permanent test ports will be measured and reported. A commissioning report that includes; commissioning data, operations and maintenance procedures, and as built drawings will be prepared and submitted.

8. Logistics

Interior work to be done off hours in the commercial spaces. Sheetrock and finishing work for SPs# 1-1, 1-2, and 1-3 to be performed by others.

9. Costs

Installation of Systems #1 and #2 and sealing of open pits in the residential building: **$64,700.00**

Installation of Systems #3 and #4 : **$58,600.00**

Permit costs are excluded and will be added to the final cost.

10. Warranty

OBAR Systems guarantees that all systems designed and installed by OBAR Systems will meet a sub-slab pressure differential of -0.004 "w.c. (as initially indicated in the diagnostic proposal) for one year from the date of installation.

Suction Point # :	SP1				
Location / Description :	Sessions (main slab)				
Soil Description	Sandy soils with rubble				
Temperature :	47°F				
Weather :	Clear				
Background ΔP :	-0.0006				
	Distance (ft.)	**Series 1**	**Series 2**	**Series 3**	**Max**
Airflow Yield (cfm)		60	80	45	95
Applied Vacuum ("w.c.)		3.9	6	2.3	8
SSP 1 (1' from applied)		1.3	1.9	0.86	2.5
TP-1	10	Metal below slab			
TP-2	20	0.01	0.012	0.008	
TP-16	6	Not measured		1.06	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP2			
Location / Description :	Sessions (lower slab)			
Soil Description	Loose sandy soils and cinders			
Temperature :	47°F			
Weather :	Clear			
Background ΔP :	+0.0017			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)		15	8	22
Applied Vacuum (''w.c.)		30	10	50
SSP 1 (1' from applied)		5	1.8	7.6
TP-3	14	0.053	0.013	
TP-4	17	0.04	0.01	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP3			
Location / Description :	Sword Smith (lower slab)			
Soil Description	compacted brown dirt			
Temperature :	46°F			
Weather :	Clear			
Background ΔP :	+0.0009			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)		25	10	35
Applied Vacuum (''w.c.)		30	10	44
SSP 1 (1' from applied)		7	3	10
TP-5	10	0.3	0.1344	
TP-6	20	0.03	0.016	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP4			
Location / Description :	Lemons and Olives (near kitchen)			
Soil Description	Tight sandy soils			
Temperature :	46°F			
Weather :	Clear			
Background ΔP :	+0.049			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)		30	30	45
Applied Vacuum (''w.c.)		20	20	40
SSP 1 (1' from applied)		2.6	2.6	3.6
TP-7	10	BG	0.003	
TP-8	20	BG	BG	
TP-9	20	BG	BG	
TP-10	5	BG	0.25	
TP-11	8	BG	0.009	
HVAC Status		On	Off	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP5		
Location / Description :	Vacant Space		
Soil Description	Loose sandy soils		
Temperature :	46°F		
Weather :	Clear		
Background ΔP :	+0.001		
	Distance (ft.)	**Series 1**	**Max**
Airflow Yield (cfm)		30	45
Applied Vacuum (''w.c.)		30	42
SSP 1 (1' from applied)		2.5	3.5
TP-12	10	0.03	
TP-13	20	BG	
TP-14	10	0.2147	
TP-15	15	0.004	
TP-16	15	4	
TP-17	13	0.002	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP6			
Location / Description :	Electric Meter Room			
Soil Description	Loose sandy soils			
Temperature :	46°F			
Weather :	Overcast			
Background ΔP :	+0.003			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)		90	60	100
Applied Vacuum (''w.c.)		24	1.1	3
SSP 1 (1' from applied)		0.02	0.01	0.02
TP-15	14	0.01	0.007	
TP-14	26	0.003	BG	
TP-18	20	0.008	0.006	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP7		
Location / Description :	Central storage room		
Soil Description	Loose sandy soils		
Temperature :	50°F		
Weather :	Clear		
Background ΔP :	+0.0001		
	Distance (ft.)	**Series 1**	**Max**
Airflow Yield (cfm)		65	80
Applied Vacuum (''w.c.)		12	17
SSP 1 (1' from applied)		3	4
TP-19	15	0.015	
TP-20	8	0.052	
TP-21	15	0.012	
TP-22	15	0.0061	Apartment

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP8			
Location / Description :	Upper Lobby			
Soil Description	Can't penetrate slab 27"			
Temperature :	46°F			
Weather :	Overcast			
Background ΔP :	N/A			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)				
Applied Vacuum (''w.c.)				
SSP 1 (1' from applied)				
TP-23	Can't penetrate			

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

Suction Point # :	SP9			
Location / Description :	Lemon and olives (front)			
Soil Description	Loose sandy soils			
Temperature :	52°F			
Weather :	Clear			
Background ΔP :	-0.004			
	Distance (ft.)	**Series 1**	**Series 2**	**Max**
Airflow Yield (cfm)		80	60	110
Applied Vacuum (''w.c.)		1.08	0.86	2.8
SSP 1 (1' from applied)		0.04	0.035	0.05
TP-23	12	0.0085	0.0062	
TP-24	10	0.0071	0.0053	
TP-25	15	0.005	0.004	

Test Point data is reported in inches of water column.
All pressure values negative unless indicated otherwise.
BG: Background
N/A: Could not penetrate slab

DRAFT

LEGEND:

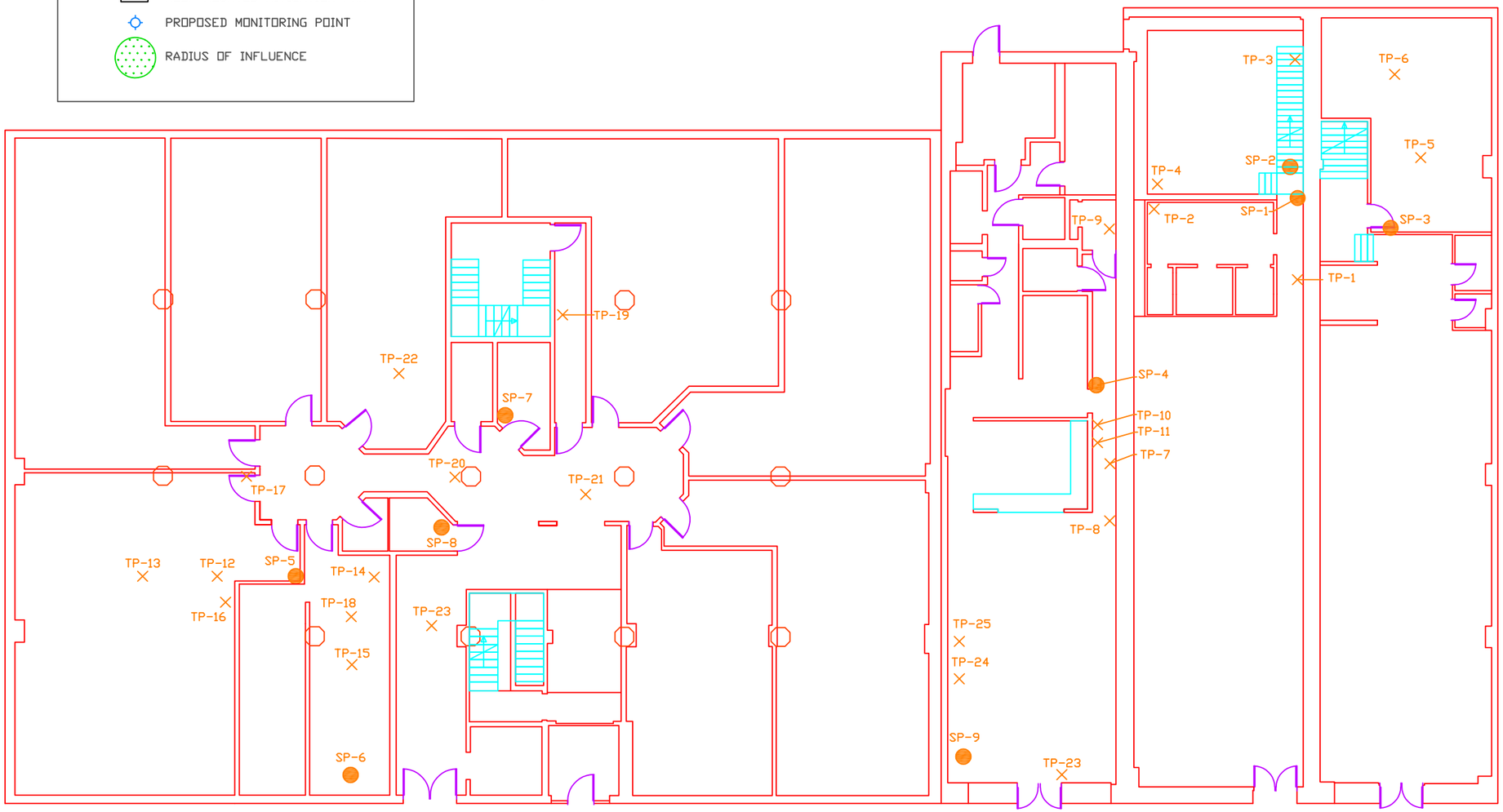
DIAGNOSTICS

- 2" DIAGNOSTIC SUCTION POINT
- TEST HOLE LOCATION

INSTALLATION

- 3" SUCTION POINT
- OVERHEAD CAST IRON PIPE
- ROOF MOUNTED MITIGATION FAN
- PROPOSED MONITORING POINT
- RADIUS OF INFLUENCE

Scale: 1" = 16'



General Notes

No.	Revision/Issue	Date
1	Original	

Firm Name and Address
OBAR SYSTEMS, INC.
2969 NJ 23, Newfoundland, NJ, 07435

Project Name and Address
98-100 South 4th Street,
Brooklyn, NY

Sheet Name	Sheet #
Diagnostic Data	SSD-1
Date: 4/9/2019	

DRAFT

LEGEND:

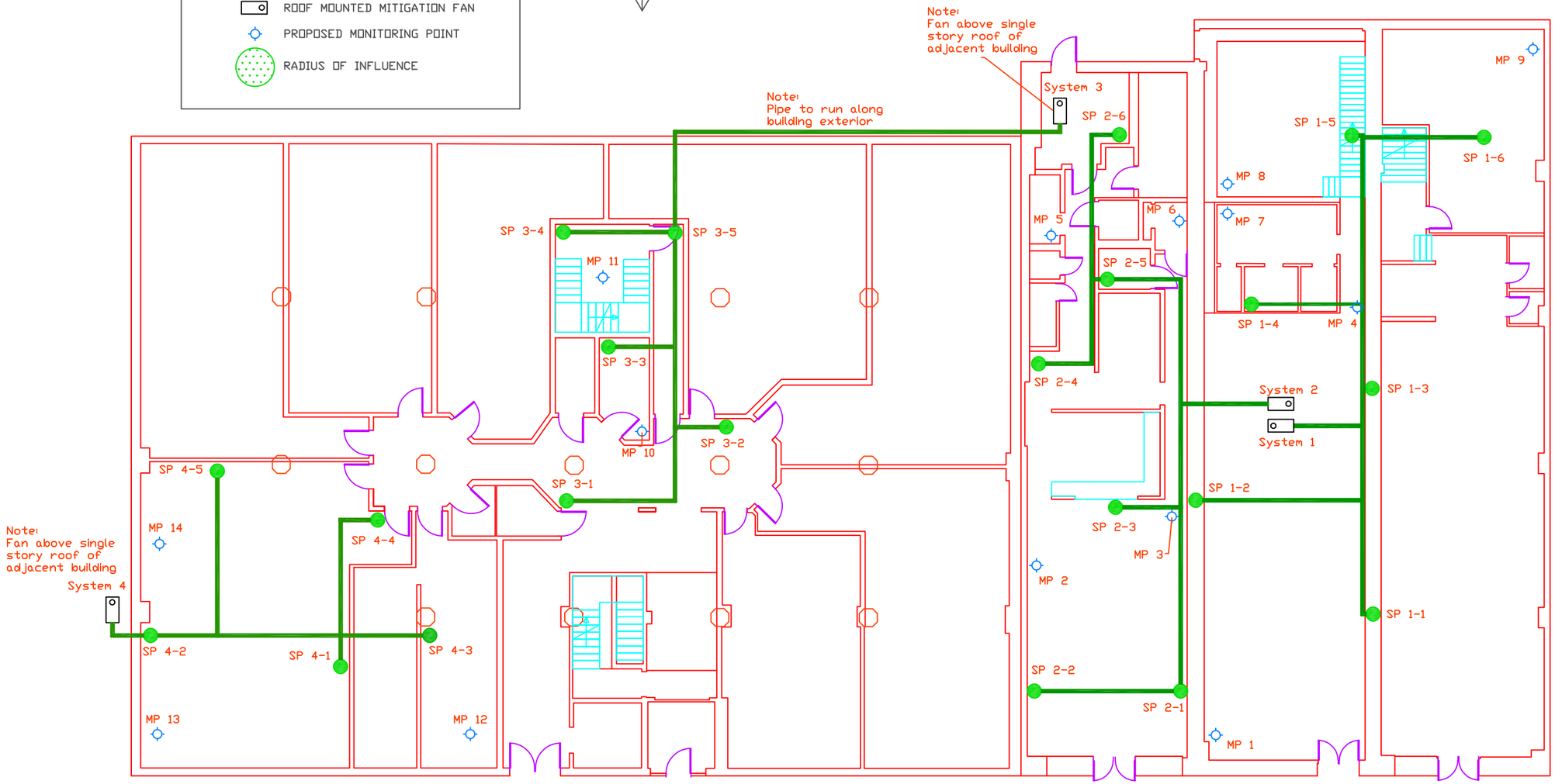
DIAGNOSTICS

- 2" DIAGNOSTIC SUCTION POINT
- TEST HOLE LOCATION

INSTALLATION

- 3" SUCTION POINT
- OVERHEAD CAST IRON PIPE
- ROOF MOUNTED MITIGATION FAN
- PROPOSED MONITORING POINT
- RADIUS OF INFLUENCE

Scale: 1" = 16'



General Notes

No.	Revision/Issue	Date
1	Original	

Firm Name and Address

OBAR SYSTEMS, INC.
2969 NJ 23, Newfoundland, NJ, 07435

Project Name and Address

98-100 South 4th Street, Brooklyn, NY

Sheet Name	Sheet #
System Layout	SSD-2
Date: 4/10/2019	

LEGEND:

DIAGNOSTICS

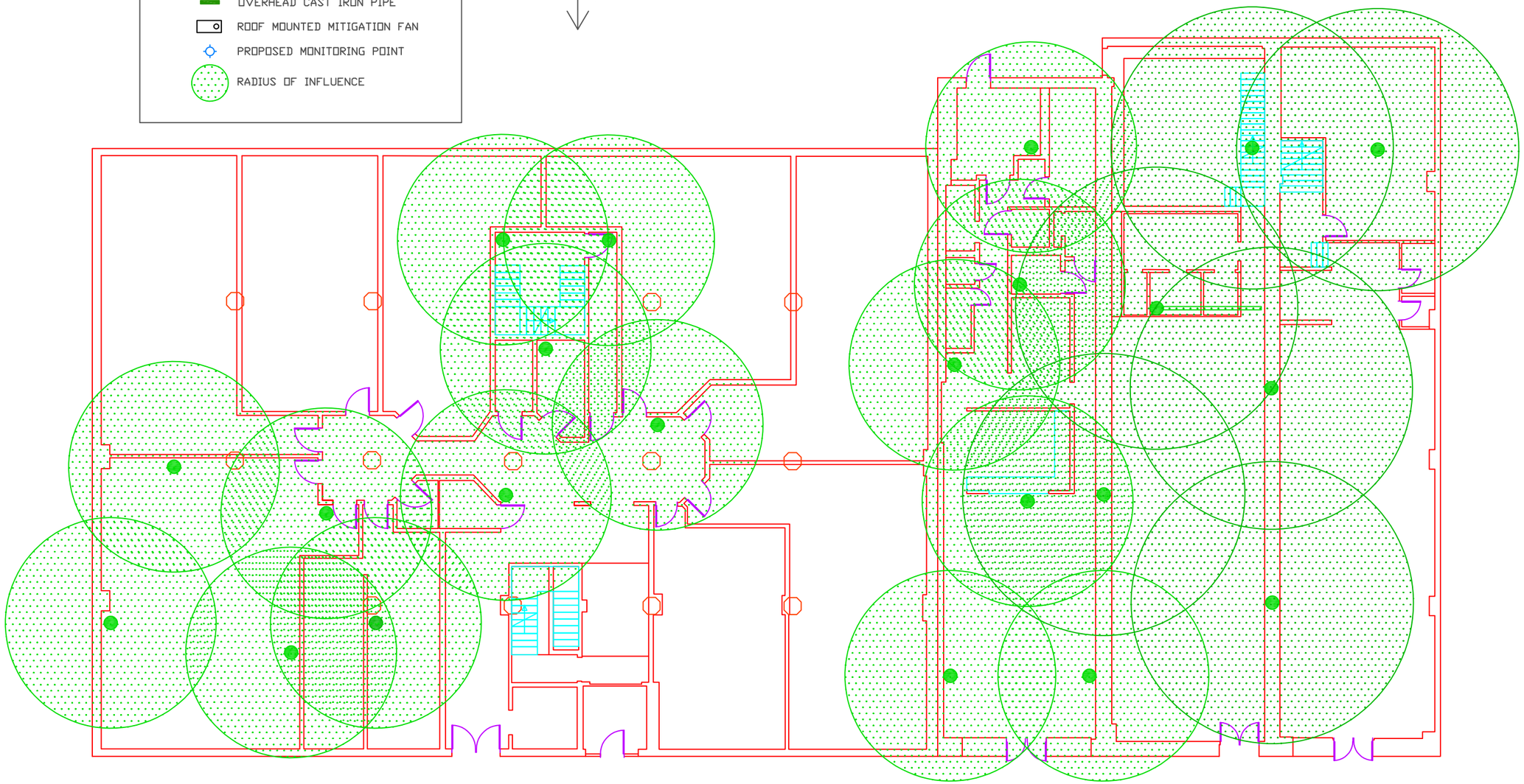
- 2" DIAGNOSTIC SUCTION POINT
- TEST HOLE LOCATION

INSTALLATION

- 3" SUCTION POINT
- OVERHEAD CAST IRON PIPE
- ROOF MOUNTED MITIGATION FAN
- PROPOSED MONITORING POINT
- RADIUS OF INFLUENCE

DRAFT

Scale: 1" = 16'



General Notes

No.	Revision/Issue	Date
1	Original	

Firm Name and Address

OBAR SYSTEMS, INC.
2969 NJ 23, Newfoundland, NJ, 07435

Project Name and Address

98-100 South 4th Street,
Brooklyn, NY

Sheet Name	Sheet #
Radius of Influence	SSD-3
Date: 4/10/2019	

IRM CCR

Appendix C

IEEG, Soil Vapor Intrusion Remedial Investigation (SVI RI), August 2, 2021

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

SOIL VAPOR INTRUSION REMEDIAL INVESTIGATION REPORT

Brownfield Cleanup Program

August 2, 2021

Submitted for:

Former El Puente Site
98, 100, and 104 South 4th Street
Brooklyn, NY

Block: 2443 Lot: 13
NYSDEC BCP Site Number C224260

Prepared for:

100 S 4th ST LLC
P.O. Box 1606
New York, NY

Submitted to:

New York State Department of Environmental Protection
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101

Project Number:
13817

IMPACT ENVIRONMENTAL | 170 Keyland Court | Bohemia | New York | 11716 | 631.269.8800

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Plate 2: Site Area Map

Plate 3: Site Topographic Map

Plate 4: Site Plan

Plate 5: Soil Sample Location Plan, Collected 1997 & 1999

Plate 6: Groundwater Sample Plan, Collected 1997

Plate 7: Soil Vapor and Air Sample Location Plan, Collected 2019

Plate 8: Site Plan with AOCs

Plate 9: SVI Sample Point Locations

Plate 10: SVI Sample Analysis NYSDOH Exceedances

Plate 11: Soil Vapor Investigation Decision Matrices Results Map

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Table 2: SVI Summary Table (All Results)

Table 3: SVI Indoor Air Guidance Values Summary Table

Table 4.1: 98c South 4th Street - NYSDOH Decision Matrices Summary Table

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Appendix A: Soil Vapor Point Construction Detail

Appendix B: SVI RI Photo Log

Appendix C: Data Validator Credentials

Appendix D: Data Usability Summary Report

Appendix E: Laboratory Analytical Report

LIST OF ACRONYMS

Acronym	Definition
AGV	Air Guidance Value
AOC	Area of Concern
ASTM	American Society for Testing and Materials
AST	Aboveground Storage Tank
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
fbg	feet below grade
CAMP	Community Air Monitoring Program
COC	Contaminant of Concern
CVOC	Chlorinated Volatile Organic Compound
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DUSR	Data Usability Summary Report
EDD	Electronic data deliverable
EDR	Environmental Data Resources
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
EPA	United Stated Environmental Protection Agency
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
FINDS	Facility Index System/Facility Registry System
FWRIA	Fish and Wildlife Resources Impact Analysis
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
IDW	Investigation Derived Waste
LNAPL	Light Non-Aqueous Phase Liquid
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	New York Codes, Rules, and Regulations
NYSDOH	New York State Department of Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	Department of Transportation
NTU	Nephelometric Turbidity Units
ORP	Oxidation-Reduction Potential
PAH	Polycyclic Aromatic Hydrocarbon

Acronym	Definition
PBS	Petroleum Bulk Storage
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PID	Photoionization Detector
PPE	Personal Protective Equipment
ppm	Parts per million
ppm_v	Parts per million by volume
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
SCO	Soil Cleanup Objective
SSDS	Sub Slab Depressurization System
SMP	Soil Management Plan
SQG	Small Quantity Generator
SVOC	Semi Volatile Organic Compound
TAL	Target Analyte List
TCA	Trichloroethane
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound

CERTIFICATION

I, Kevin Kleaka, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Soil Vapor Intrusion Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

8/2/21

Kevin Kleaka, Qualified Environmental Professional

1 INTRODUCTION

Impact Environmental Closures, Inc. (IEC) was retained by 100 S 4th St LLC (the "Volunteer") to complete a Soil Vapor Intrusion (SVI) Remedial Investigation (RI) and prepare this SVI Remedial Investigation Report (RIR) for the property located at 98, 100, and 104 South 4th Street, Brooklyn, New York (the "Site"). A Site Location Map is provided as **Plate 1**. The Volunteer was accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) under a NYSDEC Brownfield Cleanup Agreement (BCA), dated June 23, 2020, for Site No. C 224260.

1.1 Purpose and Scope

This SVI RIR presents environmental data and findings from the SVI RI from March 10th through March 12th and in substantial accordance with the Remedial Investigation Work Plan (RIWP) approved by NYSDEC on January 19, 2021. Based on communications with the department, it was agreed that the Soil Vapor Intrusion (SVI) portion of the approved RIWP would be conducted initially, to conform to, and occur within the New York State Department of Health (NYSDOH) designated heating season. The objective of this SVI RI was to determine, to the extent possible, the nature and extent of contamination in soil vapor, indoor air, and ambient outdoor air. Information presented in this SVI RIR will be used, along with the remainder of the proposed RI, to evaluate appropriate remedial action alternatives.

The scope of work proposed for this SVI RI included the following: 1) installation of nine (9) permanent sub-slab soil vapor sampling points and collection of soil vapor samples; 2) collection of twelve (12) indoor air samples, and 3) the collection of one (1) ambient outdoor air sample.

The investigative protocols used for this assessment were based, in part, upon the following document: 1) the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates. Presented herein are the results of the SVI RI conducted by IEC on the Site.

2 SITE CHARACTERISTICS

2.1 Site Description

The Site is situated on the south side of South 4th Street between Bedford Avenue and Berry Street in the Greenpoint neighborhood of Brooklyn, New York. The Site consists of a single parcel of land assigned New York City Tax Map Designation: Section 2, Block 2443, and Lot 13, and is in an area primarily comprised of residential and commercial properties within a historically industrial area (refer to **Plate 2**). The Site is located in a mixed-use district with an M1-2/R6 and MX-8 zoning designation. Based on review of sixty-five (65) historical New York City Zoning Maps covering the Site area from December 1961 through December 2018, the Site has had an M1-2/R6 zoning designation without residential overlays since March 2006, prior to which it was historically zoned M1-1. The NYC department of City Planning describes the M1—2/R6 designation as developed in built-up medium density areas consisting of multi-story lofts in districts that typically include light industrial uses and the MX-8 designation as one of mixed-use.

2.1.1 Site Conditions

The Site is currently developed with three (3) adjoining buildings: a multi-story structure made up of a 6-story, primarily residential structure in the center with a partial sub-grade cellar (100 South 4th Street) flanked by two (2) smaller 1-story structures (98 South 4th Street and 104 South 4th Street), with 98 South 4th Street also containing a partial sub-grade cellar. The three buildings have a combined footprint of approximately 21,500 square feet (SF). Aside from narrow concrete paved patios on the south side of 98 South 4th Street and 104 South 4th Street, and a narrow light and air easement on the south side of 100 South 4th Street, the surface area of the site is covered entirely by the footprint of the buildings.

The buildings currently receive electrical and natural gas service from Con Edison and National Grid respectively, potable water from the New York City (NYC) municipal water system, while sanitary waste is reportedly handled by the NYC municipal public sanitary sewer system. Storm water runoff for the Site is handled via the municipal storm water drainage system located along South 4th Street.

2.1.2 Description of Surrounding Properties

The surrounding land parcels have a combination of residential and commercial uses. The Site is bordered to the north by South 4th Street and several three and five story residential buildings, to the east by a four-story residential apartment building with a commercial first floor, to the south by a multi-story residential

apartment building and a multi-story office building, and to the west by a concrete paved driveway, one four-story residential apartment building and one three-story residential home.

2.2 Physical Setting of the Site

2.2.1 Topography

The Site is located within the Atlantic Coastal Plain Physiographic Provence. The elevation of the Site, as presented on the United States Geologic Survey (USGS), Brooklyn Quadrangle Map, is approximately 50 feet above mean sea level (amsl). The Site Topographic Map is included as **Plate 3** and indicates the Site area has relatively flat topography. The nearest surface water body to the Site is East River (which feeds into Upper Bay), located approximately 0.28 miles (or 1,410 feet) to the west-northwest.

2.2.2 Regional Geology and Hydrogeology

Brooklyn is located in the western portion of Long Island, New York. Long Island consists of a wedge-shaped mass of un-consolidated deposits that overlie ancient basement rock. The thickness of these deposits range from approximately 100 feet on the Island's north shore to approximately 2,000 feet in some portions of the south shore. These deposits contain groundwater that is a key source of drinking water for the Island's over 3.1 million residents. The major land-forms of Long Island of importance to the hydrologic system are the moraines and outwash plains, which originated from glacial activity. The moraines represent the farthest extent of the glacial advances. The moraines consist of till, which is a poorly sorted mixture of sand, silt, clay, gravel and boulders. The till is poor to moderately permeable in most areas. Outwash plains are located to the south of the moraines. The outwash plains were formed by the action of glacial melt water streams, which eroded the headland material of the moraines and laid down deposits of well-sorted sands, silts and gravels. These outwash deposits have a moderate to high permeability.

Based upon the topographic map (USGS – Brooklyn Quadrangle) and proximity to the East River, regional groundwater flow direction is presumed to be west to southwest. It should be noted that there may be localized variations in subsurface hydrology created by sewers, wells and other anthropogenic structures. Hydrologic conditions in the vicinity of the Site may be subject to variations in seasonal precipitation and geological conditions not evident during review of publicly available records. An accurate determination of groundwater depth and flow at the Site requires a site-specific ground-water study.

The topographic map indicates the Site elevation is approximately 50 feet amsl (above mean sea level). The “USGS Groundwater Conditions on Long Island” map indicates that groundwater below the Site is

situated at less than 5 feet amsl. Thus, the estimated regional groundwater elevation at the Site is approximately 45-49 feet below grade surface (bgs).

2.2.3 Site Specific Geology and Hydrogeology

Based on NYSDEC records, obtained by IEC, soil borings conducted in 1996 at the Site identified fill materials to a depth of approximately 7 feet below grade from the first floor of 98 S. 4th St and to a depth of approximately 6 feet below the basement floor of 100 S. 4th St. Beneath the surface fill layer is sand and silt to a depth of at least 17 feet below grade. These previous borings also identified groundwater at approximately 17 feet bgs, contrary to information provided on the USGS Groundwater Conditions map.

3 SITE BACKGROUND

The Site buildings are currently occupied. The westernmost building, 98 South 4th Street is a one-story building comprised of three individual retail spaces (a, b, and c). 98a is occupied by a catering facility, 98b is occupied by a CrossFit gym, and 98c is currently vacant. 100 South 4th Street is a 7-story building currently utilized as a residential apartment building. Finally, 104 South 4th Street is a one story building currently occupied by a bar/restaurant (see **Plate 4 – Site Plan**). The following sections describe the historical Site use, the findings from previous environmental investigations completed by IEC and others for the Site, and a summary of the identified areas of concern (AOCs).

3.1 Historical Site Use

Through review of historical records, New York City records, NYC databases and environmental databases for the Site, the following is a summary of the information identified:

- The Site was originally developed with small residential structures from circa 1887 through to circa 1904, at which point a large portion of the Site was developed with a large multi-story building occupied by “Gretsch Musical Instruments”.
- Circa 1918, the large multi-story building was reportedly occupied by “Interstate Electric Novelty Co.”
- Circa 1935, the large building was reportedly occupied by “Celluloid Works”, with a smaller building on the east side of the property being occupied by “Dyeing”. At this time, the western portion of the Site was unoccupied.
- Circa 1945, the large building was reportedly occupied by “Slomowitz Upholstery Supply.”
- Circa 1947, the small building on the eastern portion of the Site was labelled as “Dyeing and Cleaning”.
- In 1949, a Certificate of Occupancy (CO) was issued for a new building on Block 2443, Lot 13, to be used as an “Adhesives Manufacturing” factory.
- Circa 1950, the three (3) onsite buildings were labelled as “Factories”.
- Circa 1976, the eastern smaller building was listed as being occupied by “Rainbow Pigment Co.”
- Between 1977 and 2007, the two western buildings were reportedly occupied by “Factories”, while the eastern building was occupied by a “warehouse”.
- In 2007, a CO was issued for the 7-story building, to be altered for use as a 74-unit residential apartment building.

3.2 Proposed Site Redevelopment Plan

100 S 4th St LLC is not proposing any alterations to the current building layout or usage. The building will remain as is.

3.3 Previous Investigations

Please refer to **Plates 5, 6, and 7** for Previous Investigation sample locations.

Ecosystems Strategies, Inc. Summary Report of Phase II Environmental Services Dated January 23, 1997

This report provides a summary of Phase II Environmental Services completed at the Site in December 1996 with some previous site investigation information.

- At least three environmental investigations were conducted at the Site since 1992 which include an Order of Compliance and a Technical Report issued by the New York City Department of Environmental Protection (NYCDEP) for the Gamin Laboratories, Inc. facility in 1991; an Environmental Site Assessment prepared on a portion of the subject property by Soil Mechanics Environmental Services in 1994; and a Phase I Environmental Audit prepared on the subject property by Ecosystems Strategies, Inc. in 1996.
- The Phase I Audit identified the one-story structure located on the western portion of the subject property (98-102 South 4th Street) as recently occupied by a glue and adhesives factory (Van-Man Adhesives) and the seven-story structure located on the central portion of the property (104-114 South 4th Street) was partially occupied by a former electroplating laboratory (Gamin Laboratories, Inc.).
- The Order of Compliance and a Technical Report issued by the NYCDEP Division of Hazardous Materials Management identified presence of "... a release or substantial threat of a release of hazardous substances (abandoned electroplating solutions) on the second floor of the seven-story structure previously occupied by Gamin Laboratories, Inc. An Order of Compliance was issued by the New York City Department of Environmental Protection (NYCDEP) in 1992 that included provisions for the clean-up, treatment and disposal of all abandoned hazardous materials present within the Gamin Laboratories, Inc. facility by February 14, 1992. Based on observations made during the November 1996 site inspection performed by Ecosystems Strategies, Inc. this work was never completed by Camin Laboratories, Inc. A preliminary survey of the abandoned Gamin facility including sampling of suspected hazardous substances was conducted by the NYCDEP as part of the 1992 Technical Re-port. This preliminary survey identified the presence of sixteen open chemical

vessels and numerous bottles and boxes of chemicals; sampling of liquids within the reaction vessels identified the liquids to be acidic. An inventory of all hazardous substances present within this facility was conducted by the NYCDEP; this inventory was not included in documents provided by the Pratt Institute. The NYCDEP concluded in 1992 that the subject property should be considered a potential environmental and human health hazard."

- The Environmental Site Assessment prepared on a portion of the Site by Soil Mechanics Environmental Services ("Soil Mechanics") in September 1994 identified the following conditions "with respect to the interior of the on-site seven-story building: miscellaneous debris (including household trash); an abandoned automobile and automobile parts; several unlabeled, empty 55 and 30 gallon drums and one cylinder of compressed gas; numerous 55 and 30 gallon metal and plastic drums, a one-gallon drum labeled "Sulfuric Acid"; large fiberglass and metal vats containing an unidentified liquid, and oil-like staining in the laboratory area; indications of major flooding; and evidence of peeling/flaking paint. Due to identified on-site environmental conditions which have the potential to represent a potential liability, Soil Mechanics recommended that additional investigative and remedial action be conducted on the subject property including the installation of two monitoring wells. Ac-cording to available information, no monitoring wells are known to have been installed on the subject property and none of the recommended investigative work is known to have been performed."
- Ecosystems Strategies supervised "the extension of two (2) borings within the former glue factory (Building #3) to determine the presence or absence of subgrade soil and/or groundwater contamination as a result of historic on-site operations and/or current conditions." Chlorinated solvents were identified within the 0-2-foot interval of B-1 where 170 micrograms per kilogram (µg/kg) of tetrachloroethane and 560 µg/kg of trichloroethane were detected which were below the NYSDEC standards applicable at the time. However, compared to the cur-rent Protection of Groundwater (PGW) SCOs, PCE was below the 1,300 µg/kg SCO, while TCE was above the 470 µg/kg SCO. No chlorinated Volatile Organic Compounds (cVOCs) were detected in the 15-17-foot interval. Laboratory analysis of the sample collected from the 0-2-foot interval in B-2 identified the presence of elevated levels of chlorinated solvents: tetrachloroethane 5,500 µg/kg and 3,700 µg/kg of trichloroethane which was above the standard applicable at the time, and above the current PGW SCOs. Elevated concentrations of PAHs were also detected. Other VOCs were also detected. No detectable concentrations of trichloroethane or tetrachloroethane were identified in samples collected from 5-7 feet below grade or from 12-14 feet below grade. Available laboratory data

generated to date suggest that the vertical extent of contamination extends along the surface soils beneath the concrete floor to a depth of approximately 2 feet below grade; however, contaminated soils may extend to depths of at least 4 feet below grade.

- Observations made during the site inspection indicate the presence two (2) 10,000-gallon vaulted tanks within a vaulted area located beneath Building #3 and two (2) 275-gallon aboveground storage tanks (ASTs) located within Building #3.

Other areas were investigated which included standing water in abandoned chemical vats, standing water in the boil room, asbestos and lead in paint. Additional investigation was recommended.

Ecosystems Strategies, Inc. Summary Report of Subsurface Investigation Dated April 7, 1997

- On March 31,1997 Ecosystems Strategies, Inc. personnel supervised the extension of three (3) borings within the former glue factory to determine the lateral and vertical extent of subgrade soil contamination. Laboratory analysis identified 1,100 parts per billion (ppb) of trichloroethene in B-4 at 6" to 2'6" below grade, above the current PGW SCOs of 470 µg/kg. Laboratory analysis of soil collected from the 4'6" to 6'6" interval and the 8'6" to 10'6" interval identified low levels of these two compounds at concentrations below NYSDEC-designated action levels. No detectable concentrations of these compounds were present in soil collected at depths greater than 12 feet below grade.
- "B-6, B-7, B-8 and B-9 were advanced in the basement of Building #2. Laboratory analysis of the samples collected from the 6" to 2'6" interval identified the presence of the low levels of tetrachloroethene in B-8 and low levels of trichloroethene in B-6 and B-8. Specifically, 3 ppb and 24 ppb of trichloroethene were detected in B-6 and B-8, respectively and 6 ppb of tetrachloroethene was detected in B-8. None of these detected levels are above NYSDEC applicable action levels." These concentrations are below the current PGW SCOs for PCE and TCE.
- "No BTEX compounds (benzene, toluene, ethylbenzene or xylene) were detected in the four (4) borings ex-tended in the basement of Building #2. Laboratory analysis identified the presence of poly aromatic hydrocar-bons (PAHs) in B-6 and B-8; however, only the levels in B-8 were present at concentrations exceeding NYSDEC-designated action levels." No polychlorinated biphenyls (PCBs) were detected.
- "The source of the identified chlorinated solvents and polycyclic aromatic hydrocarbons present in the sub-grade surface soils is unknown. Based on the generally low documented levels of PAHs and

VOCs, it is likely that the compounds present in the subgrade soils are fill related and are not due to any gross release of contaminants. Based on the non-detectable levels of PAHs documented in soils from between 15 and 17 feet below grade in B-1 (likely to be either at or below the invert of the two on-site USTs), it is unlikely that the elevated levels of PAHs identified in the soils are the result of a release of product from either of the two on-site USTs."

- "The documented levels of VOCs and PAHs indicate that remediation or special handling of subsurface soils, other than the surface soils directly beneath the floor of the former glue factory (6" to approximately 3'6" be-low grade), is not warranted. No groundwater sample could be collected from beneath the building; however, the soil data support the conclusion that groundwater has not been impacted by on-site operations and/or conditions."

Ecosystems Strategies, Inc. Final Work Plan for Site Closure Activities Date December 3, 1997

Information contained within this work plan indicated the following:

- Three groundwater monitoring wells installed on the Site were sampled in June and July 1997 to document groundwater quality on and near the Site. Samples collected in June 1997 for initial screening purposes only were not collected in accordance with NYSDEC protocol.
- Data document the presence of low levels of volatile organic compounds, including compounds previously identified in on-site soil. Levels do not indicate significant groundwater contamination and do not support the conclusion that on-site groundwater should be considered a source of off-site contamination at levels warranting remediation.
- Groundwater was determined from surveyed well elevation data and depth-to-water measurement, to be flowing in a northeasterly direction. Groundwater was present between 23 and 25 feet below surface elevation at the site, and groundwater elevations vary between 26.69 feet 27.07 feet.
- Two (2) 10,000-gallon vaulted tanks were located within a vaulted area beneath Building #3 and two (2) 275-gallon aboveground storage tanks (ASTs) are located on the main floor of Building #3. Observations indicate that the two 10,000-gallon tanks were no longer in use and may have been previously closed: the two 275-gallon ASTs are also not in use. Borings conducted on the Site do not document any evidence of petroleum re-leases from the two vaulted tanks.

- Ecosystems Strategies, Inc. Summary Report of Subsurface Investigative Services Date March 26, 1999

- This report provides documentation regarding the presence or absence of subsurface soil contamination on the subject property within the footprint of Building #2. Samples from the previous sampling round indicated no evidence of significant contamination at this Site. The data was considered insufficient by the user to fully characterize the entirety of Building #2, and additional borings and soil sampling was requested.
- Subsurface soil samples were collected from six soil borings designated as B-9 and B-11 to B-12. Trichloroethene was not detected in the shallow soil samples collected from B-11 and B-14 but was detected at low concentrations below the NYSDEC standard ranging from 3 µg/kg to 15 µg/kg (below the NYSDEC PGW SCOs) in shallow soil samples collected from borings B-9, B-12, B-15 and B-16. No VOCs were detected in the deep soil samples.

Nova Consulting Phase I ESA Report, Dated February 16, 2018 with Information from the Don Carlo Phase II Subsurface Investigation and Tank Closure Report Dated April 2006

The Nova Consulting Phase I ESA revealed the following Recognized Environmental Conditions (RECs) and Historic Recognized Environmental Conditions (HRECs) relating to the Property.

- The historical use of the Property for manufacturing purposes and a cleaner / dyer, with subsurface data con-firming release impacts which have not been remediated, and its E-Designation listing were identified as RECs.
- The Property is listed as a former Voluntary Cleanup Site (El Puente at 98-116 South 4th Street) under Site ID V00094. December 2003 correspondence indicates that the NYSDEC terminated the Voluntary Cleanup Agreement W2-0840-99-011 with El Puente de Williamsburg as El Puente de Williamsburg was not successful in acquiring title to the Property. Based on the levels of contamination identified during the investigatory work completed as part of the VCP, this listing is considered a REC in connection with the Property.
- Closed Spill Numbers 8602718 and 9611887 are considered HRECs in connection with the Property. Nova submitted Freedom of Information Request to the NYSDEC for information related to the case on February 1, 2018 and February 13, 2018 and was informed that any information related to the incidents would be made available on or about March 2, 2018 and March 15, 2018, respectively.

Other pertinent information identified in this report indicate the following:

- “The Don Carlo report documented the removal of two (2) 275-gallon “aboveground USTs” and two (2) 10,000-gallon “aboveground USTs” from the western-most building. Elevated levels of SVOCs and

heavy metals were al-so identified by Don Carlo in on-site soils (presumably in the vicinity of the former tanks), with elevated levels of chlorinated solvents also identified in on-site groundwater."

- The Don Carol Report was not provided individually or attached as an appendix to the Nova Consulting Phase I Report, and as such, the exact locations of soil and groundwater sampling and levels of contamination found is not available.

Impact Environmental Closures, Inc. Phase I ESA Report, Dated May 23, 2019

A Phase I ESA Report, dated May 23, 2019, was prepared for the Site by Impact Environmental Closures, Inc. (IEC) to identify recognized environmental conditions associated with the Site. This Assessment revealed the following Recognized Environmental Conditions (RECs), Historical Recognized Environmental Conditions (HRECs), and Business Environ-mental Risks (BERs) relating to the Property.

- Operations at the Site dating back to circa 1997, had a variety of manufacturing uses including an adhesive factory (98 S. 4th St, formerly 98-102 S 4th St); an electroplating operation; a laboratory (Camin Industries); a Sawing, Painting and Varnishing factory (100 S. 4th St, formerly 104-114 S 4th St); and a dye factory (116 S 4th St). Previous environmental investigations in 1997 and 2019 have documented sources of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), including the chlorinated-VOCs trichloroethene (TCE) and tetrachloroethene (PCE), in soil and/or soil vapor. Previous data collected indicates VOCs have been detected in groundwater above the applicable regulatory standards. Furthermore, regional groundwater quality has been impacted with VOCs consistent with those detected on the Site. In addition, the southwestern, upgradient, adjacent Site, located at 150 South 5th Street is enrolled in the New York State Brownfields Cleanup Program (BCP site no. C224233) due to exceedances of several contaminants of concern discovered in past subsurface environmental investigations.
- According to the environmental database listing, SVOCs and mercury exceedances were detected in the on-site soils, and TCE and PCE were detected above regulatory standards in groundwater and soil vapor on-site. Volatile chemicals, primarily chlorinated VOCs (TCE and PCE), from this property have the potential to migrate into overlying buildings (and adjacent property buildings) via soil and groundwater. Estimated depth to water is 23 fbg and groundwater flow direction was calculated towards the north/northeast in prior investigations on and off-site. The confirmed soil and groundwater contamination at the Site, and confirmed soil vapor contamination at Site and/or southwest adjacent Site and associated soil vapor intrusion risks, are considered a Recognized Environmental Concern (REC).

- According to the NYSDEC Spill Incident Database, two (2) spill incidents were associated with the Site. Both incidents were mitigated to the satisfaction of the NYSDEC and closed, as discussed below:
    - Spill No. 8602718 – An unknown quantity of # 4 fuel oil was released to the Site soil on July 25, 1986. The cause of the spill is listed as "Abandoned Drums". The spill has a closed status as of July 25, 1986.
    - Spill No. 9611887 – An unknown quantity of #2 fuel oil was released to the Site soil on January 2, 1997. The cause of the spill is listed as "Unknown". The spill has a closed status of March 12, 2013.
- The Site is listed with an E-Designation for Hazardous Materials "E-138", with Phase I and Phase II testing protocols required under the City Environmental Quality Review (CEQR) program. Lots with E-Designations may not be issued a building permit allowing: 1) any development; 2) an enlargement, extension or change of use in-volving residential or community facility use; or 3) any enlargement that disturbs the soil on the lot until the NYC Building Department is provided with a report from NYC Office of Environmental Remediation (OER) or NYC Department of Environmental Protection (DEP) stating that the environmental E-Designation requirements for the lot have been met. This designation is considered a REC given the likely presence of hazardous substances or petroleum products at the Site.

<u>Excel Environmental Resources, Inc. Draft Vapor Intrusion Assessment Report Dated April 2019</u>

The vapor intrusion scope of work performed at the Site included: 1) collection of four (4) sub-slab soil gas samples (two of which were completed in Building No. 2, and one each for Buildings No.1 and No. 3); 2) collection of twelve (12) indoor air samples with eight 24- hour indoor samples in Building No. 2, one 8- hour indoor sample in Building No.1, and three 8 -hour indoor samples in Building No. 3; and 3) collection of one (1) 24- hour ambient air sample at Building No. 2.

- The results from soil vapor/indoor air sampling were compared against the New York State Department of Health (NYSDOH) Guidance for Evaluating Vapor Intrusion in the State of New York dated October 2006, and revealed elevated levels of the following halogenated solvents: Tetrachloroethene (PCE) was detected in one sub-soil gas sample (SS1-1) at 36.8 micrograms per cubic meter (µg/m3), and SS2-1 at 67.8 µg/m3, which are above the NYSDOH Indoor/Outdoor Air Guidance Value of 30 µg/m3 and Trichloroethene (TCE) was detected in soil vapor sample SS2-1 at 336 µg/m3, SS2-2 at 45.8 µg/m3, SS3-1 at 42.2 µg/m3 which is above the NYSDOH In-door/Outdoor

Air Guidance Value of 2 µg/m3. Additionally, Cis-1, 2-dichloroethene was detected in sub-slab soil vapor sample SS3-1 at 3.43 µg/m3, and 1,1,1-Trichloroethane was detected in SS3-1 at 1.81 µg/m3.

- Carbon Tetrachloride (CT), Trichloroethene (TCE), and Tetrachloroethene (PCE) was detected in one indoor air sample IA1-1 at 0.51 µg/m3 ,0.532 µg/m3, and 1.67 µg/m3 in Building No.1. Carbon Tetrachloride (CT) was detected in one indoor air sample IA2-1 at 0.547 µg/m3. In addition, Trichloroethene (TCE), Tetrachloroethene (PCE), and Cis-1, 2-dichloroethene (c-1,2-DCE) was detected in sample IA2-8 at 2.15 µg/m3 ,2.64 µg/m3, and 0.119 µg/m3 in Building No. 2. Carbon Tetrachloride (CT), Trichloroethene (TCE), Tetrachloroethene (PCE), Cis-1, 2-dichloroethene (c-1,2-DCE) and 1,1,1 Trichloroethane (1,1,1- TCA) was detected in IA3-1 at 0.428 µg/m3, 3.98 µg/m3, 4.43 µg/m3, 0.174 µg/m3, and 0.12 µg/m3 in Building No. 3. Carbon Tetrachloride (CT) was detected on one ambient air sample AA-1 at 0.371 µg/m3 behind Building No. 3.

Review of the NYSDOH Decision Matrices, as listed in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York, indicates that based on the concentration of TCE reported in the indoor air and in the sub-slab, the property own-er shall perform mitigation at Buildings No. 2 and 3. Additional diagnostic testing was recommended to obtain information to design a sub-slab depressurization system (SSDS) for installation at the Site.

3.4 Adjacent BCP Site Investigation

The south adjacent property, located at 337 Berry Street and 99-105 South 5th Street, is a NYSDEC Brownfield Cleanup Program (BCP) project (No. C224233). The historical use of the subject property has been for both residential and commercial/government use. Dating back to 1887, the northern portion of the Site has been used for a wagon and auto shed, owned, or operated by the Water Purveyors Bureau and Dept. City Works, storage, and the City of N.Y. Dept. of Correction Garage, and the City of New York Landmark's Preservation Commission Salvage Warehouse. The southern portion of the Site has been used as residential, warehouse, and an auto body shop since 1887. The property is currently owned by the City of New York.

Information available for this property indicates that groundwater is located at approximately 45-feet below grade surface (bgs), and the regional groundwater flow beneath this property was to the west, towards the East River, based on the installation of four (4) monitoring wells in the area during a Remedial Investigation performed by Equity Environmental Engineering LLC in November 2016. Shallow (0-2' bgs) soil samples located along the northern portion of the property showed slightly elevated concentrations of the

Chlorinated VOCs (cVOCs) 1,1,1-trichloroethane (1,1,1-TCA) and trichloroethene (TCE) at concentrations below their respective NYCRR Part 375 Unrestricted Use SCOs. No deeper soil samples were collected for VOC analysis. Concentrations of the cVOCs tetrachloroethylene (PCE) and trichloroethylene (TCE) were detected in groundwater samples collected in the northern portion of the property (MW-1) at a maximum concentration of 71.4 µg/kg and 27.2 µg/kg, respectively. Finally, elevated concentrations of the cVOCs TCE (max of 3,510 µg/m³), PCE (max of 2,870 µg/m³), and 1,1,1-TCA (max of 278 µg/m³) were detected in soil gas samples collected in the northern portion of the property.

The BCP volunteer has completed site remediation and construction at the site. The applicant currently operates a Soil Vapor Extraction (SVE) system along the northern portion of the property, which is now an open parking lot. Moreover, the newly developed 11-story mixed-use residential and commercial building, located on the southern side of the property, was constructed with a vapor barrier engineering control, along with an active Sub-Slab Depressurization System (SSDS).

A Periodic Review Report was prepared by Advanced Cleanup Technologies, Inc (ACT) in May 2019, per the approved site Management Plan (SMP). ACT was retained to perform operation, maintenance, and monitoring of the existing engineering controls at the site. The SVE system reportedly consists of four (4) PVC extraction points that extend 15-feet bgs, with 5-feet of screen. Horizontal piping is located approximately 4-feet bgs, and the piping is connected to a package treatment plant that consists of system controls, extraction monitor, and activated carbon canisters to remove VOCs from the extracted vapor. Per the report, influent and effluent samples were collected from the SVE system on March 11, 2019, and April 30, 2019. Influent concentrations of PCE were noted as 460 µg/m³ in March and 550 µg/m³ in April, while TCE was detected at 320 and 450 µg/m³, 1,1,1-TCA at 18 and 17 µg/m³, and finally Cis-1,2-dichloroethene (cis-1,2) at 5.8 and 15 µg/m³, respectively. Based on this data, it appears that, while the SVE system is running effectively, elevated concentrations of several cVOCs are still present in the subsurface soil vapor at concentrations requiring ongoing remediation.

3.5 Recognized Areas of Concern

Based on the findings of the previous subsurface investigations completed for the Site, as detailed in the previous sections, IEC identified one (1) area of concern (AOC) in the northwest portion of the property, in which cVOCs (PCE and TCE) were detected in shallow soil samples at concentrations exceeding their respective NYCRR Part 375 Protection of Groundwater (PGW) soil cleanup objectives (SCOs). Furthermore,

cVOCs (PCE and TCE) were detected in two (2) offsite groundwater samples collected during previous investigations from the north of the property, and in one (1) onsite groundwater sample collected in from the western portion of the property, at concentrations in excess of their respective NYSDEC Groundwater Quality Standards (GQS). Finally, cVOCs (PCE and TCE) were detected in sub-slab soil vapor and indoor air samples collected during previous investigations, from across the Site, at concentrations requiring either further monitoring or mitigation in accordance with the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion Decision Matrices. Due to the ability of soil vapors to migrate in any direction, following the path of least resistance, IEC cannot determine the existence or potential geographic extent of an AOC based on the soil vapor and indoor air data.

Refer to **Plate 8** for the **AOCs Site Plan**.

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4 SVI RI FIELD INVESTIGATION

The Soil Vapor Intrusion (SVI) Remedial Investigation scope of work was completed in accordance with the approved RIWP during the period from March 10th through March 12th, 2021. The SVI remedial investigation was completed in general accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006 and the subsequent updates; and ASTM D7663-12 Standard Practice for Active Soil Gas Sampling in the Vadose Zone for Vapor Intrusion Evaluations (2018).

The following work was completed to investigate and confirm the nature and extent of the soil vapor, indoor air, and ambient outdoor air contaminants detected within the Site boundaries during previous sub-surface investigations. The SVI remedial investigation included the following activities:

- Installation of nine (9) permanent sub-slab soil vapor sampling points; two (2) in each of the four (4) commercial spaces, and one (1) in the residential building.
- Installation of two (2) temporary duplicate sub-slab soil vapor sampling points, proximal to two (2) of the primary sample points, as required by the QA/QC section of the approved RIWP.
- Collection of one soil vapor sample from each soil vapor point for a total of nine (9) soil vapor samples, and two (2) QA/QC duplicate soil vapor samples.
- Collection of 12 indoor air samples; one (1) in each of the four (4) commercial spaces, one (1) in each of the seven (7) ground floor residential apartment units, and one (1) proximal to the elevator shaft.
- Collection of two (2) duplicate indoor air samples, proximal to two (2) of the primary indoor air samples, as required by the QA/QC section of the approved RIWP.
- Collection of one (1) outside ambient air sample.
- An inspection of the interior spaces to determine the presence of any preferential pathways for soil vapor and indoor air such as cracks/holes/fissures in the concrete floor or walls, along with a chemical inventory of each indoor space.
- Submission of 26 sub-slab/indoor air/outdoor air samples for certified laboratory analysis using USEPA Test Method TO-15 for VOCs.

The field activities completed as part of this remedial investigation are described in the following sections.

4.1 Site Inspection and Chemical Inventory

Prior to the completion of the soil vapor intrusion investigation, IEC staff conducted an inspection of each interior space, to the extent practicable, in order to identify potential structural deficiencies (cracks, fissures, holes etc.), preferential pathways, or stored or utilized chemicals that may have the potential to interfere with the results of the investigation. Based on IECs inspection of the interior portions of the buildings, the following observations were noted (See **Appendix B** for a Photographic Log):

- **98c South 4th Street (vacant retail unit)**
    - The main floor of the unit is finished with a floating wooden floor, so a full inspection of the building slab was not possible.
    - The partially sub-grade basement maintained a painted concrete floor and did not exhibit any significant structural deficiencies.
    - No significant structural deficiencies were observed on the walls of the unit.
    - No floor drains or sumps were identified in this unit.
    - The HVAC for this unit was not active at the time of the inspection.
    - No chemicals were observed within this unit.

- **98b South 4th Street (Session's gym)**
    - The main floor and the partially sub-grade basement floor were painted concrete; however, a significant portion was covered with rubberized gym mats, and thus could not be fully inspected.
    - No significant structural deficiencies were observed in the visible concrete flooring and/or walls.
    - No floor drains or sumps were identified in this unit.
    - The HVAC for this unit was in operation at the time of the inspection.
    - Chemicals stored within this unit were limited to a 5-gallon container of generic hand sanitizer and 2-gallons of "Zogics" Broad Spectrum Healthcare Facility disinfectant.
    - The chemicals observed are not known to contain cVOCs or other COCs.

- **98a South 4th Street (Lemons and Olives catering)**
    - The floor in this unit was primarily unfinished concrete, with ceramic tiles located in the rear kitchen area.

- No significant structural deficiencies were observed in the concrete flooring or walls of this unit.
- Approximately five (5) small diameter (5-6") grated floor drains were observed throughout this unit.
- Chemicals stored within this unit were limited to 32-ounces of isopropyl-alcohol, -quart of mineral oil, various containers of hand sanitizer, 2.5-quart container of "Liquid Plumr", and 1-gallon of dish disinfectant.
- The chemicals observed are not known to contain cVOCs or other COCs.

- **100 South 4th Street (residential apartment building)**
  - The ground floor lobby and ground floor residential apartment unit floors are finished with ceramic tiles. The stairwell and utility rooms maintained painted concrete flooring.
  - No significant structural deficiencies were observed in the visible concrete flooring and/or walls.
  - No floor drains or sumps were identified in the lobby or ground floor apartment units.
  - Each residential apartment unit utilizes an individual heating unit. No HVAC or central air is available in the residential apartment building.
  - Chemicals stored within the occupied residential apartment units were limited to general household cleaners.
  - A storage cage was present in the stairwell of the apartment building. The cage maintained approximately 15 5-gallon containers of paint/primer.
  - Ground floor apartment F was being utilized as a building maintenance and storage space. Chemicals observed in this unit included two (2) 5-gallon containers of Pro-Polyurethane, numerous bottles of grain alcohol, various containers of spray paint, enamel paint, and paint stripper. No odors were observed in this area.
  - The chemicals observed are not known to contain cVOCs or other COCs.

- **104 South 4th Street (Randolph Beer restaurant)**
  - The floor in this unit was primarily painted and unfinished concrete, with ceramic tiles located in the rear kitchen area and a floating wooden floor on the western side of the unit that extends into the adjoining 100 South 4th Street.

- No significant structural deficiencies were observed in the visible concrete flooring or walls of this unit.
- Approximately two (2) small diameter (5-6”) grated floor drains were observed in this unit.
- Chemicals stored within this unit were limited to a container of Simple Green cleaner and a container of Zee Lerasept PAA (Peracetic Acid).
- The chemicals observed are not known to contain cVOCs or other COCs.

Based on the Site Inspection conducted by IEC, the chemicals stored within the commercial units and residential apartment building are not expected to negatively influence the results of the soil vapor intrusion investigation. No significant cracks, holes, or fissures were observed in the floors or walls of the buildings; however, several floor drains were identified.

4.2 Soil Vapor Intrusion Investigation

The NYSDEC and the NYSDOH require assessment of soil vapor at contaminated sites to collect data to evaluate health risk associated with potential exposure to VOCs through vapor intrusion into occupied spaces. The sub-slab soil vapor sampling points were installed by IEC on March 10, 2021, and the soil vapor, indoor air, and outdoor air samples were collected over a 24-hour period between March 11 and 12, 2021. The locations of the sub-slab soil vapor sampling points, indoor air and outdoor air samples, are shown on **Plate 9**. Prior to the installation of the soil vapor points, IEC conducted a preliminary walkthrough of the Site to select locations for the installation of the permanent sub-slab soil vapor points and collection of indoor air samples. The sample locations were selected to confirm the sub-slab vapor and indoor air conditions across the Site.

The permanent sub-slab soil vapor monitoring points were located at least 5 feet from exterior walls of the building to minimize the potential for infiltration of outdoor air into the vadose zone. The nine (9) permanent sub-slab soil vapor sampling points installed during the remedial investigation were designated SV-1a, SV-1b, SV-2a, SV-2b, SV-3a, SV-3b, SV-4, SV-5a, and SV-5b. The sample locations chosen were as follows:

- **SV-1a:** Located in the northern portion of the vacant retail space (98c South 4th Street).
- **SV-DUP-1**: Duplicated sample located proximal to SV-1a.
- **SV-1b:** Located in the southern portion of the vacant retail space (98c South 4th Street).
- **SV-2a:** Located in the northern portion of the retail space occupied by the gym (98b South 4th Street).
- **SV-2b:** Located in the southern portion of the retail space occupied by the gym (98b South 4th Street).
- **SV-3a:** Located in the northern portion of the retail space occupied by the catering facility (98a South 4th Street).
- **SV-3b:** Located in the southern portion of the retail space occupied by the catering facility (98a South 4th Street).
- **SV-4:** Located in the central stairwell of the residential building (100 South 4th Street).
- **SV-DUP-2**: Duplicated sample located proximal to SV-4.
- **SV-5a:** Located in the northern portion of the bar/restaurant (104 South 4th Street).
- **SV-5b:** Located in the southern portion of the bar/restaurant (104 South 4th Street).

The indoor air sampling locations were located at least 10 feet from exterior walls of the building to minimize the potential for infiltration of outdoor air into the beathing zone and were set at between 4-6-feet above

grade, to be representative of the breathing zone. The 12 indoor air samples collected during the remedial investigation were designated IA-1, IA-2, IA-3, IA-4a, IA-4b, IA-4c, IA-4d, IA-4e, IA-4g, IA-4h, and IA-5. The sample locations chosen were as follows:

- **IA-1:** Located in the central portion of the vacant retail space (98c South 4th Street).
- **IA-2**: Located in the central portion of the retail space occupied by the gym (98b South 4th Street).
- **IA-3**: Located in the central portion of the retail space occupied by the catering facility (98a South 4th Street).
- **IA-1a through IA-1g**: Located in ground floor apartments A-through-G within the residential building (100 South 4th Street)
- **IA-DUP-1**: Duplicated sample collected proximal to IA-4a.
- **IA-4h**: Located proximal to the elevator shaft within the residential building (100 South 4th Street).
- **IA-5**: Located in the central portion of the bar/restaurant (104 South 4th Street).
- **IA-DUP-2**: Duplicated sample collected proximal to IA-5.

Finally, the outdoor air sampling location was located in the building's year egress area, south of 98 South 4th Street, and was set at between 4-6-feet above grade, to be representative of the breathing zone. The outdoor air sample collected during the remedial investigation was designated OA-1.

See **Plate 9** for Soil Vapor Investigation Sample Location Map.

4.2.1 Installation of Permanent Soil Vapor Points

The permanent soil vapor implants were installed in accordance with the protocols and procedures cited in Section 2.7.2 within the New York State Department of Health (NYSDOH) October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York document to address the identified AOCs and confirm soil vapor conditions. The soil vapor monitoring points were located at least 5 feet from exterior walls of the building to minimize the potential for infiltration of outdoor air into the vadose zone. A 1.5-inch diameter hole was drilled approximately 1.75-inches down into the slab. Then a 5/8-inch diameter hole was installed through the remainder of the slab. Once fully penetrated, the vapor pin and silicone sleeve were immediately installed using a vapor pin installation tool (impact protection) and dead-blow ham-mer. Once installed, the silicone sleeve created an airtight seal, and the vapor pin was fitted with a protective cap to eliminate the

potential for vapor migration into the building. Stainless-steel secure covers were then place over the vapor pins, which thread directly onto the vapor pin for a secure and flush mounted finish. A soil vapor sample point construction detail is presented in **Appendix A**. The soil vapor points were allowed to equilibrate for a minimum of 24 hours. See **Appendix B** for a Photo Log of the Soil Vapor Intrusion Remedial Investigation.

4.2.2 Soil Vapor Sampling Procedures

Prior to sampling, a tracer helium gas test was performed to confirm the integrity of the implant seals at each soil vapor point assembly as part of a quality assurance verification. The failure of a seal allows for atmospheric air to impact the soil vapor sample. A containment shroud (i.e., 5-gallon plastic bucket) was placed on top of the soil vapor point assembly and the soil vapor point tubing was extended through the shell of the shroud using an air-tight probe hole fitting installed through the container. The bucket is then sealed around the edges with hydrated bentonite to maintain the helium within the container. The sealed shroud is then enriched with helium using a second air-tight probe hole fitting installed through shell of the container. A real-time helium detection instrument was then connected to the tubing from the soil vapor sampling point. The soil vapor sampling train is then activated by using the helium detector to draw air (at less than 0.2 liters per minute). The detection of helium would indicate that a seal was compromised and require replacement. The tracer gas helium was not detected in the eight (8) soil vapor sampling locations indicating the implant seals were considered airtight.

After confirmation of the soil vapor point seal integrity, the vapor points were each purged to evacuate potential atmospheric air prior to sample collection to ensure the sample would be representative of subsurface soil vapor conditions. The evacuation process was completed by using a PID attached to the polyethylene tubing of the sampling point. A PID has a flow rate of approximately 0.2 liters per minute. A total of three tube volumes was purged during the evacuation and during the prior helium tracer gas test. A PID reading was also recorded once the evacuation with the PID was completed.

After purging was complete, a laboratory supplied clean 2.75-liter Summa canister with a laboratory pre-calibrated flow controller with a flow rate of no more than 0.2 liters per minute, was attached to the vapor sampling point polyethylene tubing. Sampling of the sub-slab soil vapor then proceeded by fully opening the flow control valve on each sample canister. Immediately after opening the flow control valve on each canister, the initial vacuum (inches of mercury) was recorded in the field log and on the sample tag. The

Summa canisters supplied by the analytical laboratory arrived with approximately 29.09 to 31.90 inches of mercury vacuum.

The samples were collected over a period of approximately 24-hours, with an estimated flow rate of 0.0020 liters per minute. When approximately 2.75 liters of sample had been collected or the canister pressure dropped to approximately 4 inches of mercury (approx. 24 hours), the samples were stopped by closing the flow controller valves. The final vacuum recorded in the field notebook and on the sample tag.

4.2.3 Indoor/Outdoor Air Sampling Procedures

The indoor and outdoor air samples were collected using laboratory supplied clean 2.75-litre Summa canisters with laboratory pre-calibrated flow controllers. The summa canisters were placed approximately 4-6-feet above grade, in the approximate breathing zone. Samples were collected over a period of approximately 24-hours, with an estimated flow rate of 0.0020 liters per minute. When approximately 2.75 liters of sample had been collected or the canister pressure dropped to approximately 4 inches of mercury (approx. 24 hours), the samples were stopped by closing the flow controller valves. The final vacuum recorded in the field notebook and on the sample tag.

4.2.4 Soil Vapor/Indoor/Outdoor Sample Laboratory Analysis

The soil vapor, indoor air, and outdoor air sample identification, date, start time, start vacuum, end time, and end vacuum for each Summa canister sample were recorded on a sample log sheet and the laboratory chain of custody. Nine (9) soil vapor samples, two (2) duplicate soil vapor samples, 12 indoor air samples, two (2) duplicated indoor air samples, and one (1) outdoor air sample were submitted to Analytical Laboratories of Mansfield, MA (Alpha) on March 12, 2021 via laboratory courier to Alpha Analytical of Westboro, MA, for laboratory analysis of VOCs via EPA Method TO-15.

4.3 Quality Control Sampling

During the SVI RI, duplicate samples were collected for QA/QC purposes in accordance with the QAPP. A summary of the QA/QC samples collected/analyzed during the RI is provided in **Table 1.**

4.3.1 Duplicate Samples

Duplicate sample collection will apply to soil vapor and indoor air samples collected at this Site. A duplicate (replicate) sample is collected to control the general sampling methodology that is being employed. This sample ensures that a representative sample is being collected. Duplicate samples may also be submitted to verify the precision of the analytical methods.

The duplicate samples were collected from the same material as the primary sample by splitting the volume of sample collected in the field into two sample containers. The duplicate samples are labelled in such a manner that the laboratory would not be able to determine that they are duplicate samples. This serves to minimize possible bias that could arise during analysis.

4.4 Data Usability Validation

The analytical data packages from the SVI RI were validated by Christina Rink with Laboratory Data Consultants, Inc., of Carlsbad, CA (LDC), an independent third-party data validator subcontractor in accordance with USEPA and NYSDEC validation protocols. The data validator's credentials are provided in **Appendix C.**

4.4.1 Data Usability Summary Report Preparation

A DUSR was prepared for each sampling matrix and analytes. The DUSR presents the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. The independent data validator reviews and considers the following as part of their evaluation for the of the soil vapor samples:

- Holding times
- Canister certification
- Laboratory blanks
- Laboratory control samples
- System monitoring compounds
- Target compound identification and qualification
- Field duplicate sample results

4.4.2 Data Usability and Qualifiers

The Category B analytical laboratory reports for the soil vapor samples, indoor air, and outdoor air samples collected during the SVI RI were provided by Alpha Analytical Laboratory and were forwarded to LDC for evaluation and preparation of DUSRs. The analytical results were reviewed by LDC for overall usability issues.

Based on the results of the data validation, the following qualifiers may be assigned to the data in accordance with USEPA's guidelines and best professional judgment:

- U Data qualified with this qualifier are usable at the reporting limit (RL).
- UJ Data qualified with this qualifier are to be used cautiously as they are estimated data with some quality control issues.
- J Data qualified with this qualifier are to be used cautiously as they are estimated data with some quality control issues.
- R Data qualified with this data qualifier are not usable due to server quality control issues.

A summary of the findings of the DUSR is as follows:

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers with the exception listed below.

Samples IA-4C and IA-4G were diluted for ethanol due to original analyses exceeding the calibration range. For ethanol results in samples IA-4C and IA-4G, the diluted results should be considered the most usable. The IA-4C and IA-4G results should not be considered usable for ethanol.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Gas Chromatography/Mass Spectrometry (GC/MS) Tunes

All criteria were met.

Initial and Continuing Calibration

Initial Calibration: All criteria were met.

Compounds that did not meet criteria are summarized in the following table:

Date	Instrument ID	Compound	ICV %D	Associated Samples		Validation Action
12/21/20	ICV-AIRLAB17	1,2,4-Trichlorobenzene	34.1	IA-4C	SS	UJ nondetects
		Hexachlorobutadiene	35.4	IA-4D	SS	UJ nondetects
				IA-4E		
				IA-4F		
				IA-4G		
				IA-4H		
				IA-5		
				IA-DUP-1		
				IA-DUP-2		
				OA-1		

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,2,4-trichlorobenzene and hexachlorobutadiene results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as non-detects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration: All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were performed on samples IA-2 and IA-4D for VOC analyses. All criteria were met.

Laboratory Control Sample (LCS) Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples SV -1A and SV -DUP-1, samples SV -4 and SV -DUP-2, samples IA-4A and IA-DUP-1, and samples IA-5 and IA-DUP-2 were submitted as the field duplicate pairs with this sample group. The following tables summarize the concentrations and validation actions taken (RPD = Relative Percentage Difference).

Compound	Concentration (ppbv)		RPD
	SV-1A	SV-DUP-1	
Dichlorodifluoromethane	0.409	0.403	1
Ethanol	81.2	68.2	17
Acetone	193	120	47
Isopropanol	6.29	6.29	0
tert-Butyl alcohol	1.72	0.508	109
Carbon disulfide	0.200U	0.403	Not comparable
1,1-Dichloroethane	0.809	0.353	78
2-Butanone	2.79	1.39	67
cis-1,2-Dichloroethene	1.93	0.645	100
Chloroform	0.390	0.408	5
n-Hexane	0.222	0.200U	Not comparable
1,1,1-Trichloroethane	1.30	0.857	41
Benzene	0.262	0.212	21
Trichloroethene	22.4	16.9	28
Toluene	0.552	0.527	5
2-Hexanone	0.319	0.200U	Not comparable
Tetrachloroethene	6.78	5.60	19

Compound	Concentration (ppbv)		RPD
	SV-4	SV-DUP-2	
Dichlorodifluoromethane	0.582	0.503	15
Chloromethane	0.200U	0.373	Not comparable
Ethanol	24.4	42.0	53
Acetone	3.86	5.98	43
Isopropanol	4.20	9.86	81
tert-Butyl alcohol	0.782	1.78	78
2-Butanone	1.24	1.74	34
Chloroform	2.18	0.643	109
Trichloroethene	3.90	3.03	25
Toluene	0.589	1.02	54
2-Hexanone	0.216	0.371	53
Tetrachloroethene	0.687	0.835	19
Ethylbenzene	0.459	0.790	53
m,p-Xylene	0.812	1.43	55
o-Xylene	0.430	0.670	44
1,3,5-Trimethylbenzene	0.200U	0.347	Not comparable
1,2,4-Trimethylbenzene	0.200U	0.341	Not comparable

Compound	Concentration (ppbv)		RPD
	IA-4A	IA-DUP-1	
Dichlorodifluoromethane	0.408	0.497	20
Chloromethane	0.532	0.524	2
Ethanol	472	438	7
Acetone	15.3	16.4	7
Trichlorofluoromethane	0.226	0.336	39
Isopropanol	93.4	104	11
2-Butanone	0.521	0.519	0
Ethyl acetate	0.733	0.955	26
n-Hexane	0.247	0.242	2
Benzene	0.341	0.336	1
Cyclohexane	0.565	0.533	6
n-Heptane	8.56	8.44	1
Toluene	1.41	1.37	3
m,p-Xylene	0.442	0.481	8
Carbon tetrachloride	0.062	0.082	28
Trichloroethene	0.064	0.069	8
Tetrachloroethene	0.153	0.153	0

Compound	Concentration (ppbv)		RPD
	IA-5	IA-DUP-2	
Dichlorodifluoromethane	0.492	0.491	0
Chloromethane	0.476	0.473	1
Ethanol	479	467	3
Acetone	10.2	10.1	1
Trichlorofluoromethane	1.11	1.06	5
Isopropanol	47.4	46.4	2
2-Butanone	0.797	0.838	5
Ethyl acetate	2.47	2.37	4
Chloroform	0.271	0.257	5
n-Hexane	0.200U	0.212	Not comparable
Benzene	0.329	0.331	1
n-Heptane	0.202	0.204	1
Toluene	0.742	0.739	0
m,p-Xylene	0.456	0.431	6
1,2,4-Trimethylbenzene	0.283	0.246	14
Carbon tetrachloride	0.093	0.083	11
Trichloroethene	0.055	0.054	2
Tetrachloroethene	0.078	0.077	1

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analyses.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed, and the results reported. RLs were elevated accordingly.

Sample	VOC Analyses Reported
SV-1B	3.125-fold dilution due to nature of sample matrix
SV-2B	10-fold dilution due to nature of sample matrix
SV-3A	2.941-fold dilution due to nature of sample matrix
IA-4CDL	5-fold dilution due to high compound level for ethanol
IA-4GDL	2.5-fold dilution due to high compound level for ethanol

Sample Quantitation and Compound Identification

Calculations were spot checked; no discrepancies were noted.

Overall, the data reviewed by LDC is acceptable for the intended purpose of this SVI RI. The DUSR for the soil vapor, indoor, and outdoor air samples is provided in **Appendix D**.

5 RI FIELD OBSERVATIONS AND ANALYTICAL RESULTS

The following sections provide information regarding the field observations and a summary of the laboratory analytical results for the soil vapor, indoor air, and outdoor air samples collected during the SVI RI. Sub-slab soil vapor samples were collected from a total of nine (9) locations during the SVI RI. The SVI sample locations are shown on **Plate 9**. A summary of the sub-slab soil vapor, indoor air, and outdoor air samples with associated QA/QC samples collected and analysis performed is provided in **Table 1.** The laboratory analytical data reports for data generated during the SVI RI are provided in **Appendix E**.

5.1 Soil Vapor Investigation Analytical Results

5.1.1 Soil Vapor Sample Results

The soil vapor samples were collected from within the three (3) onsite buildings (98 South 4th Street, 100 South 4th Street, and 104 South 4th Street), and comprised of nine (9) soil vapor sampling points. The results of the sub-slab soil vapor analysis indicated that several VOCs were detected at elevated concentrations (See **Plate 10**). Of note, the chlorinated VOC (cVOC) tetrachloroethene (PCE) was detected at elevated concentrations in the nine (9) soil vapor samples collected, and the cVOC trichloroethene (TCE) was also detected at elevated concentrations in the nine (9) soil vapor samples. PCE and TCE are commonly identified as degreasing solvents. In addition, elevated concentrations of the following VOCs were detected: 1,1,1-trichloroethane was detected in three (3) of the nine (9) sub-slab samples, cis-1,2-dichloroethene was detected in six (6) of the nine (9) samples, and vinyl chloride was detected in one (1) of the nine (9) samples. The NYSDEC does not currently have standards, criteria or guidance values for concentrations of volatile chemicals in subsurface soil vapors.

The PCE and TCE were detected in soil vapor at elevated concentrations above the NYSDOH Air Guidance Values (AGV) of 30 micrograms per cubic meter (µg/m^3) and 2.0 µg/m^3, respectively. The concentrations of PCE ranged from 4.6µg/m^3 at SV-4 up to 2,710µg/m^3 at SV-2b. The TCE concentrations ranged from 5.7µg/m^3 at SV-5b up to 3,260µg/m^3 at SV-2b. The concentrations of PCE and TCE are lower beneath the east side portion of the property (samples collected from beneath 100 and 104 South 4th Street) with the highest concentrations located in the west and southwestern portion of the property (primarily beneath 98 South 4th Street). While the PCE and TCE concentrations are elevated in the northwest portion of the property, the AOC where cVOCs were detected in shallow soils during previous investigations, the highest concentrations were detected in the southwest corner of the property. A summary of the soil vapor, indoor air, and outdoor

air laboratory analytical results are provided in **Table 2**. The Category B laboratory report for the soil vapor analysis is included in **Appendix E**.

The elevated sub-slab soil vapor concentrations on the Site area likely the result of volatilized contamination from soil and groundwater. Migration of soil gas contaminated with VOCs is less predictable than groundwater migration due to subsurface heterogeneities. Soil and groundwater samples will be collected during the second Phase of the Remedial Investigation and will further determine the presence of and potential origins of the PCE and TCE contamination detected in the soil vapor samples. It is unknow whether the contamination is from an on-site or off-site source.

5.1.2 Indoor/Outdoor Air Sample Results

The indoor air samples were collected from within the three (3) onsite buildings (98 South 4th Street, 100 South 4th Street, and 104 South 4th Street), and comprised of 12 indoor air sample locations, while one (1) outdoor ambient air sample was collected from the year yard behind 98 South 4th Street. The results of the indoor air sample analysis indicated that several VOCs were detected at elevated concentrations. Of note, the cVOC TCE was detected at elevated concentrations in 10 of the 12 indoor air samples collected from non-detect in IA-4D and IA-4E, with a minimum concentration of 0.253 µg/m³ in IA-4H and a maximum concentration of 2.14 µg/m³ in IA-3. In addition, the cVOC PCE was detected at elevated concentrations in the 12 indoor air samples with a minimum concentration of 0.292 µg/m³ in IA-4E and a maximum concentration of 2.55 µg/m³ in IA-4C. PCE and TCE are commonly identified as degreasing solvents. In addition, elevated concentrations of the cVOC carbon tetrachloride were detected in the 12 indoor air samples with a minimum concentration of 0.39 µg/m³ in IA-4A and a maximum concentration of 0.591 µg/m³ in IA-4C and IA-4G. Finally, elevated concentrations of the cVOCs TCE (0.325 µg/m³) and carbon tetrachloride (0.491 µg/m³) were detected in the outside ambient air sample OA-1. Concentrations of carbon tetrachloride were similar in indoor samples to the results of the outdoor ambient sample, and thus these detections are considered reflective of ambient conditions.

TCE was detected in one (1) indoor air sample, IA-3, located within 98a South 4th Street (occupied by the catering facility) at a concentration (2.14 µg/m^3) marginally above the NYSDOH Air Guidance Value (AGV) of 2 µg/m^3. PCE and TCE were not detected in the other 11 samples at levels in excess of the NYSDOH AGV. A summary of indoor air laboratory analytical results is provided in **Table 3**.

5.1.3 Decision Matrix Results

Per the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion, the soil vapor sample results were compared to those indoor air samples collected from the same space using three Decision Matrices, A, B, and C. The following compounds are evaluated using Soil Vapor/Indoor Air Matrix A: TCE, cis-1,2-dichlorethene,1,1-dichlroethene, and carbon tetrachloride. The following compounds are evaluated using Soil Vapor/Indoor Air Matrix B: PCE, 1,1,1-trichloroethane, and methylene chloride. Finally, the compound vinyl chloride is evaluated using Soil Vapor/Indoor Air Matrix C.

Each space within the property was assessed using a combination of soil vapor and indoor air samples.

- 98c South 4th Street was evaluated using two (2) soil vapor samples (SV-1a and SV-1b), and one (1) indoor air sample (IA-1).
- 98b South 4th Street was evaluated using two (2) soil vapor samples (SV-2a and SV-2b), and one (1) indoor air sample (IA-2).
- 98a South 4th Street was evaluated using two (2) soil vapor samples (SV-3a and SV-3b), and one (1) indoor air sample (IA-3).
- 100 South 4th Street was evaluated using one (1) soil vapor sample (SV-4), and eight (8) indoor air samples (IA-4a through IA-4h).
- 104 South 4th Street was evaluated using two (2) soil vapor samples (SV-5a and SV-5b), and one (1) indoor air sample (IA-5).

See **Plate 9** for Sample Locations. The following tables (also provided in **Tables 4.1 through 4.6** at the end of this report) provide the matrices decisions for each space sampled.

98c South 4th Street:

Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices Decision
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	7.09	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.396	NFA
cis-1,2-Dichloroethene	7.65	88	ND	NFA/MITIGATE
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	46	1,240	1.11	NFA/MITIGATE
Trichloroethene	120	1000	0.435	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Based on the results of the decision matrices, the concentrations of TCE in SV-1a require mitigation, while concentrations of cis-1,2-dichloroethene, PCE, and TCE in SV-1b require mitigation.

98b South 4th Street:

Sample ID	SV-2A	SV-2B	IA-2	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.421	NFA
cis-1,2-Dichloroethene	5.35	379	ND	NFA/MITIGATE
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	5.2	2710	0.787	NFA/MITIGATE
Trichloroethene	16.5	3260	0.408	MONITOR/MITIGATE
Vinyl chloride	0.537	ND	ND	NFA

Based on the results of the decision matrices, the concentrations of TCE in SV-2a require monitoring, while concentrations of cis-1,2-dichloroethene, PCE and TCE in SV-2b require mitigation.

98a South 4th Street

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	3.79	1.58	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.403	NFA
cis-1,2-Dichloroethene	20	24.1	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	460	138	2.09	NFA
Trichloroethene	967	321	2.14	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Based on the results of the decision matrices, the concentrations of TCE in SV-3a and SV-3b require mitigation.

100 South 4th Street

Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/12/2021									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	$\mu g/m^3$									
Volatile Organics in Air										
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	ND	0.39	0.421	0.591	0.459	0.478	0.547	0.591	0.535	NFA
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Tetrachloroethene	4.66	1.04	1.02	2.55	0.387	0.292	0.448	0.57	0.502	NFA
Trichloroethene	21	0.344	0.908	1.23	ND	ND	0.516	0.333	0.253	NFA/MONITOR/MITIGATE
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Based on the results of the decision matrices, the concentrations of TCE in IA-4a, IA-4b, IA-4f, IA-4g, and IA-4h require further monitoring, while TCE concentrations in IA-4c require mitigation.

104 South 4th Street

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	2.68	0.585	NFA/IDENTIFY SOURCES and RESAMPLE or MITIGATE
cis-1,2-Dichloroethene	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	9.56	59.8	1.04	NFA
Trichloroethene	7.9	5.7	0.296	NFA/MONITOR
Vinyl chloride	ND	ND	ND	NFA

Based on the results of the decision matrices, the concentrations of carbon tetrachloride in SV-5b require identification of potential sources, resampling and potential mitigation, while concentrations of TCE in SV-5a require monitoring.

See **Plate 11 - Soil Vapor Investigation Decision Matrices Results Map** for a map of sample locations, and required remedial measures, per the NYSDOH Decision Matrices.

5.2 QA/QC Duplicate Sample Results

During the RI, two (2) duplicated soil vapor samples (SV-DUP-1 and SV-DUP-2) and two (2) indoor air duplicated samples (IA-DUP-1 and IA-DUP-2) were collected. A summary of the results for these QA/QC samples is provided in **Table 1**. Samples were collected from in direct proximity to the primary sample location and were submitted to the laboratory for analysis of VOCs using USEPA Method TO-15.

5.3 Evaluation of Results

The nature and extent of contamination at the Site, based on field observation and the analytical results of the soil vapor, indoor air, and outdoor air samples collected as part of this SVI RI, are discussed in the following sections. The main contaminants of concern (COCs) identified at the Site requiring either monitoring or mitigation based on the NYSDOH Decision Matrices are TCE, PCE, and cis-1,2-dichloroethene.

5.3.1 COC Distribution

An accurate determination of COC distribution will be further defined once the soil and groundwater phase of the Remedial Investigation has been completed. However, below is a discussion of the COC distribution within soil vapor and indoor air samples alone.

The highest soil vapor TCE concentrations were 1,000 µg/m^3 at SV-1b and 3,260 µg/m^3 at SV-2b, both of which are located on the south west portion of the Site. The highest concentrations of PCE in soil vapor were 1,240 µg/m^3 in SV-1b, and 2,710 µg/m^3 in SV-2b, both of which are located on the south west portion of the Site. Finally, the highest concentrations of cis-1,2-dichloroethene were 88 µg/m^3 at SV-1b, and 379 µg/m^3 at SV-2b, also located on the south west portion of the Site. It should be noted that during previous subsurface investigations, the primary AOC was located in the north west portion of the site, in which slightly elevated concentrations of TCE and PCE were detected in shallow soil samples. Of note, soil vapor concentrations of TCE and PCE in the north west portion of the Site were significantly lower than those collected from the south west portion of the Site.

In summary, the distribution of the cVOCs in soil vapor indicate the source area for the TCE/PCE/cis-1,2-dichloroethene at the Site is potentially in the southwest portion of the Site, contrary to the results of previous investigations. The second Phase of the RI will include soil samples that will be collected at several sample intervals, both shallow, intermediate, and deep, across the Site, including the south west portion of

the Site. These samples will further define and confirm the presence of an AOC in the south west portion of the Site.

The sampling locations associated with the SVI RI is shown on **Plate 9**.

6 QUALATATIVE HUMAN EXPOSURE ASSESSMENT

A qualitative exposure assessment for both human health and fish and wildlife resources has been prepared to evaluate exposure to the identified contaminants of concern in accordance with the May 2010 NYSDEC Final DER-10 Technical Guidance for Site Investigation and Remediation. The following sections provide the details for both assessments.

6.1 Human Health Exposure Assessment

Human health exposure risk was evaluated for both the current and the proposed future use conditions associated with the Site. The assessment includes an evaluation of potential sources and migration pathways of site contamination, potential receptors, exposure media, and receptor intake routes and exposure pathways.

6.1.1 Current Site Condition

The Site is currently developed with three (3) adjoining buildings: a multi-story structure made up of a 6-story, primarily residential structure in the center with a partial sub-grade cellar (100 South 4th Street) flanked by two (2) smaller 1-story structures (98 South 4th Street and 104 South 4th Street), with 98 South 4th Street also containing a partial sub-grade cellar. The three buildings have a combined footprint of approximately 21,500 square feet (SF). Aside from narrow concrete paved patios on the south side of 98 South 4th Street and 104 South 4th Street, and a narrow light and air easement on the south side of 100 South 4th Street, the surface area of the site is covered entirely by the footprint of the buildings.

6.1.2 Proposed Future Use Conditions

The Site is planned to remain as is, with no renovations or redevelopments proposed.

6.1.3 Exposure Assessment

This exposure assessment discusses potential migration routes by which chemicals in the environment may be able to reach human receptors. This discussion is based on current and hypothetical future conditions at the Site and investigation area. A complete exposure pathway for the COCs identified for the Site includes an evaluation of the following:

- The contaminant source(s) and location of the release(s) to the environment, and the contaminated medium at the potential points of exposure;
- Description of the contaminant release and transport mechanisms to the exposed population;

- Identification of all points of potential human contact with the contaminated medium;
- Possible exposure route (i.e., ingestion, inhalation, dermal absorption); and
- Description of the receptor populations the who may be exposed to contaminants.

An exposure pathway is considered complete when these five elements are documented. A potential exposure pathway exists if one or more of the five elements is unknown. An exposure pathway can be eliminated from further evaluation when one of the five elements has not existed in the past, does not exist in the present and can reasonably be expected to never exist in the future. The following section identifies potential points of human contact with contaminated media and exposure pathways identified for the Site. A summary of exposure pathways relating to surface soil, sub-surface soil, and groundwater, will be discussed in the Soil and Groundwater Remedial Investigation Report that will be prepared following the second phase of the RI.

6.1.3.1 Inhalation of Air (e.g., soil vapor intrusion)

- Since the building is occupied by a mixture of commercial and residential tenants, and will remain as such for the foreseeable future, there exists the potential for human exposure to soil vapor intrusion on the Site.
- Inhalation of vapors from contaminated soil and contaminated groundwater beneath the Site creates a potential for exposure to building occupants when vapors accumulate beneath structures and possibly have impacted indoor air quality within a structure.

6.1.4 Conceptual Site Model

The Conceptual Site Model (CSM) is developed to provide an understanding of the fate and transport of COCs based on the physical and chemical characteristics of the Site and the interaction of the COCs with the Site environment (e.g. solubility, adsorption, persistence, volatilization and biological processes) which is necessary to understand the movement of the COCs in the various media and the risk posed to potential receptors. The CSM is a method to develop and compile information as obtained for the Site such as site history, site investigation findings and remedial actions. The conceptual site model presented in the RIWP has been updated for the Site to include the data generated from the SVI RI and to provide a succinct

description of the distribution of COCs in Site soil vapor, potential migration pathways, and potentially complete exposure pathways.

Depth to bedrock has not yet been identified during previous environmental investigations, and the unconsolidated overburden soil consist of granular soils (silty to medium poorly graded sand). The depth to groundwater beneath the Site has been encountered at between approximately 17 and 26 feet below grade (fbg) and is anticipated to flow in a north-northeasterly direction. The Site area has a relatively flat topography and the nearest surface water body to the Site is East River, located approximately 1,410 feet to the west. The potable water supply for the area of the Site is provided by the New York City Department of Environmental Protection (NYCDEP) Bureau of Water and Sewer Operations where the potable water supply is obtained from upstate within the Catskill/Delaware watersheds. The Catskill/Delaware watersheds consist of nineteen (19) reservoirs which use a series of tunnels and aqueducts to transfer water to municipalities. Groundwater in Kings County is not used for potable purposes in the area of the Site.

The Site is in an area which is residential mixed with commercial and office usage. The Sites two single story commercial and one 6-story residential apartment buildings are currently occupied .. The Site is bordered to the north by South 4th Street and several three and five story residential buildings, to the east by a four-story residential apartment building with a commercial first floor, to the south by a multi-story residential apartment building and a multi-story office building, and to the west by a concrete paved driveway, one four-story residential apartment building and one three-story residential home. The use of the Site is not planned to change in the future.

CVOCs are the predominant COC present at the Site, as confirmed by the soil vapor intrusion investigation performed. There have been some incidental detections of SVOCs above Unrestricted Use SCOs in shallow and intermediate soil. However, no distinctive historic fill layer has yet been identified at the Site.

The soil vapor analytical data shows the cVOCs PCE, TCE, and cis-1,2 were detected at elevated concentrations requiring mitigation, in accordance with the NYSDOH final Guidance for Evaluating Soil Vapor Intrusion Decision Matrices, primarily in the southwest corner of the property (samples SV-1b and SV-2b). The SVI RI soil vapor analytical data from SV-3b, SV-1a, and SV-3a indicate that cVOCs have potentially migrated in soil vapors to the northwestern portion of the Site. Due to the high TCE/PCE concentration detected in SV-1b and SV-2b, the source area is potentially the southwest portion of the Site. Due to the lack

of comprehensive soil and groundwater data at this time, it cannot be determined whether the source is onsite, or from an off-site source to the south.

The source area and distribution of contamination at the Site has been identified and discussed in greater detail in Sections 5.3 of the SVI RIR. The contaminated media includes soil vapor, soil and groundwater, indicating the Site may have been impacted by past Site operations as adhesives manufacturing (98 S. 4th St, formerly 98-102 S 4th St); an electroplating operation; a laboratory (Camin Industries); a Sawing, Painting and Varnishing factory (100 S. 4th St, formerly 104-114 S 4th St); and a dye factory (116 S 4th St).

The south adjoining property, located at 95-105 South 5th Street, is a NYSDEC Brownfield Cleanup Program (BCP) project (No. C224233). Developments at this site have included two-story residential units (on Lots 37 and 41) circa 1868 and an auto body shop (on Lot 41). Due to the auto body shop, both Lots have an E-Designation assigned in the Greenpoint-Williamsburg Rezoning Environmental Impact Statement (EIS). The site has been redeveloped into a 12-story apartment building with a commercial business located at the first floor. The nature and extent of contamination is as follows: The primary contaminants of concern were SVOCs and mercury in soil, and tetrachloroethene and trichloroethene in groundwater. Groundwater is noted to flow north towards the East River. Remedial actions have successfully achieved soil cleanup objectives for restricted residential use. However, it should be noted that the property is operating a continuous soil vapor extraction (SVE) system, located in the parking lot, directly adjoining 98 South 4th Street (the Site) to the south, and for which recent data from the Operations, Maintenance and Monitoring of said system seemed to report that cVOCs are still present in soil vapor in this area of the site.

This SVI RIR has included updating of the initial CSM to consider the relationship between contaminant sources and contaminants of concern, environmental media and receptors through consideration of migration and exposure pathways. This conceptual model is based on current Site conditions and surrounding land use as well as the planned future Site and the surrounding land uses. The remedy selected for the Site will address the complete exposure pathways in a Remedial Action Work Plan (RAWP).

An illustrative CSM, **Figure 1**, is a pictorial depiction of environmental hazards associated with contaminated soil vapor. Exposure pathways to human (e.g., incidental ingestion, dermal absorption, and inhalation) are also indicated based on the current information available for the Site. This CSM presents an understanding of the known Site conditions based on the SVI RI. The CSM will be maintained and updated as new

information is collected throughout the life cycle of the project, including the upcoming second phase of the RI, including extensive soil and groundwater sampling and analysis.

7 FINDINGS AND CONCLUSIONS

IEC has prepared this SVI RI for the Site and in substantial accordance with the Remedial Investigation Work Plan (RIWP) approved by NYSDEC on January 19, 2021. This SVI RI is intended to determine, to the extent possible, the nature and extent of contamination in soil vapor and will be used to evaluate appropriate remedial action alternatives for the Site.

The findings of the SVI RI are summarized as follows:

- A total of nine (9) sub-slab soil vapor points were sampled, along with 12 indoor air samples and one (1) outdoor ambient air sample.
- The concentrations of PCE in soil vapor ranged from 4.66 µg/m^3 at SV-4 (located in the stairwell, centrally located within 100 South 4th Street) up to 2,710 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). The TCE concentrations in soil vapor ranged from 5.7 µg/m^3 at SV-5b (located on the south portion of 104 South 4th Street) up to 3,260 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). In addition, concentrations of cis-1,2-DCE in soil vapor ranged from non-detect at SV-4, SV-5a, and SV-5b (located on the eastern portions of the property) up to 379 µg/m^3 at SV-2b (located in the south portion of 98b South 4th Street). The concentrations of PCE, TCE, and cis-1,2 in soil vapor are lower beneath the central and eastern portions of the property, with the highest concentrations located in the southwest portion of the property. Finally, an elevated concentration of carbon tetrachloride was detected in one (1) of the nine (9) soil vapor samples at SV-5b. Based on the lack of evidence of this compound in the other soil vapor samples (or historic soil data), it appears that this detection is an anomaly, and not an indication of contamination present beneath the property in this area. The presence of this compound will be further investigated during the second phase of the Remedial Investigation, which will include soil sampling in this area.
- The concentrations of PCE in indoor air ranged from 0.292 µg/m^3 at IA-4e (located in ground floor apartment #E, located within 100 South 4th Street) up to 2.55 µg/m^3 at IA-4c (located in ground floor apartment #C, located within 100 South 4th Street). The TCE concentrations in indoor air ranged from non-detect at IA-4d and IA-4e (located in ground floor apartments #D and #E, located within 100 South 4th Street) up to 2.14 µg/m^3 at IA-3 (located in 98c South 4th Street). In addition, concentrations of carbon tetrachloride in indoor air ranged from 0.39 µg/m^3 at IA-4a (located in ground floor apartment #A, located within 100 South 4th Street) up to 0.591 µg/m^3 at IA-4c (located in ground

floor apartment #C, located within 100 South 4th Street). The concentrations of PCE and TCE in indoor air across the Site vary only marginally.

- Ambient concentrations of PCE and carbon tetrachloride were detected in the outdoor air sample OA-1, at concentrations of 0.325 µg/m^3 and 0.491 µg/m^3 respectively. These detections in outdoor air may be contributing to the indoor air detections of PCE and carbon tetrachloride, although likely to a minimal extent.
- Source Area: The most prevalent COCs identified at the Site requiring mitigation, based on the NYSDOH Decision Matrices are PCE, TCE, and cis-1,2, chlorinated VOCs associated with metal-cleaning and degreasing, which may have been utilized during the property's usage as a manufacturing facility, or may be migrating onto the site from documented off-site cVOC sources to the south. Based on the distribution of the cVOCs detected in soil vapor, the potential source area for the cVOC at the Site is the southwest portion of the Site, proximal to the south adjoining BCP Site.

The conclusions are summarized as follows:

1. The SVI RI determined the degree and extent of on-site soil vapor contamination from past Site operations as a metal fabricating/manufacturing facility, or from off-site sources to the south.
2. Thus far, the analytical data gathered during the SVI RI is not sufficient to develop a remedy for the Site. The second phase of the RI, including additional soil and groundwater sampling will be performed. Once all components of the RIWP have been completed and reported, the proposed remedy will be described and evaluated in a Remedial Action Work Plan (RAWP) prepared in accordance with NYSDEC BCP guidelines.
3. IEC proposes that, based on the ongoing residential and commercial occupancy of the property, and confirmed presence of elevated concentrations of cVOCs in the soil vapor at the Site, an Interim Remedial Measure (IRM) be prepared. The IRM will propose measures to address the on-Site soil vapor contamination to ensure continued protection of human health and the environment.

7.1 Project Schedule

IEC anticipates that the second phase of the Remedial Investigation, comprising of comprehensive soil and groundwater sampling and analysis, will commence in August/September 2021.

8 REFERENCES

1. Ecosystems Strategies, Inc., Summary Report of Phase II Environmental Services, dated January 23, 1997.
2. Ecosystems Strategies, Inc., Summary Report of Subsurface Investigation, dated April 7, 1997.
3. Ecosystems Strategies, Inc., Final Work Plan for Site Closure Activities, dated December 3, 1997.
4. Ecosystems Strategies, Inc., Summary Report of Subsurface Investigative Services, dated March 26, 1999.
5. Nova Consulting, Phase I ESA Report, dated February 16, 2018 (with information from the Don Carlo Phase II Subsurface Investigation and Tank Closure Report, dated April 2006).
6. Impact Environmental Closures, Inc., Phase I ESA Report, dated May 23, 2019.
7. Excel Environmental Resources, Inc., Draft Vapor Intrusion Assessment Report, dated April 2019.
8. New York State Department of Environmental Conservation Department of Environmental Remediation DER-10 Technical Guidance for Site Investigation and Remediation dated May 3, 2010.
9. New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and the subsequent updates.

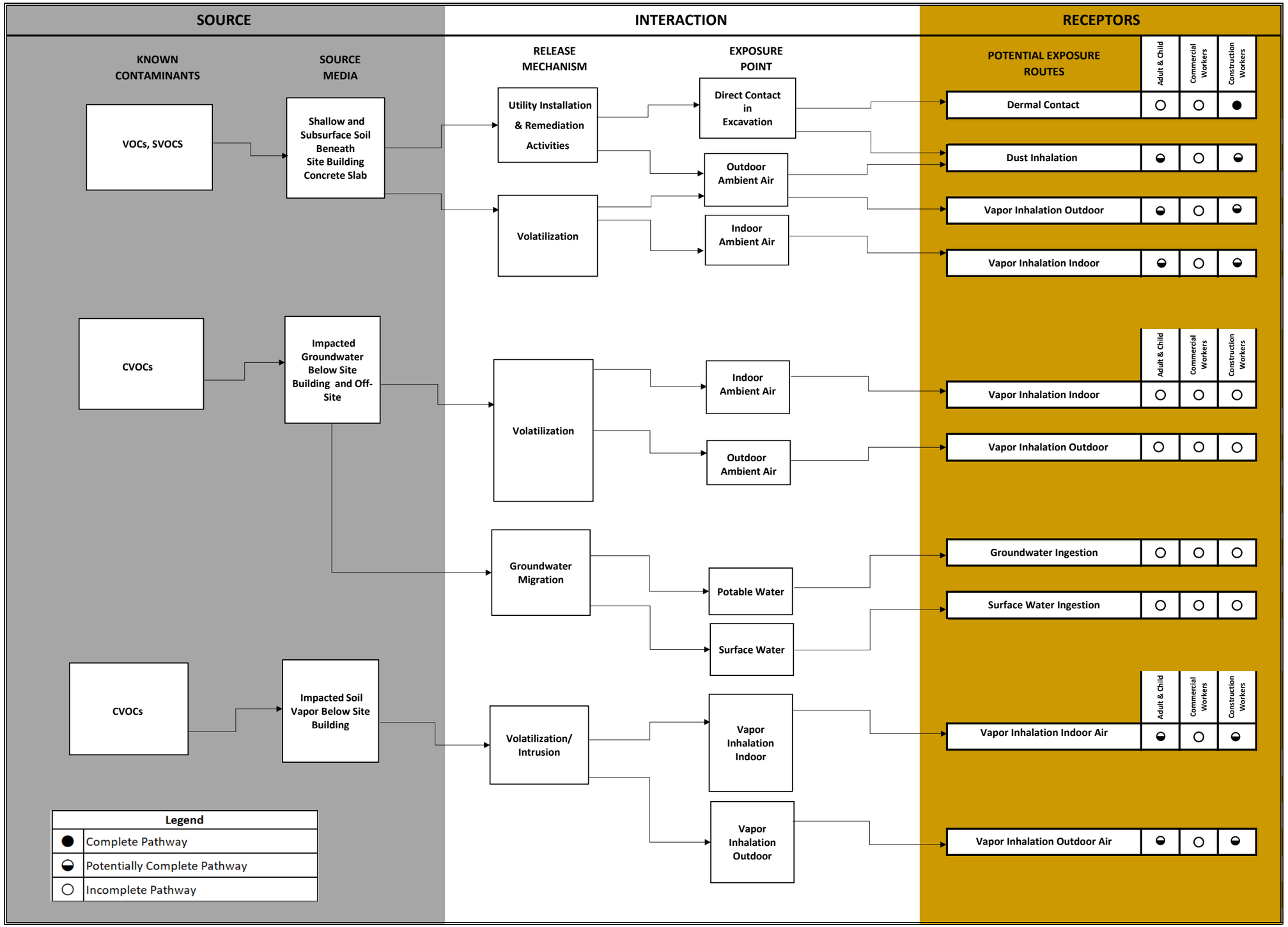
FIGURES

98, 100, and 104 South 4th Street, Brooklyn, NY

NYSDEC BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

FIGURE 1: CONCEPTUAL SITE MODEL



PLATES

98, 100, and 104 South 4th Street, Brooklyn, NY

NYSDEC BCP #C224260

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Bohemia, New York 11716
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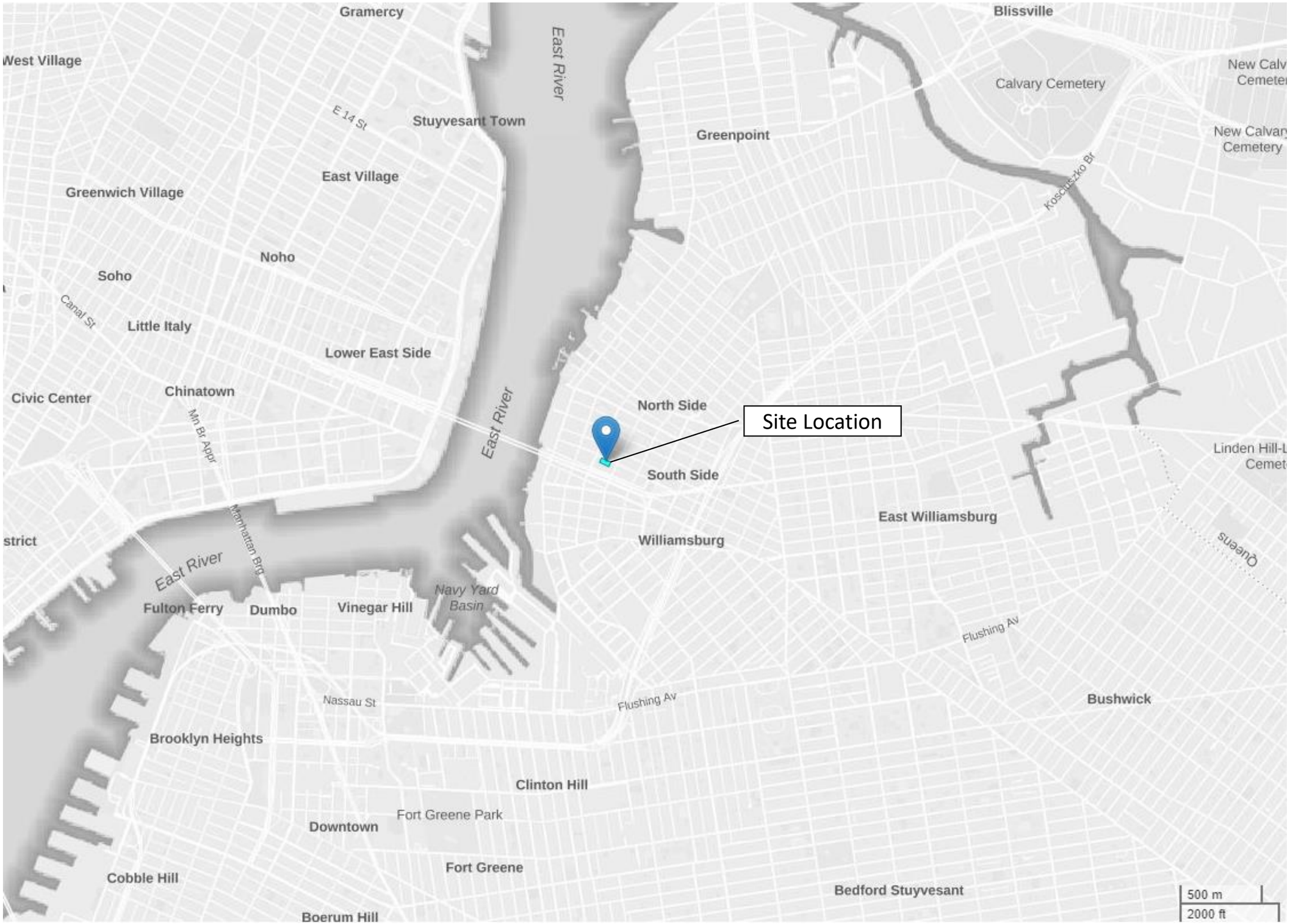

Legend

Notes:

Base map: NYCOER SPEED Map

SITE LOCATION MAP

100 South 4th Street, Brooklyn, NY

Plate 1

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DATE	5/21/21
Revisions	

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Notes:

Base Map: NYC OASIS Map

SITE AREA MAP

100 South 4th Street, Brooklyn, NY

Plate 2

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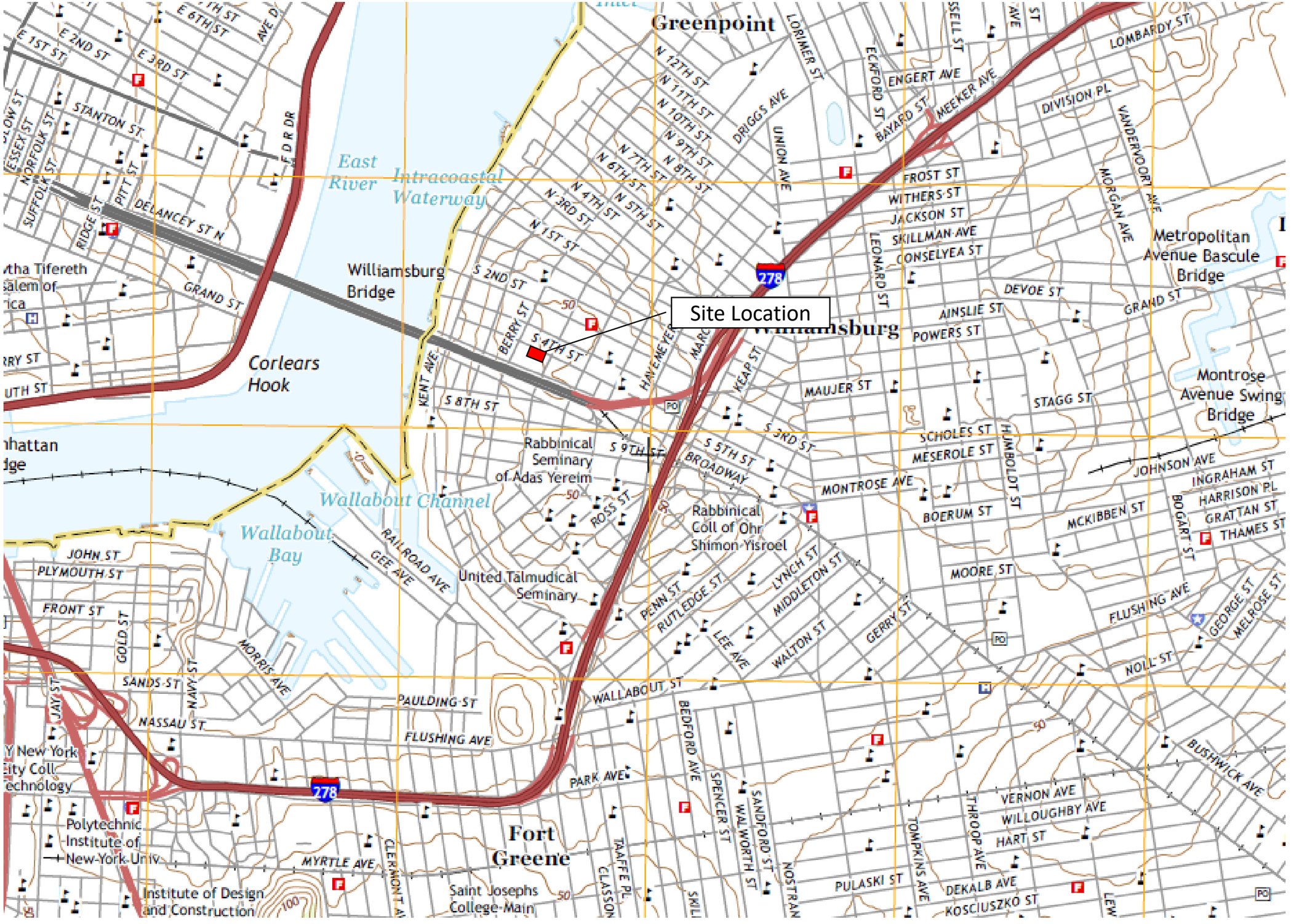

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Notes:

Base Map: USGS Brooklyn Quadrangle Topographic Map

SITE TOPOGRAPHIC MAP

100 South 4th Street, Brooklyn, NY

Plate 3

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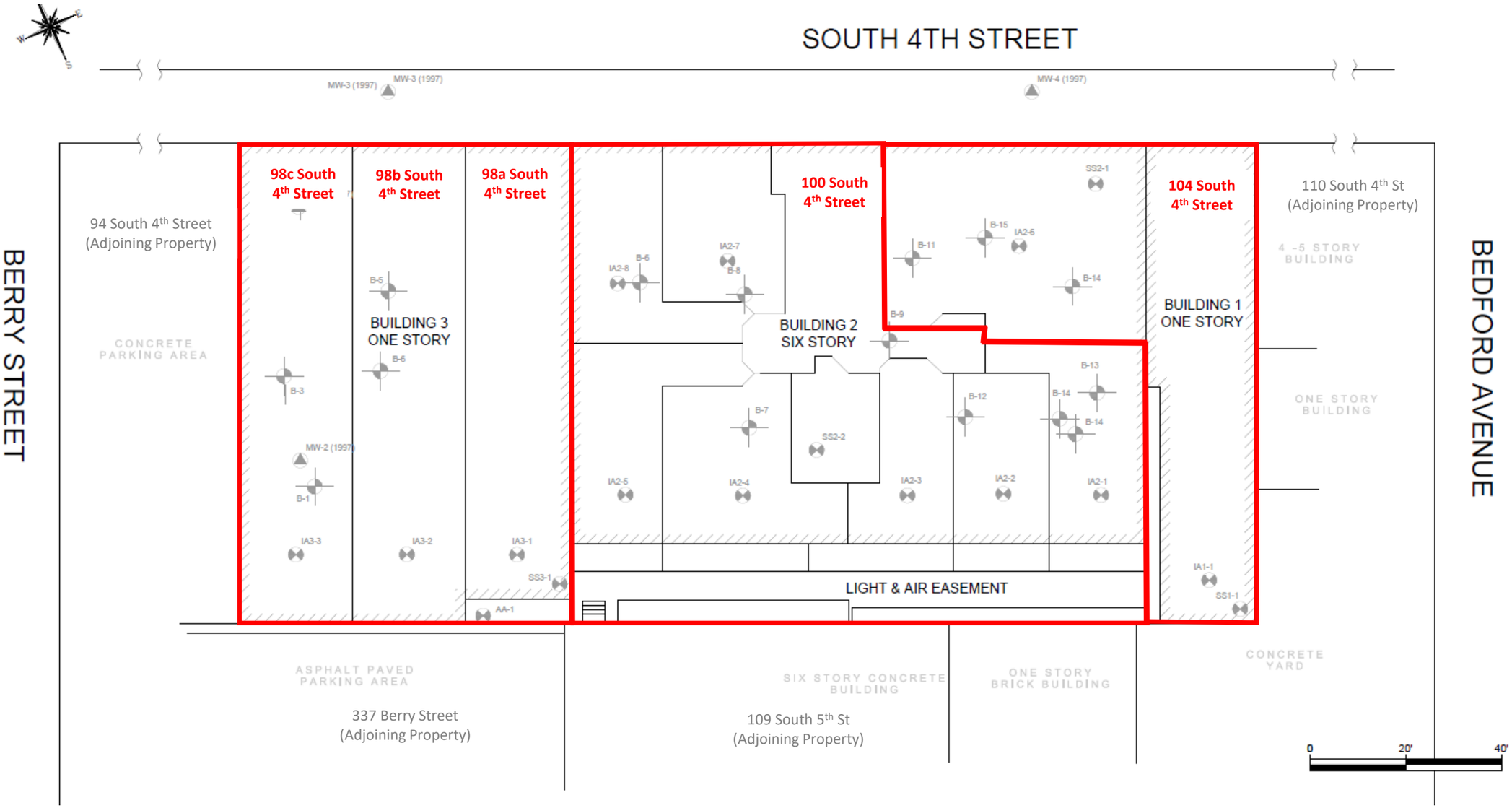

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Property Boundaries

Notes:

SITE PLAN

100 South 4th Street, Brooklyn, NY

Plate 4

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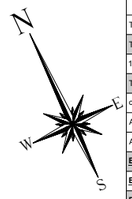

SOUTH 4TH STREET

BERRY STREET

BEDFORD AVENUE

B-2 (12/11/1996)	0' - 2'	5' - 7'	15' - 17'	PGW	RR
Toluene	ND	1.4	ND	*0.7*	*100*
Tetrachloroethene	5.5	ND	ND	*1.3*	*19*
1,1,1-Trichloroethane	ND	0.071	ND	*0.68*	*100*
Trichloroethene	3.7	ND	ND	*0.47*	*21*
cis-1,2-dichloroethene	ND	ND	ND	*0.25*	*100*
Acenaphthene	ND	NA	NA	*98*	*100*
Anthracene	1.2	NA	NA	*1000*	*100*
Benzo(a)anthracene	**3.3**	NA	NA	*1*	*1*
Benzo(a)pyrene	**2.9**	NA	NA	*22*	*1*
Benzo(b)fluoranthene	**4**	NA	NA	*1.7*	*1*
Benzo(k)fluoranthene	1.5	NA	NA	*1.7*	*3.9*
Benzo(g,h,i)perylene	1.5	NA	NA	*1000*	*100*
Chrysene	3.5	NA	NA	*1*	*3.9*
Fluoranthene	7.3	NA	NA	*1000*	*100*
Indeo(1,2,3-cd)pyrene	**1.3**	NA	NA	*8.82*	*0.5*
Napthalene	ND	NA	NA	*12*	*100*
Phenanthrene	6.1	NA	NA	*1000*	*100*
Pyrene	6.1	NA	NA	*1000*	*100*

B-5 (4/1/1997)	6" - 2'	4' - 6'	8' - 10'	PGW	RR
Acetone	*0.046*	ND	ND	*0.05*	*100*
Tetrachloroethene	*0.063*	0.002	0.004	*1.3*	*19*
Trichloroethene	*0.1*	0.005	0.007	*0.47*	*21*
Methylene Chloride	0.023	ND	ND	*0.05*	*100*
Acenaphthene	*1.1*	ND	ND	*98*	*100*
Anthracene	*1.6*	ND	ND	*1000*	*100*
Benzo(a)anthracene	***4.3***	0.078	ND	*1*	*1*
Benzo(a)pyrene	***3.8***	ND	ND	*22*	*1*
Benzo(b)fluoranthene	***6.7***	ND	ND	*1.7*	*1*
Benzo(k)fluoranthene	*1.8*	ND	ND	*1.7*	*3.9*
Benzo(g,h,i)perylene	*1.6*	ND	ND	*1000*	*100*
Chrysene	***4.5***	78J	ND	*1*	*3.9*
Fluorene	0.6	ND	ND	*386*	*100*
Fluoranthene	9.7	0.17	ND	*1000*	*100*
Indeo(1,2,3-cd)pyrene	**1.5**	ND	ND	*8.2*	*0.5*
Napthalene	*1*	ND	ND	*12*	*100*
Phenanthrene	*9*	0.13	ND	*1000*	*100*
Pyrene	8	0.14	ND	*1000*	*100*
Dibenzo(a,h)anthracene	**0.51**	ND	ND	*1000*	*0.33*

B-8 (4/1/1997)	6" - 2'	PGW	RR
Tetrachloroethene	0.003	*1.3*	*19*
Trichlorethene	0.014	*0.47*	*21*
Benzo(a)anthracene	0.13	*1*	*1*
Benzo(b)fluoranthene	0.14	*1.7*	*1*
Chrysene	0.13	*1*	*3.9*
Phenanthrene	0.11	*1000*	*100*
Pyrene	0.2	*1000*	*100*

B-15 (3/19/1999)	0' - 2'	12'	PGW	RR
Trichlorethene	0.007	ND	*0.47*	*21*

B-11 (3/19/1999)	0' - 2'	12'
Non-Detect or Not Analyzed		

B-14 (3/19/1999)	0' - 2'	12'
Non-Detect or Not Analyzed		

B-13 (3/19/1999)	-
Refusal	

B-10 (4/1/1997)	-
Refusal	

B-6 (4/1/1997)	6" - 2'	PGW	RR
Trichloroethene	0.003	*0.47*	*21*
Fluoranthene	0.056	*1000*	*100*
Pyrene	0.052	*1000*	*100*

B-7 (4/1/1997)	6" - 2'
Non-Detect or Not Analyzed	

B-9 (4/1/1997)	4' - 6'	PGW	RR
Trichloroethene (TCE)	0.003	*0.47*	*21*

B-16 (3/19/1999)	0' - 2'	8'	PGW	RR
Trichlorethene	0.005	ND	*0.47*	*21*

B-12 (3/19/1999)	0' - 2'	8'	PGW	RR
Trichlorethene	0.015	ND	*0.47*	*21*

B-3 (4/1/1997)	6" - 2'	4' - 6'	8' - 10'	PGW	RR
Tetrachloroethene	0.006	0.055	0.004	*1.3*	*19*
Trichloroethene	0.003	0.018	0.003	*0.47*	*21*
Acenaphthene	0.79	ND	ND	*98*	*100*
Anthracene	1.6	ND	0.082	*1000*	*100*
Benzo(a)anthracene	**3.1**	ND	0.2	*1*	*1*
Benzo(a)pyrene	**2.6**	ND	0.16	*22*	*1*
Benzo(b)fluoranthene	**3.3**	ND	0.21	*1.7*	*1*
Benzo(k)fluoranthene	1.2	ND	0.008	*1.7*	*3.9*
Benzo(g,h,i)perylene	1.2	ND	ND	*1000*	*100*
Chrysene	3	ND	0.2	*1*	*3.9*
Fluorene	0.830	ND	ND	*386*	*100*
Fluoranthene	6.9	0.095	0.48	*1000*	*100*
Indeo(1,2,3-cd)pyrene	**1.2**	ND	ND	*8.2*	*0.5*
Napthalene	0.56	ND	ND	*12*	*100*
Phenanthrene	7.1	0.099	0.4	*1000*	*100*
Pyrene	5.9	0.082	0.38	*1000*	*100*
Dibenzo(a,h)anthracene	0.32	ND	ND	*0.33*	*0.33*

B-1 (12/11/1996)	0' - 2'	15' - 17'	PGW	RR
Tetrachloroethene	0.17	ND	*1.3*	*19*
Trichloroethene	0.56	ND	*0.47*	*21*
cis-1,2-dichloroethene	0.12	ND	*0.25*	*100*
Acenaphthene	1.4	ND	*98*	*100*
Anthracene	3	ND	*1000*	*100*
Benzo(a)anthracene	**7.9**	ND	*1*	*1*
Benzo(a)pyrene	**6**	ND	*22*	*1*
Benzo(b)fluoranthene	**7.1**	ND	*1.7*	*1*
Benzo(k)fluoranthene	2.5	ND	*1.7*	*3.9*
Benzo(g,h,i)perylene	2.3	ND	*1000*	*100*
Chrysene	**9**	ND	*1*	*3.9*
Fluoranthene	14	ND	*1000*	*100*
Indeo(1,2,3-cd)pyrene	**1.9**	ND	*8.82*	*0.5*
Napthalene	3.4	ND	*12*	*100*
Phenanthrene	19	ND	*1000*	*100*
Pyrene	19	ND	*1000*	*100*

B-4 (4/1/1997)	6" - 2'	4' - 6'	8' - 10'	PGW	RR
Acetone	ND	0.056	0.037	*0.05*	*100*
Tetrachloroethene	0.37	0.059	0.032	*1.3*	*19*
Trichloroethene	1.1	0.15	0.066	*0.47*	*21*
Acenaphthene	0.12	0.48	0.1	*78*	*100*
Acenaphthylene	ND	0.1	0.068	*107*	*100*
Anthracene	0.38	0.89	0.38	*1000*	*100*
Benzo(a)anthracene	**1.2**	**2.4**	0.87	*1*	*1*
Benzo(a)pyrene	**1.1**	**2.1**	0.88	*22*	*1*
Benzo(b)fluoranthene	**1.4**	**2.7**	**1.2**	*1.7*	*1*
Benzo(k)fluoranthene	0.56	0.89	0.41	*1.7*	*3.9*
Benzo(g,h,i)perylene	0.35	0.86	0.34	*1000*	*100*
Chrysene	1.2	2.6	0.86	*1*	*3.9*
Fluorene	ND	0.43	ND	*386*	*100*
Fluoranthene	2.4	5.2	2	*1000*	*100*
Indeo(1,2,3-cd)pyrene	0.35	**0.82**	0.3	*8.2*	*0.5*
Napthalene	ND	0.55	0.13	*12*	*100*
Phenanthrene	1.7	6	1.7	*1000*	*100*
Pyrene	2.2	5.1	2.6	*1000*	*100*
Dibenzo(a,h)anthracene	0.11	0.27	0.077	*1000*	*0.33*

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10 B-11 B-12 B-13 B-14 B-15 B-16

BUILDING 3
ONE STORY

BUILDING 2
SIX STORY

BUILDING 1
ONE STORY

4 -5 STORY
BUILDING

ONE STORY
BUILDING

CONCRETE
PARKING AREA

LIGHT & AIR EASEMENT

STORY CONCRETE
BUILDING

ONE STORY
BRICK BUILDING

CONCRETE
YARD

0 20' 40'

IMPACT ENVIRONMENTAL
170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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1000 PAGE AVENUE
LYNDHURST, NEW JERSEY 07071

TITLE:

SOIL SAMPLE LOCATION PLAN COLLECTED 1997 & 1999

SITE:

100 SOUTH 4TH STREET
BROOKLYN NY
BLOCK: 2443 LOT: 13

SHEET NO. PLATE 5

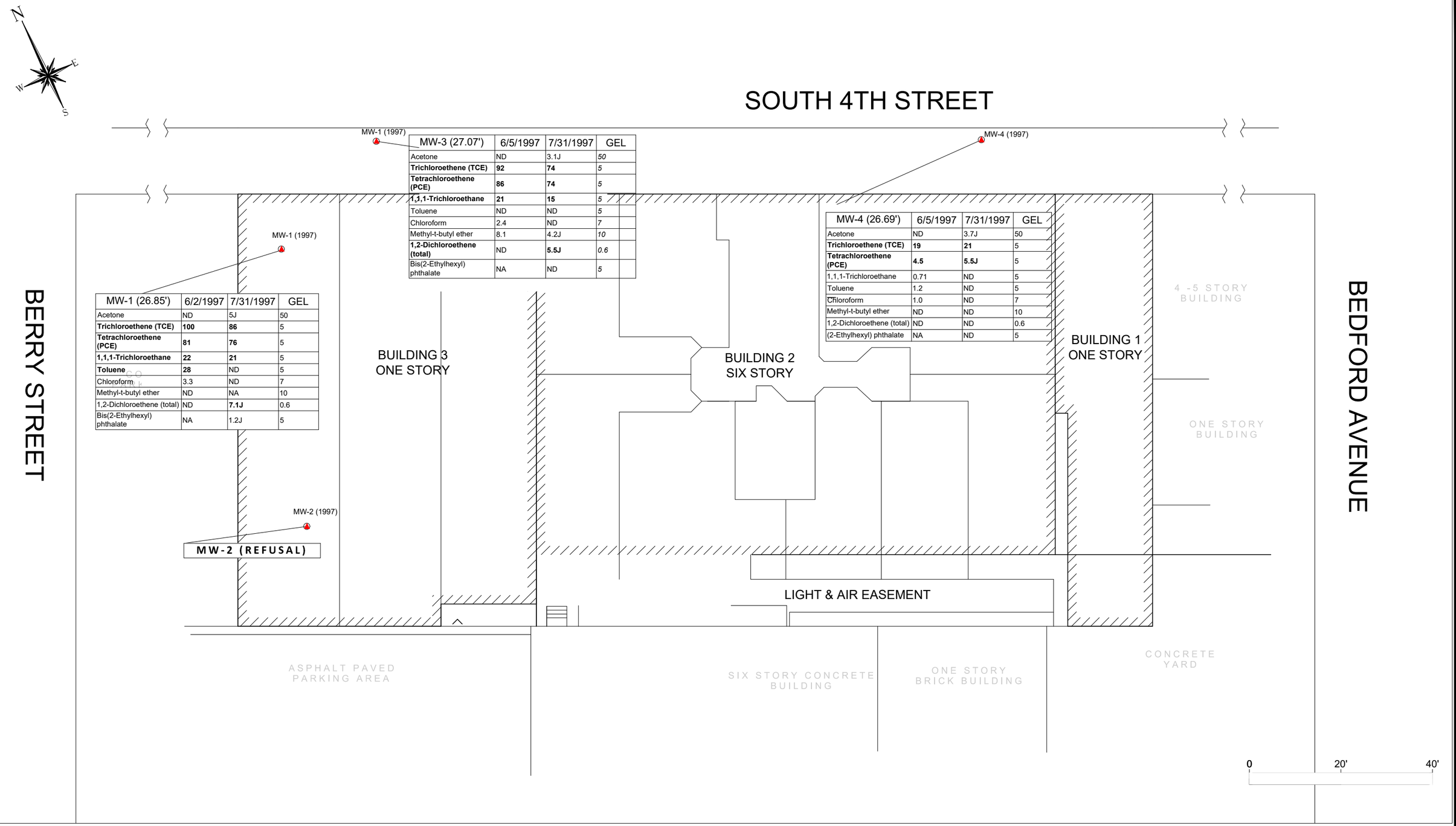
PROJECT NO.	13817
DESIGNED BY:	RD
DRAWN BY:	RD
CHECKED BY:	KK/JDF
DATE:	08/23/2019
SCALE:	1" = 20'

REVISIONS NO:	DATE:

NOTES:
1. BORINGS B-1 TO B-8: SAMPLE RESULTS TAKEN FROM THE FINAL WORK PLAN FOR SITE CLOSURE ACTIVITIES REPORT, PREPARED BY ECOSYSTEMS STRATEGIES, INC. DATED 3/12/1997.
2. BORINGS B-9 & B-11 TO B-16: SAMPLE RESULTS TAKEN FROM THE SUMMARY REPORT OF SUPPLEMENTAL SUBSURFACE INVESTIGATIVE SERVICES, PREPARED BY ESI DATED 26/03/1999.
3. SITE UNDERLAY AND PROPERTY LINES TAKEN FROM SURVEY PERFORMED BY BORO LAND SURVEYING, P.C. DATED APRIL 12, 2019.
4. CONTAMINANTS IDENTIFIED AS EXCEEDING THE PROTECTION OF GROUNDWATER-(PGW) SCOS LISTED IN 6NYCRR PART 375 ARE HIGHLIGHTED WITH A GRAY BACKGROUND.
5 CONTAMINANTS IDENTIFIED AS EXCEEDING THE RESTRICTED RESIDENTIAL SCOS- (RR) LISTED IN 6NYCRR PART 375 ARE HIGHLIGHTED IN **BOLD & UNDERLINE.**
6 "J" INDICATES RESULT BELOW LABORATORY'S DETECTION LIMIT.
7 CONCENTRATIONS ARE IN PARTS PER MILLION (PPM)

LEGEND:

SOIL BORING



MW-3 (27.07')	6/5/1997	7/31/1997	GEL
Acetone	ND	3.1J	*50*
Trichloroethene (TCE)	**92**	**74**	*5*
Tetrachloroethene (PCE)	**86**	**74**	*5*
1,1,1-Trichloroethane	**21**	**15**	*5*
Toluene	ND	ND	*5*
Chloroform	2.4	ND	*7*
Methyl-t-butyl ether	8.1	4.2J	*10*
1,2-Dichloroethene (total)	ND	**5.5J**	*0.6*
Bis(2-Ethylhexyl) phthalate	NA	ND	*5*

MW-1 (26.85')	6/2/1997	7/31/1997	GEL
Acetone	ND	5J	50
Trichloroethene (TCE)	**100**	**86**	5
Tetrachloroethene (PCE)	**81**	**76**	5
1,1,1-Trichloroethane	**22**	**21**	5
Toluene	**28**	ND	5
Chloroform	3.3	ND	7
Methyl-t-butyl ether	ND	NA	10
1,2-Dichloroethene (total)	ND	**7.1J**	0.6
Bis(2-Ethylhexyl) phthalate	NA	1.2J	5

MW-4 (26.69')	6/5/1997	7/31/1997	GEL
Acetone	ND	3.7J	50
Trichloroethene (TCE)	**19**	**21**	5
Tetrachloroethene (PCE)	**4.5**	**5.5J**	5
1,1,1-Trichloroethane	0.71	ND	5
Toluene	1.2	ND	5
Chloroform	1.0	ND	7
Methyl-t-butyl ether	ND	ND	10
1,2-Dichloroethene (total)	ND	ND	0.6
(2-Ethylhexyl) phthalate	NA	ND	5

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TITLE:

GROUNDWATER SAMPLE PLAN COLLECTED 1997

SITE:

100 SOUTH 4TH STREET
BROOKLYN NY
BLOCK: 2443 LOT: 13

SHEET NO. PLATE 6

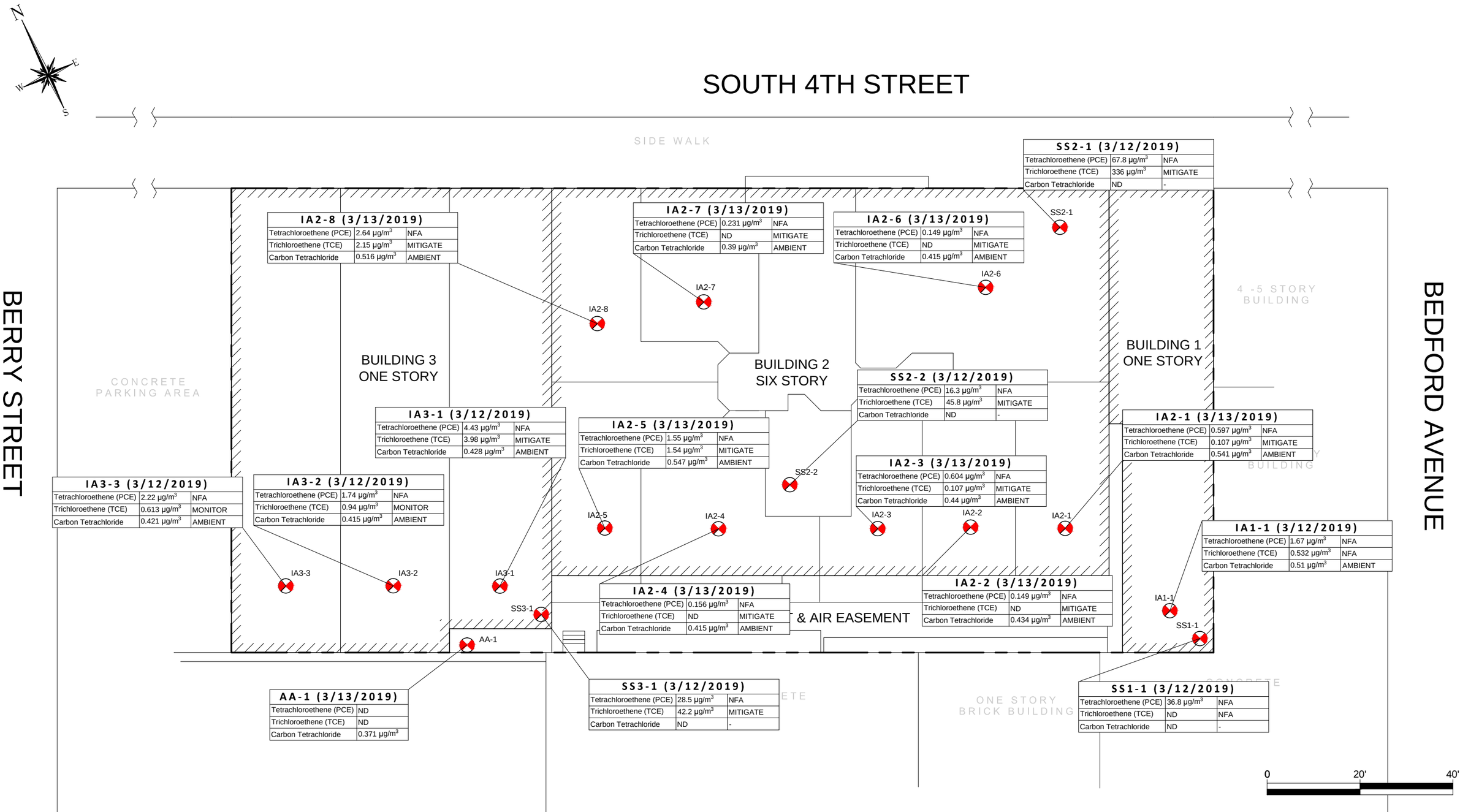
PROJECT NO.	13817
DESIGNED BY:	RD
DRAWN BY:	RD
CHECKED BY:	KK/JDF
DATE:	08/23/2019
SCALE:	1" = 20'

REVISIONS NO:	DATE:

NOTES:
1. SAMPLE LOCATIONS & RESULTS TAKEN FROM "FIGURE 2: FIELD WORK MAP" OF THE FINAL WORK PLAN FOR SITE CLOSURE ACTIVITIES REPORT, PREPARED BY ECOSYSTEMS STRATEGIES, INC. DATED 3/12/1997, PROJECT NUMBER PB96146.40.
2. SITE UNDERLAY AND PROPERTY LINES TAKEN FROM SURVEY PERFORMED BY BORO LAND SURVEYING, P.C. DATED APRIL 12, 2019.
3. CONTAMINANTS IDENTIFIED AS EXCEEDING THE 6NYCRR PART 703.5 GROUNDWATER EFFLUENT LIMITATIONS (GEL) CLASS GA STANDARDS HAVE BEEN HIGHLIGHTED IN **BOLD**.
4. "J" IDENTIFIER INDICATES RESULT BELOW LABORATORY'S DETECTION LIMIT.
5. CONCENTRATIONS ARE REPORTED IN PPB

LEGEND:

GROUNDWATER MONITORING WELL



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TITLE:

SOIL VAPOR & AIR SAMPLE LOCATION PLAN COLLECTED 2019

SITE:

100 SOUTH 4TH STREET
BROOKLYN NY
BLOCK: 2443 LOT: 13

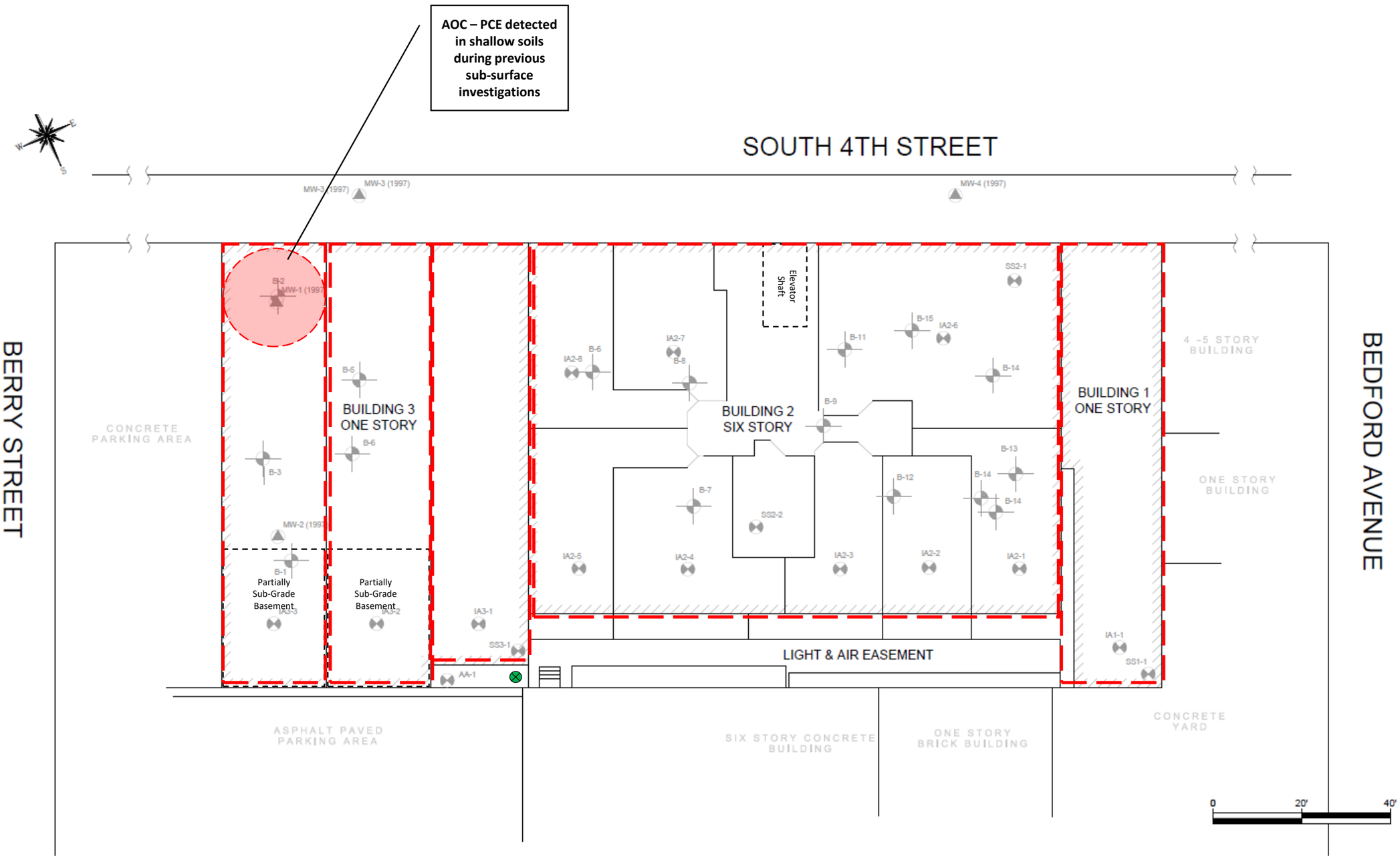
SHEET NO. PLATE 7

PROJECT NO.	13817
DESIGNED BY:	RD
DRAWN BY:	RD
CHECKED BY:	KK/JDF
DATE:	08/23/2019
SCALE:	1" = 20'

REVISIONS NO:	DATE:

NOTES:
1. SAMPLE LOCATIONS & RESULTS TAKEN FROM "FIGURE 2" OF THE VAPOR INTRUSION ASSESSMENT REPORT, PREPARED BY EXCEL ENVIRONMENTAL RESOURCES, DATED 4/10/19, PROJECT NUMBER 18597.
2. SITE UNDERLAY AND PROPERTY LINES TAKEN FROM SURVEY PERFORMED BY BORO LAND SURVEYING, P.C. DATED APRIL 12, 2019.
3. CONTAMINANTS & THEIR LOCATIONS, IDENTIFIED AS REQUIRING FURTHER ACTION BY THE NYSDOH DECISION MATRIX HAVE BEEN LISTED. ACTIONS ARE;
   - NFA; NO FURTHER ACTION.
   - AMBIENT; COMPOUND REPORTED IN AMBIENT AIR SAMPLE.
   - MITIGATE; NEEDED TO MINIMIZE EXPOSURES ASSOCIATED WITH SVI.
   - MONITOR; MONITOR TO DETERMINE APPLICABLE ACTION IF ANY.

LEGEND:
- GROUNDWATER MONITORING WELL
- SOIL BORING
- SOIL VAPOR/AIR SAMPLE POINT
- SS SUB-SLAB SAMPLE
- IA INDOOR AIR SAMPLE
- AA AMBIENT AIR SAMPLE



Legend

Notes:

SITE PLAN WITH AOCs

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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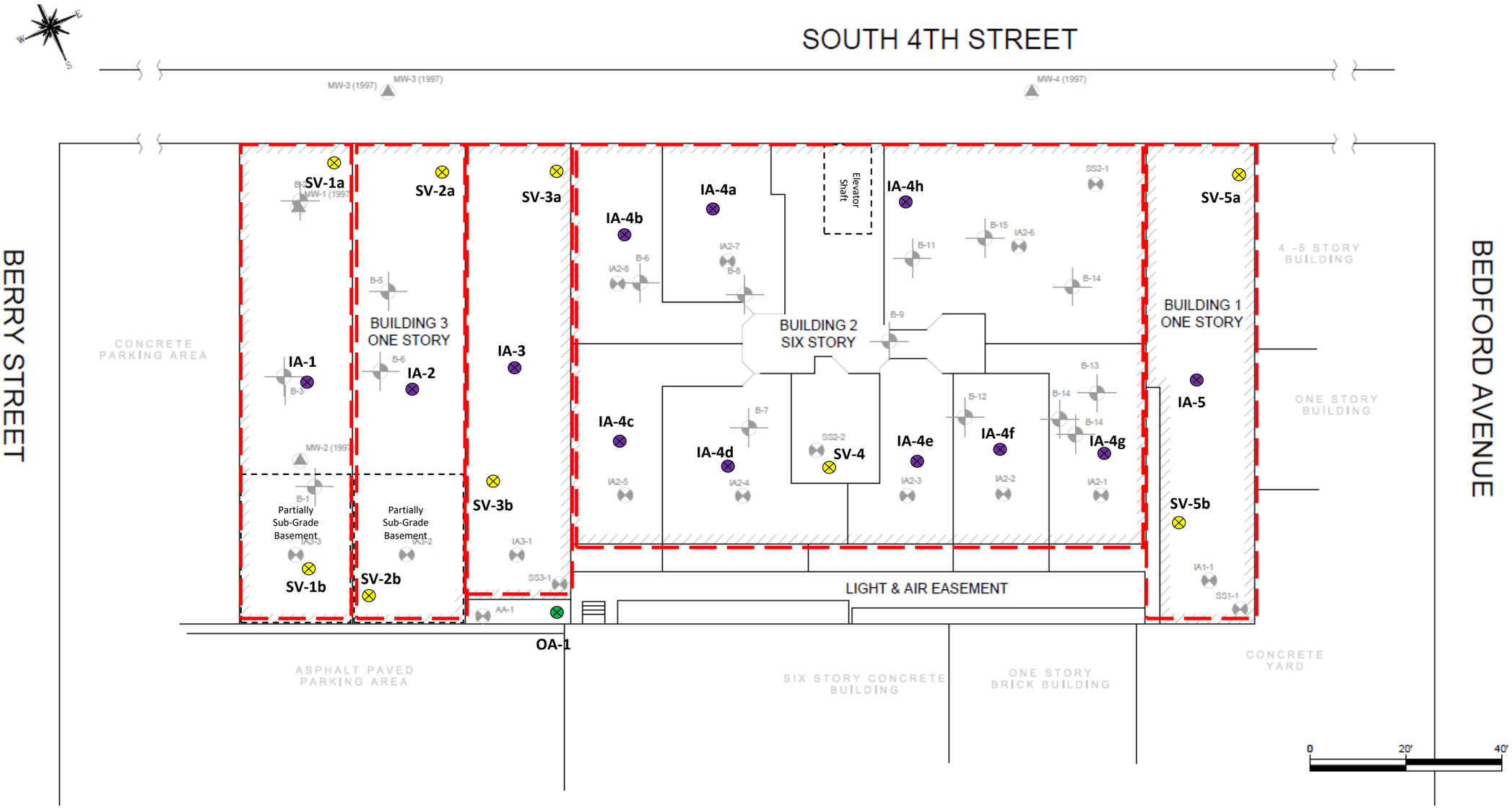

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

SVI Sample Point Locations

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
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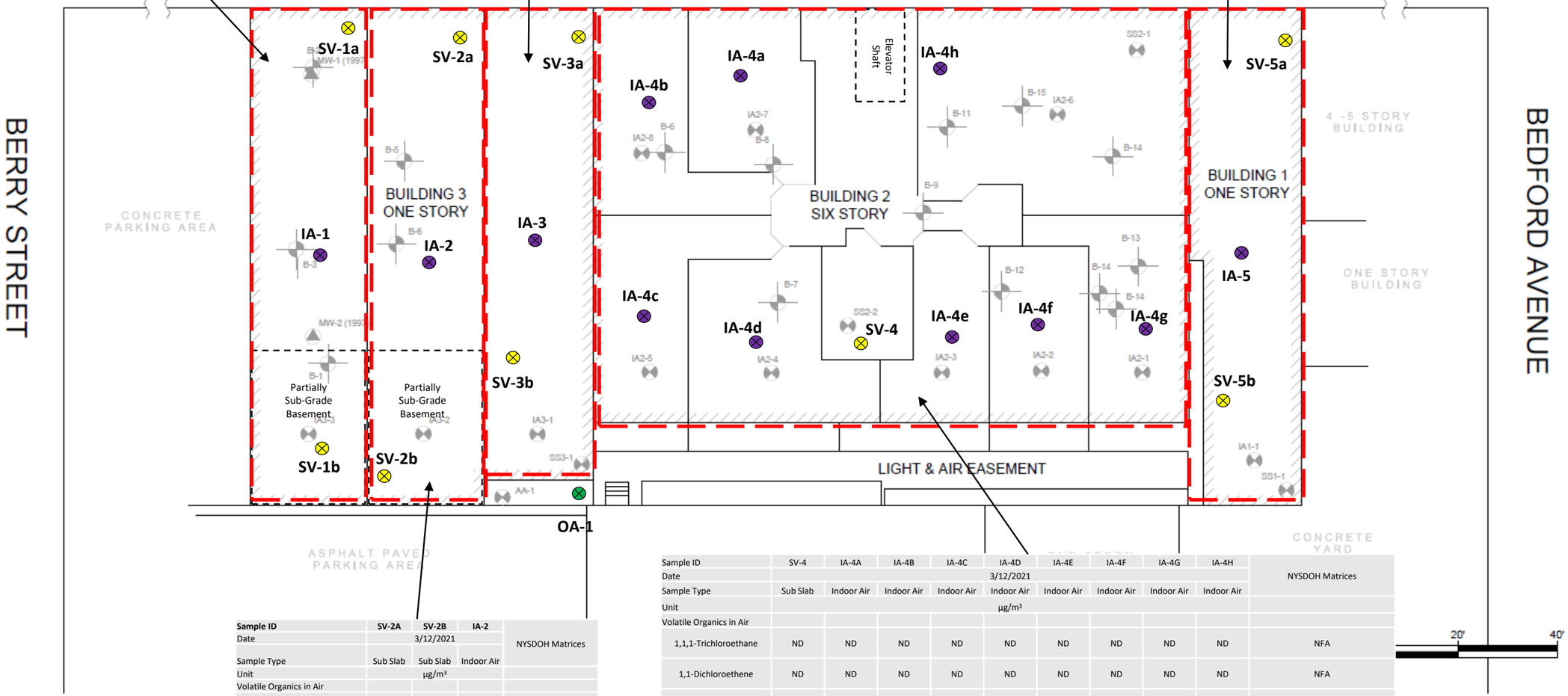
Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices Decision
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	µg/m³			
Volatile Organics in Air				
1,1,1-Trichloroethane	7.09	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.396	NFA
cis-1,2-Dichloroethene	7.65	88	ND	NFA/MITIGATE
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	46	1,240	1.11	NFA/MITIGATE
Trichloroethene	120	1000	0.435	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	µg/m³			
Volatile Organics in Air				
1,1,1-Trichloroethane	3.79	1.58	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.403	NFA
cis-1,2-Dichloroethene	20	24.1	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	460	138	2.09	NFA
Trichloroethene	967	321	2.14	MITIGATE/MITIGATE
Vinyl chloride	ND	ND	ND	NFA

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	µg/m³			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	2.68	0.585	NFA/IDENTIFY SOURCES and RESAMPLE or MITIGATE
cis-1,2-Dichloroethene	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	9.56	59.8	1.04	NFA
Trichloroethene	7.9	5.7	0.296	NFA/MONITOR
Vinyl chloride	ND	ND	ND	NFA



Sample ID	SV-2A	SV-2B	IA-2	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	µg/m³			
Volatile Organics in Air				
1,1,1-Trichloroethane	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	NFA
Carbon tetrachloride	ND	ND	0.421	NFA
cis-1,2-Dichloroethene	5.35	379	ND	NFA/MITIGATE
Methylene chloride	ND	ND	ND	NFA
Tetrachloroethene	5.2	2710	0.787	NFA/MITIGATE
Trichloroethene	16.5	3260	0.408	MONITOR/MITIGATE
Vinyl chloride	0.537	ND	ND	NFA

Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/12/2021									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	µg/m³									
Volatile Organics in Air										
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	ND	0.39	0.421	0.591	0.459	0.478	0.547	0.591	0.535	NFA
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Tetrachloroethene	4.66	1.04	1.02	2.55	0.387	0.292	0.448	0.57	0.502	NFA
Trichloroethene	21	0.344	0.908	1.23	ND	ND	0.516	0.333	0.253	NFA/MONITOR/MITIGATE
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NFA

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

All results are in µg/m3: micrograms per cubic meter
ND – Not detected
NFA – No further action

SVI Sample Analysis NYSDOH Exceedances

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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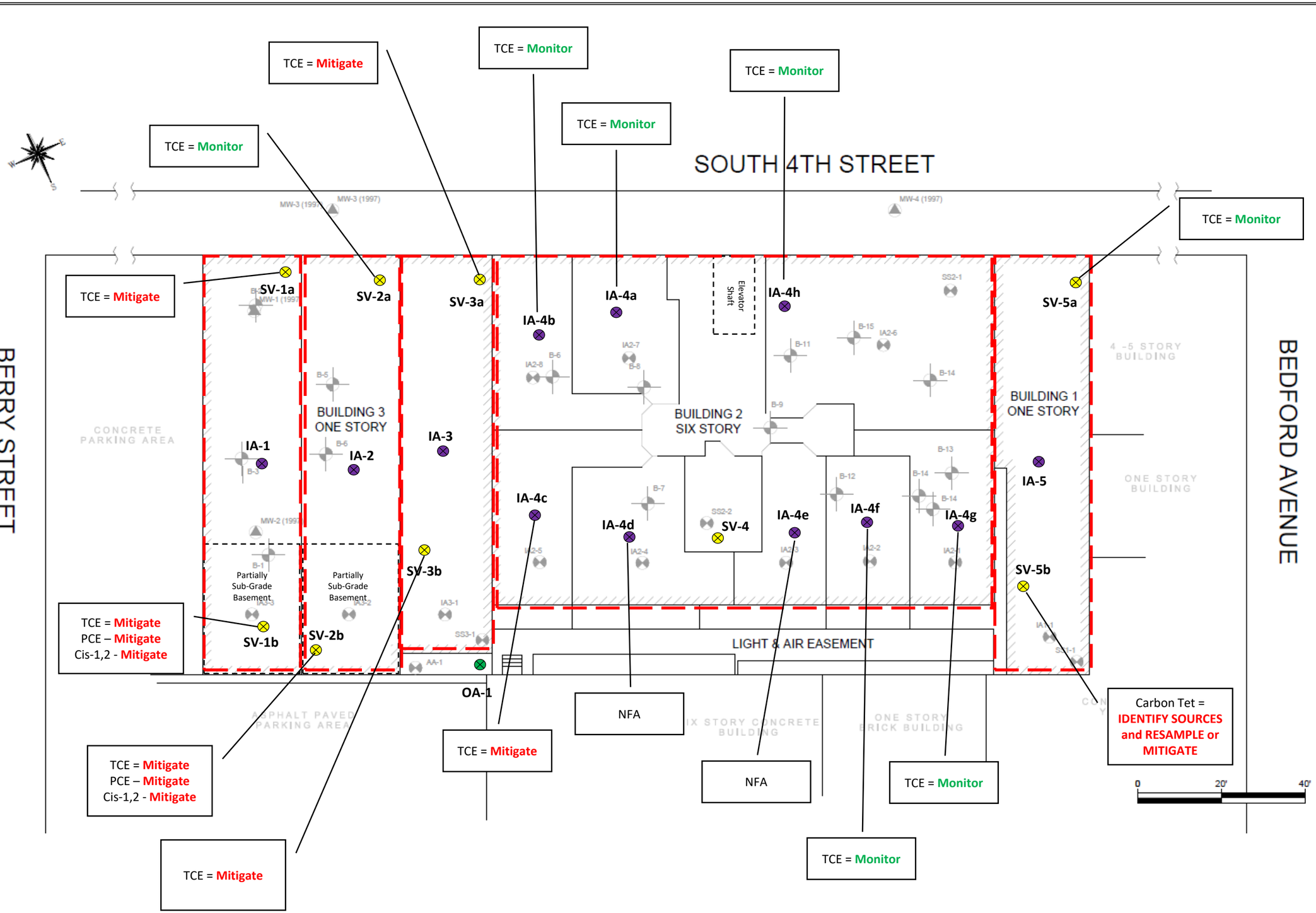

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations

Notes:

SVI Decision Matrices Results Map

100 South 4th Street, Brooklyn, NY

Plate 11

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
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FAX (631) 269-1599

TABLES

98, 100, and 104 South 4th Street, Brooklyn, NY

NYSDEC BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Table 1
Quality Control Sample Summary
100 south 4th Street, Brooklyn, NY

LOCATION			SV-1A		SV-DUP-1		SV-4		SV-DUP-2		IA-4A		IA-DUP-1		IA-5		IA-DUP-2	
SAMPLING DATE			3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021	
LAB SAMPLE ID			L2112425-01		L2112425-10		L2112425-07		L2112425-11		L2112425-15		L2112425-24		L2112425-23		L2112425-25	
SAMPLE TYPE			SOIL_VAPOR		SOIL_VAPOR		SOIL_VAPOR		SOIL_VAPOR		AIR		AIR		AIR		AIR	
	IA Guidance	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																		
Dichlorodifluoromethane		ug/m3	**2.02**		**1.99**		**2.88**		**2.49**		**2.02**		**2.46**		**2.43**		**2.43**	
Chloromethane		ug/m3	0.413	U	0.413	U	0.413	U	**0.77**		**1.1**		**1.08**		**0.983**		**0.977**	
Freon-114		ug/m3	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Vinyl chloride		ug/m3	0.511	U	0.511	U	0.511	U	0.511	U	-	-	-	-	-	-	-	-
1,3-Butadiene		ug/m3	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U
Bromomethane		ug/m3	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Chloroethane		ug/m3	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Ethanol		ug/m3	**153**		**129**		**46**		**79.1**		**889**		**825**		**903**		**880**	
Vinyl bromide		ug/m3	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Acetone		ug/m3	**458**		**285**		**9.17**		**14.2**		**36.3**		**39**		**24.2**		**24**	
Trichlorofluoromethane		ug/m3	1.12	U	1.12	U	1.12	U	1.12	U	**1.27**		**1.89**		**6.24**		**5.96**	
Isopropanol		ug/m3	**15.5**		**15.5**		**10.3**		**24.2**		**230**		**256**		**117**		**114**	
1,1-Dichloroethene		ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	-	-	-	-	-	-	-	-
Tertiary butyl Alcohol		ug/m3	**5.21**		**1.54**		**2.37**		**5.4**		1.52	U	1.52	U	1.52	U	1.52	U
Methylene chloride	60	ug/m3	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
3-Chloropropene		ug/m3	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
Carbon disulfide		ug/m3	0.623	U	**1.25**		0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U
Freon-113		ug/m3	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
trans-1,2-Dichloroethene		ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
1,1-Dichloroethane		ug/m3	**3.27**		1.43		0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
Methyl tert butyl ether		ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2-Butanone		ug/m3	**8.23**		**4.1**		**3.66**		**5.13**		**1.54**		**1.53**		**2.35**		**2.47**	
cis-1,2-Dichloroethene		ug/m3	**7.65**		2.56		0.793	U	0.793	U	-	-	-	-	-	-	-	-
Ethyl Acetate		ug/m3	1.8	U	1.8	U	1.8	U	1.8	U	**2.64**		3.44		**8.9**		8.58	
Chloroform		ug/m3	**1.9**		**1.99**		**10.6**		**3.14**		0.977	U	0.977	U	**1.32**		**1.26**	
Tetrahydrofuran		ug/m3	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
1,2-Dichloroethane		ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
n-Hexane		ug/m3	**0.782**		0.705	U	0.705	U	0.705	U	**0.871**		**0.853**		0.705	U	**0.747**	
1,1,1-Trichloroethane		ug/m3	**7.09**		**4.68**		1.09	U	1.09	U	-	-	-	-	-	-	-	-
Benzene		ug/m3	**0.837**		**0.677**		0.639	U	0.639	U	**1.09**		**1.07**		**1.05**		**1.06**	
Carbon tetrachloride		ug/m3	1.26	U	1.26	U	1.26	U	1.26	U	-	-	-	-	-	-	-	-
Cyclohexane		ug/m3	0.688	U	0.688	U	0.688	U	0.688	U	**1.94**		**1.83**		0.688	U	0.688	U
1,2-Dichloropropane		ug/m3	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
Bromodichloromethane		ug/m3	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
1,4-Dioxane		ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Trichloroethene	2	ug/m3	**120**		**90.8**		**21**		**16.3**		-	-	-	-	-	-	-	-
2,2,4-Trimethylpentane		ug/m3	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
Heptane		ug/m3	0.82	U	0.82	U	0.82	U	0.82	U	**35.1**		**34.6**		**0.828**		**0.836**	
cis-1,3-Dichloropropene		ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
4-Methyl-2-pentanone		ug/m3	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
trans-1,3-Dichloropropene		ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
1,1,2-Trichloroethane		ug/m3	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
Toluene		ug/m3	**2.08**		**1.99**		**2.22**		**3.84**		**5.31**		**5.16**		**2.8**		**2.78**	
2-Hexanone		ug/m3	**1.31**		0.82	U	**0.885**		**1.52**		0.82	U	0.82	U	0.82	U	0.82	U
Dibromochloromethane		ug/m3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
1,2-Dibromoethane		ug/m3	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
Tetrachloroethene	30	ug/m3	**46**		**38**		**4.66**		**5.66**		-	-	-	-	-	-	-	-
Chlorobenzene		ug/m3	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Ethylbenzene		ug/m3	0.869	U	0.869	U	**1.99**		**3.43**		0.869	U	0.869	U	0.869	U	0.869	U
p/m-Xylene		ug/m3	1.74	U	1.74	U	**3.53**		**6.21**		**1.92**		**2.09**		**1.98**		**1.87**	
Bromoform		ug/m3	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Styrene		ug/m3	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
1,1,2,2-Tetrachloroethane		ug/m3	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
o-Xylene		ug/m3	0.869	U	0.869	U	**1.87**		**2.91**		0.869	U	0.869	U	0.869	U	0.869	U
4-Ethyltoluene		ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3,5-Trimethylbenzene		ug/m3	0.983	U	0.983	U	0.983	U	**1.71**		0.983	U	0.983	U	0.983	U	0.983	U
1,2,4-Trimethylbenzene		ug/m3	0.983	U	0.983	U	0.983	U	**1.68**		0.983	U	0.983	U	**1.39**		**1.21**	
Benzyl chloride		ug/m3	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
1,3-Dichlorobenzene		ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene		ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichlorobenzene		ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2,4-Trichlorobenzene		ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
Hexachlorobutadiene		ug/m3	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Volatile Organics in Air by SIM																		
Vinyl chloride		ug/m3	-	-	-	-	-	-	-	-	0.051	U	0.051	U	0.051	U	0.051	U
1,1-Dichloroethene		ug/m3	-	-	-	-	-	-	-	-	0.079	U	0.079	U	0.079	U	0.079	U
cis-1,2-Dichloroethene		ug/m3	-	-	-	-	-	-	-	-	0.079	U	0.079	U	0.079	U	0.079	U
1,1,1-Trichloroethane		ug/m3	-	-	-	-	-	-	-	-	0.109	U	0.109	U	0.109	U	0.109	U
Carbon tetrachloride		ug/m3	-	-	-	-	-	-	-	-	**0.39**		**0.516**		**0.585**		**0.522**	
Trichloroethene	2	ug/m3	-	-	-	-	-	-	-	-	**0.344**		**0.371**		**0.296**		**0.29**	
Tetrachloroethene	30	ug/m3	-	-	-	-	-	-	-	-	**1.04**		**1.04**		**0.529**		**0.522**	

Notes:
IA Guidance - Ambient Air Guidance Values, NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion (Table 3.1)
Highlighted Value Above Table 3.1 Indoor Air Guidance Values
ug/m3 - micrograms per cubic meter
U - Not detected
BOLD - Analyte detected

Table 2
SVI Summary Table (All Results)
100 South 4th Street, Brooklyn, NY

LOCATION			SV-1A		SV-1B		IA-1		SV-2A		SV-2B		IA-2		SV-3A		SV-3B		IA-3		SV-4		IA-4A		IA-4B		IA-4C		IA-4D		IA-4E		IA-4F		IA-4G		IA-4H		SV-5A		SV-5B		IA-5		IA-DUP-1		IA-DUP-2		SV-DUP-1		SV-DUP-2		OA-1	
SAMPLING DATE			3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021	
LAB SAMPLE ID			L2112425-01		L2112425-02		L2112425-12		L2112425-03		L2112425-04		L2112425-13		L2112425-06		L2112425-05		L2112425-14		L2112425-07		L2112425-15		L2112425-16		L2112425-17		L2112425-18		L2112425-19		L2112425-20		L2112425-21		L2112425-22		L2112425-08		L2112425-09		L2112425-23		L2112425-24		L2112425-25		L2112425-10		L2112425-26	
SAMPLE TYPE			SOIL_VAPOR		SOIL_VAPOR		AIR		SOIL_VAPOR		SOIL_VAPOR		AIR		SOIL_VAPOR		SOIL_VAPOR		AIR		SOIL_VAPOR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		SOIL_VAPOR		SOIL_VAPOR		AIR		AIR		AIR		SOIL_VAPOR		AIR	
	IA Guidance	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																																																					
Dichlorodifluoromethane		ug/m3	**2.02**		3.09	U	**1.99**		**2.02**		9.89	U	**2.08**		2.91	U	**2.1**		**2.13**		**2.88**		**2.02**		**2.05**		**2.5**		**2.26**		**2.49**		**2.49**		**2.48**		**2.46**		**1.95**		**2.05**		**2.43**		**2.46**		**2.43**		**1.99**		**2.49**		**2.41**	
Chloromethane		ug/m3	0.413	U	1.29	U	**0.888**		0.413	U	4.13	U	**0.964**		1.21	U	0.413	U	**0.989**		0.413	U	1.1		**1**		**1.33**		**1.67**		**0.975**	1	**1.03**		**1.23**		**1.08**		0.413	U	0.413	U	**0.983**		**1.08**		**0.977**		0.413	U	**0.77**		**1.08**		**0.892**	
Freon-114		ug/m3	1.4	U	4.37	U	1.4	U	1.4	U	14	U	1.4	U	4.11	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Vinyl chloride		ug/m3	0.511	U	1.6	U	-	-	**0.537**		5.11	U	-	-	1.5	U	0.511	U	-	-	0.511	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.511	U	0.511	U	-	-	-	-	0.511	U	0.511	U	-	-	0.511	U
1,3-Butadiene		ug/m3	0.442	U	1.38	U	0.442	U	0.442	U	4.42	U	0.442	U	1.3	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	**0.763**		0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U
Bromomethane		ug/m3	0.777	U	2.43	U	0.777	U	0.777	U	7.77	U	0.777	U	2.28	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Chloroethane		ug/m3	0.528	U	1.65	U	0.528	U	0.528	U	5.28	U	0.528	U	1.55	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Ethanol		ug/m3	**153**		**795**		**28.6**		**524**		**537**		447		**41.5**		**492**		**203**		**46**		**889**		**196**		**1810**		**433**		**105**		**205**		**784**		**288**		**746**		**28.6**		**903**		**825**		**880**		**129**		**79.1**		**19.4**	
Vinyl bromide		ug/m3	0.874	U	2.73	U	0.874	U	0.874	U	8.74	U	0.874	U	2.57	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Acetone		ug/m3	**458**		**21.1**		2.38	U	**19.9**		**304**		**47**		6.98	U	**53.7**		**18.2**		**9.17**		**36.3**		**15.6**		**67.5**		**31.4**		**11.5**		**44.2**		**62.7**		**24.7**		**55.8**		**12.6**		**24.2**		**39**		**24**		**285**		**14.2**		**6.39**	
Trichlorofluoromethane		ug/m3	1.12	U	3.51	U	1.12	U	1.12	U	11.2	U	**1.26**		3.3	U	**1.12**		**1.29**		1.12	U	**1.27**		**1.27**		**2.28**		**1.47**		**1.83**		**2.42**		**4.9**		**2.5**		**2.86**		**1.83**		**6.24**		**1.89**		**5.96**		1.12	U	1.12	U	**1.69**	
Isopropanol		ug/m3	**15.5**		**7.67**		**3.37**		**2.04**		12.3	U	**6.02**		3.61	U	**20.9**		**6.22**		**10.3**		**7.67**		**230**		**35.2**		**91.4**		**61.9**		**98**		**23.9**		**45.2**		**93.9**		**52.1**		**42.3**		**3.98**		**117**		**256**		**114**		**15.5**		**24.2**		**5.14**	
1,1-Dichloroethene		ug/m3	0.793	U	2.48	U	-	-	0.793	U	7.93	U	-	-	2.33	U	0.793	U	-	-	0.793	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.793	U	0.793	U	-	-	-	-	0.793	U	0.793	U	-	-
Tertiary butyl Alcohol		ug/m3	**5.21**		4.73	U	1.52	U	**5.73**		15.2	U	1.52	U	**7.82**		**4.67**		1.52	U	**2.37**		1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	**11.7**		**17.6**		1.52	U	1.52	U	1.52	U	**1.54**		**5.4**		1.52	U
Methylene chloride	60	ug/m3	1.74	U	5.42	U	1.74	U	1.74	U	17.4	U	1.74	U	5.11	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
3-Chloropropene		ug/m3	0.626	U	1.96	U	0.626	U	0.626	U	6.26	U	0.626	U	1.84	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
Carbon disulfide		ug/m3	0.623	U	1.95	U	0.623	U	0.623	U	6.23	U	0.623	U	1.83	U	**9.09**		0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	**1.25**		0.623	U	0.623	U
Freon-113		ug/m3	1.53	U	4.79	U	1.53	U	1.53	U	15.3	U	1.53	U	4.51	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
trans-1,2-Dichloroethene		ug/m3	0.793	U	2.48	U	0.793	U	**8.21**		0.793	U	0.793	U	2.33	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
1,1-Dichloroethane		ug/m3	**3.27**		2.53	U	0.809	U	0.809	U	8.09	U	0.809	U	2.38	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	1.43		0.809	U	0.809	U
Methyl tert butyl ether		ug/m3	0.721	U	2.25	U	0.721	U	0.721	U	7.21	U	0.721	U	2.12	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2-Butanone		ug/m3	**8.23**		4.6	U	1.47	U	**1.8**		14.7	U	1.47	U	4.34	U	**5.9**		1.47	U	**3.66**		**1.54**		1.47	U	**2.12**		**2**		1.47	U	**2.23**		**3.51**		**1.7**		**2.91**		**5.13**		**1.89**		1.47	U	**4.1**		**5.13**		1.47	U
cis-1,2-Dichloroethene		ug/m3	**7.65**		**88**		-	-	**5.35**		**379**		-	-	**20**		**24.1**		-	-	0.793	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.793	U	0.793	U	-	-	-	-	2.56		0.793	U	-	-
Ethyl Acetate		ug/m3	1.8	U	5.62	U	1.8	U	1.8	U	18	U	1.8	U	5.3	U	1.8	U	1.8	U	**2.64**		1.8	U	**13.8**		**3.57**		1.8	U	**3.68**		**8.61**		**2.52**		1.8	U	1.8	U	**8.9**		3.44		8.58		1.8	U	1.8	U	1.8	U	1.8	U
Chloroform		ug/m3	**1.9**		3.05	U	0.977	U	0.977	U	9.77	U	0.977	U	54.7		**78.6**		**2.08**		**10.6**		0.977	U	0.977	U	**4.68**		0.977	U	0.977	U	0.977	U	3.04		0.977	U	**2.13**		**38.7**		**1.32**		0.977	U	**1.26**		**1.99**		**3.14**		0.977	U
Tetrahydrofuran		ug/m3	1.47	U	4.6	U	1.47	U	1.47	U	14.7	U	1.47	U	4.34	U	**2.22**		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	**3.33**		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
1,2-Dichloroethane		ug/m3	0.809	U	2.53	U	0.809	U	0.809	U	8.09	U	0.809	U	2.38	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	1.04		0.809	U	0.809	U	0.809	U	1.6		0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
n-Hexane		ug/m3	**0.782**		2.2	U	0.705	U	0.705	U	7.05	U	**0.73**		2.07	U	**1.56**		0.705	U	0.705	U	**0.871**		0.705	U	**0.765**		**0.885**		0.705	U	**0.737**		**0.712**		0.705	U	0.705	U	0.705	U	**0.853**		**0.747**		0.705	U	0.705	U	0.705	U	0.705	U
1,1,1-Trichloroethane		ug/m3	**7.09**		3.41	U	-	-	1.09	U	10.9	U	-	-	**3.79**		**1.58**		-	-	1.09	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.09	U	1.09	U	-	-	-	-	**4.68**		1.09	U	-	-
Benzene		ug/m3	**0.837**		2	U	**0.879**		0.639	U	6.39	U	**1.04**		1.88	U	**2.02**		**1.16**		0.639	U	**1.09**		**1.08**		**1.17**		**1.57**		**0.847**		**0.926**		**1.35**		**1.02**		0.639	U	0.639	U	**1.05**		**1.07**		**1.06**		**0.677**		0.639	U	**0.748**	
Carbon tetrachloride		ug/m3	1.26	U	3.93	U	-	-	1.26	U	12.6	U	-	-	3.7	U	1.26	U	-	-	1.26	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.26	U	**2.68**		-	-	1.26	U	1.26	U	-	-	1.26	U	-	-
Cyclohexane		ug/m3	0.688	U	2.15	U	0.688	U	0.688	U	6.88	U	0.688	U	2.02	U	**2.34**		0.688	U	0.688	U	**1.94**		0.688	U	0.688	U	**0.723**		0.688	U	0.688	U	0.688	U	0.688	U	**0.747**		**0.826**		0.688	U	0.688	U	**1.83**		0.688	U	0.688	U	0.688	U
1,2-Dichloropropane		ug/m3	0.924	U	2.89	U	0.924	U	0.924	U	9.24	U	0.924	U	2.72	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
Bromodichloromethane		ug/m3	1.34	U	4.19	U	1.34	U	1.34	U	13.4	U	1.34	U	3.94	U	**1.96**		1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
1,4-Dioxane		ug/m3	0.721	U	2.25	U	0.721	U	0.721	U	7.21	U	0.721	U	2.12	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Trichloroethene	2	ug/m3	**120**		**1000**		**321**		**16.5**		**3260**		-	-	0.721	U	**260**		-	-	**21**		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**7.9**		**5.7**		-	-	**90.8**		**16.3**		-	-
2,2,4-Trimethylpentane		ug/m3	0.934	U	2.92	U	0.934	U	0.934	U	9.34	U	0.934	U	2.75	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
Heptane		ug/m3	0.82	U	2.56	U	0.82	U	0.82	U	8.2	U	0.82	U	2.41	U	**0.84**		0.82	U	0.82	U	**35.1**		**1.75**		**2.73**		**8.57**		0.82	U	**1.45**		**1.08**		**1.88**		0.82	U	0.82	U	**0.828**		**34.6**		**0.836**		0.82	U	0.82	U	0.82	U
cis-1,3-Dichloropropene		ug/m3	0.908	U	2.84	U	0.908	U	0.908	U	9.08	U	0.908	U	2.67	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
4-Methyl-2-pentanone		ug/m3	2.05	U	6.39	U	2.05	U	2.05	U	20.5	U	2.05	U	6.02	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
trans-1,3-Dichloropropene		ug/m3	0.908	U	2.84	U	0.908	U	0.908	U	9.08	U	0.908	U	2.67	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
1,1,2-Trichloroethane		ug/m3	1.09	U	3.41	U	1.09	U	1.09	U	10.9	U	1.09	U	3.21	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
Toluene		ug/m3	**2.08**		**4.94**		**2.09**		**15**		**7.88**		**2.36**		**12**		**8.03**		**2.08**		**2.22**		**5.31**		**2.58**		**3**		**3.73**		**1.62**		**3.84**		**3.04**		**2.48**		**13.1**		**14.9**		**2.8**		**5.16**		**2.78**		**1.99**		**3.84**		**1.46**	
2-Hexanone		ug/m3	**1.31**		2.56	U	0.82	U	**1.41**		8.2	U	0.82	U	2.41	U	**2.07**		0.82	U	**0.885**		0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	**1.62**		**4.75**		0.82	U	0.82	U	0.82	U	0.82	U	**1.52**		0.82	U
Dibromochloromethane		ug/m3	1.7	U	5.32	U	1.7	U	1.7	U	17	U	1.7	U	5.01	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
1,2-Dibromoethane		ug/m3	1.54	U	4.8	U	1.54	U	1.54	U	15.4	U	1.54	U	4.52	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
Tetrachloroethene	30	ug/m3	**46**		**1240**		-	-	**5.2**		**2710**		-	-	**460**		**138**		-	-	**4.66**		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**9.56**		**59.8**		-	-	-	-	**38**		**5.66**		-	-
Chlorobenzene		ug/m3	0.921	U	2.88	U	0.921	U	0.921	U	9.21	U	0.921	U	2.71	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Ethylbenzene		ug/m3	0.869	U	**4.04**		0.869	U	**15.3**		8.69	U	**1.23**		**11.9**		**6.39**		0.869	U	**1.99**		0.869	U	0.869	U	**1.13**		0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	**13.1**		**15.8**		0.869	U	0.869	U	0.869	U	0.869	U	**3.43**		0.869	U
p/m-Xylene		ug/m3	1.74	U	**7.43**		1.74	U	**25.4**		17.4	U	**4.6**		**19.8**		**11.3**		**1.91**		**3.53**		**1.92**		**4.43**		**1.85**		**2.14**		1.74	U	**5.99**		**2.53**		**2.06**		**21.6**		**26.4**		**1.98**		**2.09**		**1.87**		1.74	U	**6.21**		1.74	U
Bromoform		ug/m3	2.07	U	6.46	U	2.07	U	2.07	U	20.7	U	2.07	U	6.08	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Styrene		ug/m3	0.852	U	2.66	U	0.852	U	**1.28**		8.52	U	0.852	U	2.5	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	1.01		0.852	U	0.852	U	**1.09**		**1.41**		0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
1,1,2,2-Tetrachloroethane		ug/m3	1.37	U	4.29	U	1.37	U	1.37	U	13.7	U	1.37	U	4.04	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
o-Xylene		ug/m3	0.869	U	**3.87**		0.869	U	**14.3**		8.69	U	**1.32**		**11.2**		**6.52**		0.869	U	**1.87**		0.869	U	**1.3**		0.869	U	0.869	U	0.869	U	0.869	U	**1.74**		**0.934**		0.869	U	**12.5**		**14.9**		0.869	U	0.869	U	0.869	U	0.869	U	**2.91**		0.869	U
4-Ethyltoluene		ug/m3	0.983	U	3.07	U	0.983	U	0.983	U	9.83	U	0.983	U	2.89	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3,5-Trimethylbenzene		ug/m3	0.983	U	3.07	U	0.983	U	0.983	U	9.83	U	0.983	U	2.89	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	**1.71**		0.983	U
1,2,4-Trimethylbenzene		ug/m3	0.983	U	3.07	U	0.983	U	0.983	U	9.83	U	**1.25**		2.89	U	0.983	U	**1.64**		0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	**1.19**		**1.06**		**0.998**		0.983	U	0.983	U	**1.39**		0.983	U	**1.21**		0.983	U	**1.68**		0.983	U
Benzyl chloride		ug/m3	1.04	U	3.24	U	1.04	U	1.04	U	10.4	U	1.04	U	3.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
1,3-Dichlorobenzene		ug/m3	1.2	U	3.76	U	1.2	U	1.2	U	12	U	1.2	U	3.54	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene		ug/m3	1.2	U	3.76	U	1.2	U	1.2	U	12	U	1.2	U	3.54	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichlorobenzene		ug/m3	1.2	U	3.76	U	1.2	U	1.2	U	12	U	1.2	U	3.54	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2,4-Trichlorobenzene		ug/m3	1.48	U	4.64	U	1.48	U	1.48	U	14.8	U	1.48	U	4.36	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
Hexachlorobutadiene		ug/m3	2.13	U	6.67	U	2.13	U	2.13	U	21.3	U	2.13	U	6.27	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Volatile Organics in Air by SIM																																																					
Vinyl chloride		ug/m3	-	-	-	-	0.051	U	-	-	-	-	0.051	U	-	-	-	-	0.051	U	-	-	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	-	-	-	-	0.051	U	0.051	U	0.051	U	-	-	-	-	0.051	U
1,1-Dichloroethene		ug/m3	-	-	-	-	0.079	U	-	-	-	-	0.079	U	-	-	-	-	0.079	U	-	-	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	-	-	-	-	0.079	U	0.079	U	0.079	U	-	-	-	-	0.079	U
cis-1,2-Dichloroethene		ug/m3	-	-	-	-	0.079	U	-	-	-	-	0.079	U	-	-	-	-	0.079	U	-	-	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	-	-	-	-	0.079	U	0.079	U	0.079	U	-	-	-	-	0.079	U
1,1,1-Trichloroethane		ug/m3	-	-	-	-	0.109	U	-	-	-	-	0.109	U	-	-	-	-	0.109	U	-	-	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	-	-	-	-	0.109	U	0.109	U	0.109	U	-	-	-	-	0.109	U
Carbon tetrachloride		ug/m3	-	-	-	-	**0.396**		-	-	-	-	**0.421**		-	-	-	-	**0.403**		-	-	**0.39**		**0.421**		**0.591**		**0.459**		**0.478**		**0.547**		**0.591**		**0.535**		-	-	-	-	**0.585**		**0.516**		**0.522**		-	-	-	-	**0.491**	
Trichloroethene	2	ug/m3	-	-	-	-	**0.435**		-	-	-	-

Table 3
SVI Indoor Air Guidance Values Summary Table
100 South 4th Street, Brooklyn, NY

LOCATION			IA-1		IA-2		IA-3		IA-4A		IA-4B		IA-4C		IA-4D		IA-4E		IA-4F		IA-4G		IA-4H		IA-5	
SAMPLING DATE			3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021		3/12/2021	
LAB SAMPLE ID			L2112425-12		L2112425-13		L2112425-14		L2112425-15		L2112425-16		L2112425-17		L2112425-18		L2112425-19		L2112425-20		L2112425-21		L2112425-22		L2112425-23	
SAMPLE TYPE			AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR	
	IA Guidance	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Methylene chloride	60	ug/m3	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
Trichloroethene	2	ug/m3	**0.435**		**0.408**		**2.14**		**0.344**		**0.908**		**1.23**		0.107	U	0.107	U	**0.516**		**0.333**		**0.253**		**0.296**	
Tetrachloroethene	30	ug/m3	**1.11**		**0.787**		**2.09**		**1.04**		**1.02**		**2.55**		**0.387**		**0.292**		**0.448**		**0.57**		**0.502**		**0.529**	

Notes:
IA Guidance - Ambient Air Guidance Values, NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion (Table 3.1)
Highlighted Value Above Table 3.1 Indoor Air Guidance Values
ug/m3 - micrograms per cubic meter
U - Not detected
BOLD - Analyte detected

Table 4.1

98c South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	SV-1A	SV-1B	IA-1	NYSDOH Matrices Decision
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	**7.09**	**ND**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
Carbon tetrachloride	**ND**	**ND**	0.396	NFA
cis-1,2-Dichloroethene	**7.65**	**88**	ND	NFA/MITIGATE
Methylene chloride	**ND**	**ND**	ND	NFA
Tetrachloroethene	**46**	**1,240**	1.11	NFA/MITIGATE
Trichloroethene	**120**	**1000**	0.435	MITIGATE/MITIGATE
Vinyl chloride	**ND**	**ND**	ND	NFA

Notes:

µg/m3: mirogram per cubic meter

ND - not detected

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.2

98b South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	SV-2A	SV-2B	IA-2	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	**ND**	**ND**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
Carbon tetrachloride	**ND**	**ND**	0.421	NFA
cis-1,2-Dichloroethene	**5.35**	**379**	ND	NFA/MITIGATE
Methylene chloride	**ND**	**ND**	ND	NFA
Tetrachloroethene	**5.2**	**2710**	0.787	NFA/MITIGATE
Trichloroethene	**16.5**	**3260**	0.408	MONITOR/MITIGATE
Vinyl chloride	**0.537**	**ND**	ND	NFA

µg/m3: mirogram per cubic meter

ND - not detected

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.3

98a South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	SV-3A	SV-3B	IA-3	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	**3.79**	**1.58**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
Carbon tetrachloride	**ND**	**ND**	0.403	NFA
cis-1,2-Dichloroethene	**20**	**24.1**	ND	NFA
Methylene chloride	**ND**	**ND**	ND	NFA
Tetrachloroethene	**460**	**138**	2.09	NFA
Trichloroethene	**967**	**321**	2.14	MITIGATE/MITIGATE
Vinyl chloride	**ND**	**ND**	ND	NFA

µg/m3: mirogram per cubic meter

ND - not detected

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.4
100 South 4th Street - NYSDOH Decision Matrices Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	SV-4	IA-4A	IA-4B	IA-4C	IA-4D	IA-4E	IA-4F	IA-4G	IA-4H	NYSDOH Matrices
Date	3/12/2021									
Sample Type	Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	
Unit	$\mu g/m^3$									
Volatile Organics in Air										
1,1,1-Trichloroethane	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
1,1-Dichloroethene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Carbon tetrachloride	**ND**	0.39	0.421	0.591	0.459	0.478	0.547	0.591	0.535	NFA
cis-1,2-Dichloroethene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Methylene chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA
Tetrachloroethene	**4.66**	1.04	1.02	2.55	0.387	0.292	0.448	0.57	0.502	NFA
Trichloroethene	**21**	0.344	0.908	1.23	ND	ND	0.516	0.333	0.253	NFA/MONITOR/MITIGATE
Vinyl chloride	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	NFA

µg/m3: mirogram per cubic meter

ND - not detected

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.5

104 South 4th Street - NYSDOH Decision Matrices Summary Table

100 South 4th Street, Brooklyn, NY

Sample ID	SV-5A	SV-5B	IA-5	NYSDOH Matrices
Date	3/12/2021			
Sample Type	Sub Slab	Sub Slab	Indoor Air	
Unit	$\mu g/m^3$			
Volatile Organics in Air				
1,1,1-Trichloroethane	**ND**	**ND**	ND	NFA
1,1-Dichloroethene	**ND**	**ND**	ND	NFA
Carbon tetrachloride	**ND**	**2.68**	0.585	NFA/IDENTIFY SOURCES and RESAMPLE or MITIGATE
cis-1,2-Dichloroethene	**ND**	**ND**	ND	NFA
Methylene chloride	**ND**	**ND**	ND	NFA
Tetrachloroethene	**9.56**	**59.8**	1.04	NFA
Trichloroethene	**7.9**	**5.7**	0.296	NFA/MONITOR
Vinyl chloride	**ND**	**ND**	ND	NFA

µg/m3: mirogram per cubic meter

ND - not detected

NFA: No Further Actions recomended to address human exposures

IDENTIFY SOURCES, RESAMPLE, AND/OR MITIGATE: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

MONITOR: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air -conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitorin g is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Table 4.6
Outdoor Air Analysis Summary Table
100 South 4th Street, Brooklyn, NY

Sample ID	OA-1	NYSDOH Matrices
Date	3/12/2021	
Sample Type	OUTDOOR AIR	
Unit	$\mu g/m^3$	
Volatile Organics in Air		
1,1,1-Trichloroethane	**ND**	NA
1,1-Dichloroethene	**ND**	NA
Carbon tetrachloride	**0.491**	NA
cis-1,2-Dichloroethene	**ND**	NA
Methylene chloride	**ND**	NA
Tetrachloroethene	**0.325**	NA
Trichloroethene	**ND**	NA
Vinyl chloride	**ND**	NA

µg/m3: mirogram per cublic meter
NFA: No Further Actions warranted to address human exposures

APPENDICES

98, 100, and 104 South 4th Street, Brooklyn, NY

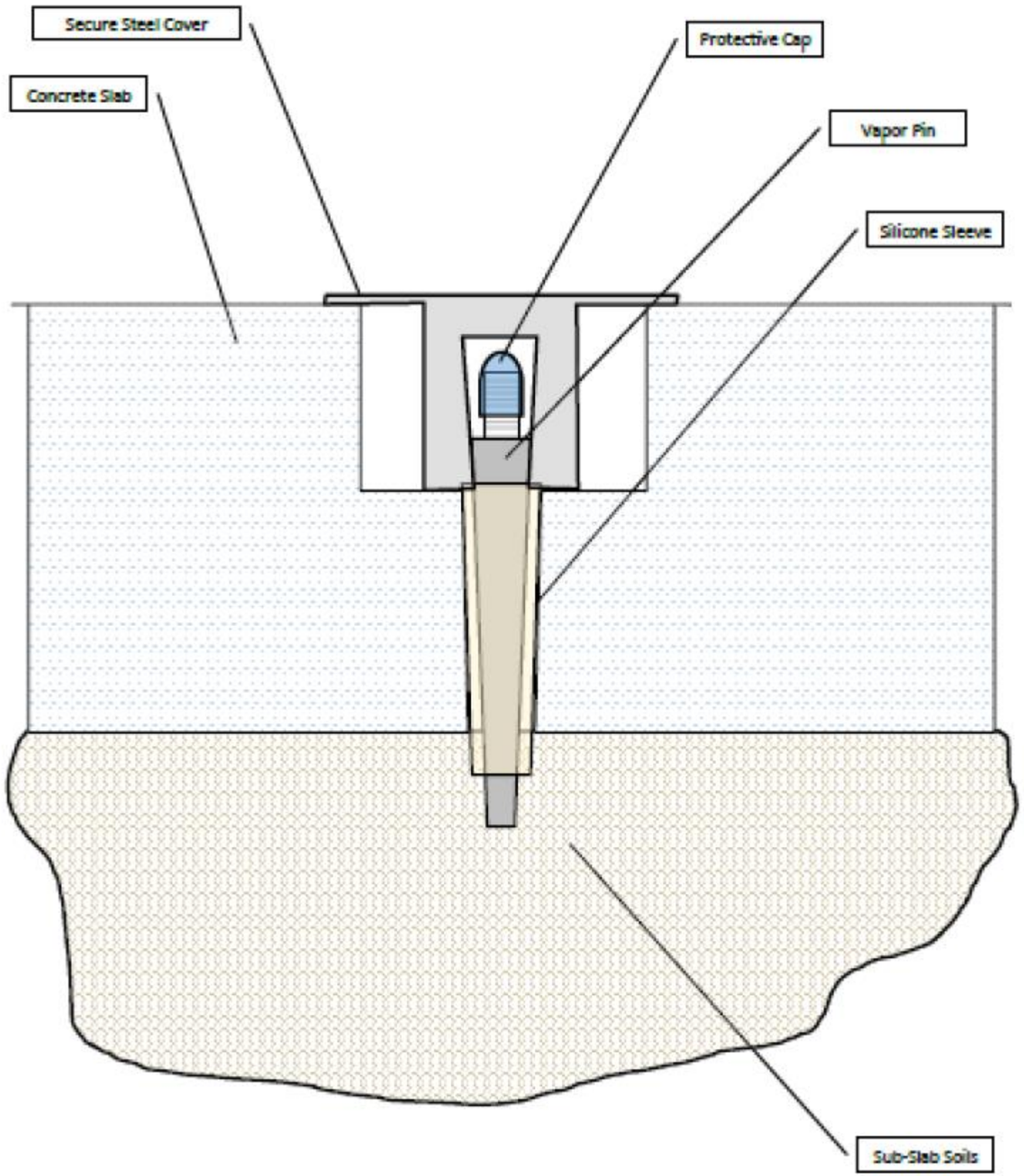
NYSDEC BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Appendix A

Soil Vapor Point Construction Detail

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599



Sub-Slab Vapor Pin Installation

Legend

Notes:

Soil Vapor Point Construction Detail

100 South 4th Street, Brooklyn, NY

Appendix A

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	5/21/21
Revisions	

N

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Appendix B

Photo Log

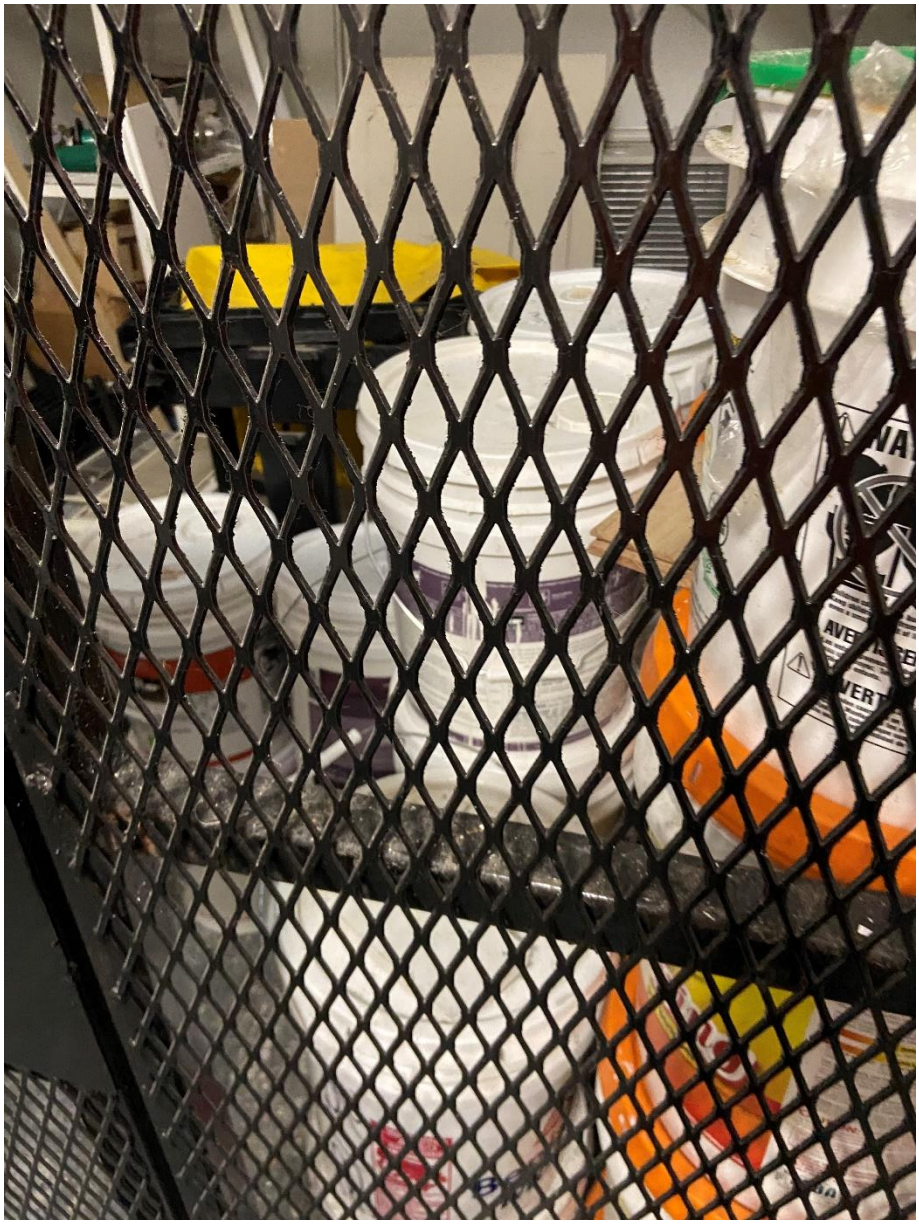
IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Photograph No. 1: View of typical sub-slab soil vapor monitoring point installation and duplicate sample location

Photograph No. 2: View of typical indoor air sampling location and duplicate indoor air sampling location.

Photograph No. 3: View of typical conversion of temporary to permanent soil vapor point.

Photograph No. 4: View of typical building maintenance chemical storage within ground floor nonresidential unit in 100 South 4th Street.



Photograph No. 5: View of typical building maintenance chemical storage in stairwell storage cage in 100 South 4th Street.

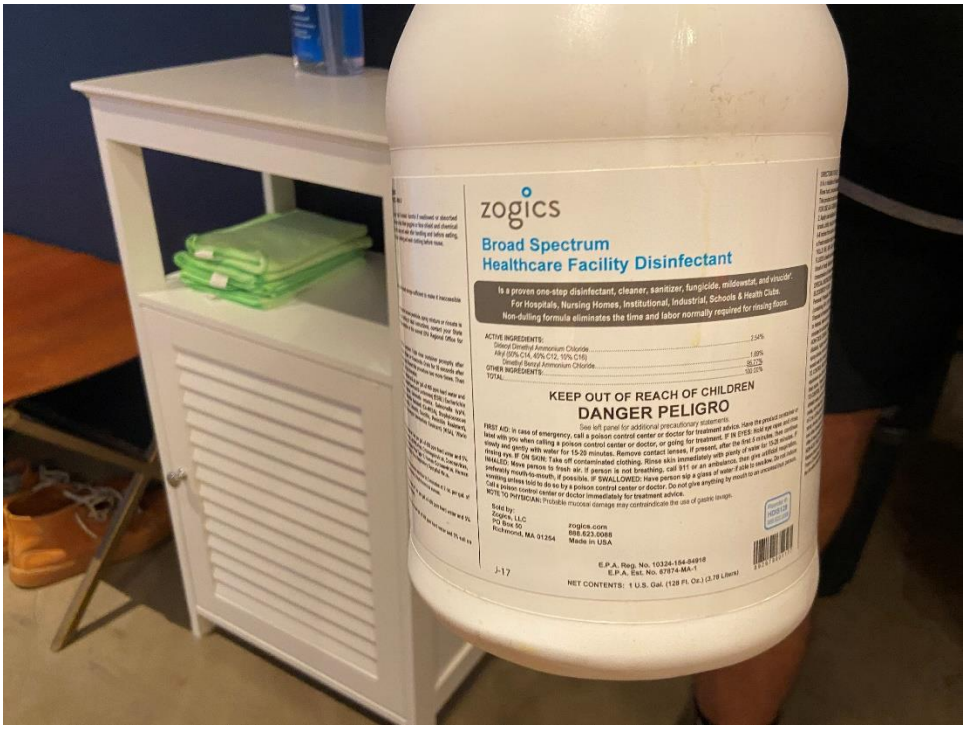
Photograph No. 6: View of typical chemical storage within 98c South 4th Street

Photograph No. 7: View of typical chemical storage within 98c South 4th Street

Photograph No. 8: View of typical chemical storage within 98c South 4th Street

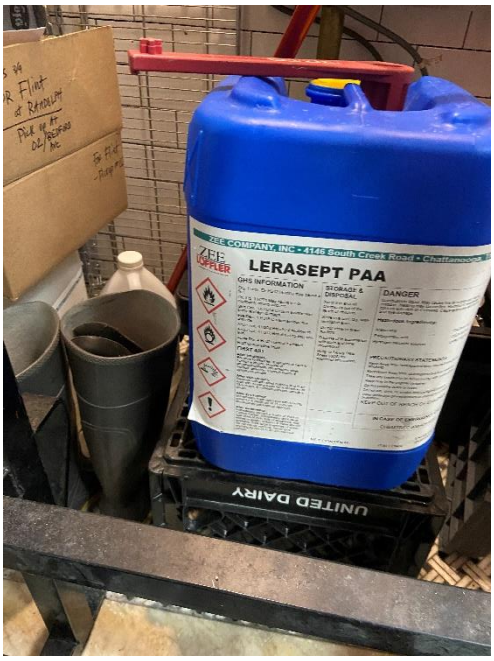
Photograph No. 9: View of typical chemical storage within 98c South 4th Street

Photograph No. 10: View of typical chemical storage within 98c South 4th Street



Photograph No. 11: View of typical chemical storage within 98b South 4th Street

Photograph No. 12: View of typical chemical storage within 98b South 4th Street



Photograph No. 13: View of typical chemical storage within 104 South 4th Street

Photograph No. 14: View of typical chemical storage within 104 South 4th Street

Photograph No. 15: View of typical chemical storage within 104 South 4th Street

Appendix C

Data Validator Credentials

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

LDC Corporate Resources

LDC personnel have experience and formal training in the areas of data validation, electronic data deliverables and laboratory QA/QC. LDC personnel have performed data validation in all analytical disciplines. These include, but are not limited to, GC/MS volatiles, GC volatiles, GC/MS semivolatiles, GC pesticides, ICP metals, ICP/MS metals, GFAA metals, GC petroleum hydrocarbons, GC/MS dioxins, explosives, radiochemistry, and wet chemistry. This versatility allows our organization to adapt to workload changes and allows for an excellent secondary review system. Our organization is structured to allow direct communication between project managers, data validators, and clerical staff which occurs on a daily basis.

With LDC's 25+ years as a national leader in the data validation industry and extensive experience supporting projects with multiple EPA regions, DoD and DOE facilities, LDC is confident our data validation services will successfully meet all project requirements. The validation group is managed by Ms. Stella Cuenco, principal chemist, who has over 25 years of experience, the software products and services group is managed by Mr. Scott Denzer, who has over 35 years of experience, and the overall operations are directed by Mr. Michael Takaki, president.

The validation group is divided into chemists by discipline, organics (GC/MS, GC and HPLC) and inorganics (wet chemistry, IC, ICP, ICP/MS). All chemists report to senior group leads. A separate group performs data package log-in to the LDC tracking system. Another group performs the EDD population and verification. Shauna McKellar, Chemist and Project Manager, leads this group and has over 6 years of experience in EDD population, preparation, and uploading to various databases.

The majority of the data validation staff at LDC have been employed for over 10 years with some senior staff over 15 years as noted in the attached resumes. This level of stability and experience will ensure project stability and consistency.

In addressing LDC's financial status, LDC has an excellent Dun & Bradstreet report and has been profitable for the past 15 years. LDC has grown at approximately 10% in each of the past 5 years and continues to be a leader in our environmental sector of the data quality business. References are available from our vendors and clients to confirm our business success. Our annual revenue of approximately $6,000,000 per year in data validation work makes LDC one of the largest independent data validation firms in the nation. In 2001, Mr. Richard Amano was the San Diego SBA Small Businessman of the Year through our sponsor Earth Tech.

LDC will commit the resources and materials to successfully complete this project with the required time period and with a high level of quality.

Project Team Summary

LDC personnel have hands-on experience in the areas of data validation, laboratory QA/QC, CLP SOWs, and environmental laboratory analyses. As documented in the resumes of our staff, the project team has significant experience with USACE and DoD protocols, current technology, SW-846, and all methods stated in the SOW.

LDC is presenting the following staff to perform key roles for this contract. The key staff of the project team and their experience are as follows:

- **Stella Cuenco, Principal Chemist/Operations Manager**
  Project Role: Principal Chemist/Program Manager
  Data Validation Experience: 22 years
  Overall Laboratory and Data Validation Experience: 27 years
  B.S. Chemistry, University of the Philippines, 1991

  Ms. Cuenco has over 27 years of environmental laboratory and data validation experience under DoD and EPA guidelines. Her experience includes performance of data validation in gas chromatography/mass spectrometry for volatile and semivolatile organics and extensive Navy and EPA data review and data verification for all organic and inorganic analyses. Her laboratory experience includes hands-on CLP and SW-846 GC/MS methods.

- **Pei Geng, Senior Chemist/Project Manager**
  Project Role: Senior Organic Data Validator
  Data Validation Experience: 21 years
  Overall Laboratory and Data Validation Experience: 28 years
  M.S. Chemistry, Sam Houston University, 1989

  Ms. Geng will perform the role of organic data validator for this project. She will perform data validation for GC/MS and gas chromatography analyses and serve as a peer reviewer in the initial validation review process.

  Ms. Geng has over 28 years of environmental laboratory and data validation experience. Her experience includes performance of data validation in the gas chromatography area for volatile and semivolatile organics and extensive DoD data review and data verification for all organic analyses. Her laboratory experience includes hands-on CLP and SW-846 GC/MS methods.

- **Richard M. Amano, Principal Chemist**
  Project Role: Senior Technical Reviewer/Director
  Data Validation Experience: 26 years
  Overall Laboratory and Data Validation Experience: 38 years
  B.S. Biochemistry, UCLA, 1979

  Mr. Amano has over 38 years of environmental laboratory, QA/QC, and data validation experience. He has managed data validation projects using the DoD QSM data validation guidelines for the past twenty years. Prior to founding LDC in 1991, he directed two major laboratories, Analytical Technologies, Inc. and Brown and Caldwell, from 1983 to 1991. His data validation experience includes oversight and direction of major efforts for Superfund sites, DoE sites, Navy RI/FS projects, Army Corps of

Engineers investigations, and AFCEE/AFCEC projects. He also has overseen several laboratory audits for major analytical testing programs for the Navy, Texaco, and Hewlett-Packard. His laboratory experience includes hands-on CLP and SW-846 GC/MS analysis, direction of GC/MS (including TO-14 air analyses) and radiochemistry groups, dioxins method development, and complex GC data interpretation of Aroclors. He has performed expert witness support for litigation purposes.

- **Erlinda T. Rauto, Principal Chemist**
  Project Role: Technical Reviewer
  Data Validation Experience: 25 years
  Overall Laboratory and Data Validation Experience: 38 years
  B.S Chemical Engineering, Feati University, Manila, 1967

  Ms. Rauto will perform the role of Technical Reviewer for this project. She will monitor schedules, compliance of the validation to the applicable documents, perform routine surveillance activities such as generation of nonconformance reports, validator training, and QA reports to management.

  Ms. Rauto has over 38 years of environmental laboratory and data validation experience. She has worked under the DoD QSM data validation guidelines for the past 10 years. Her experience includes performance of data validation in the GC, trace metals, and wet chemistry areas for major Federal projects. Her laboratory experience includes hands-on CLP and SW-846 ICP/GFAA analysis, pesticide/PCBs and wet chemistry analysis.

- **Christina Rink-Ashdown, Inorganic Chemist**
  Project Role: Inorganic Data Validator/Project Manager
  Data Validation Experience: 9 years
  Overall Laboratory and Data Validation Experience: 11 years
  B.S. Biology, University of California, San Diego 2006

  Ms. Rink-Ashdown will perform the role of day to day Project Manager for this project. She will monitor schedules, compliance of validation to the Required Guidelines, perform routine surveillance activities such as generation of non-conformance reports, validator training and QA reports to management.

  Ms. Rink-Ashdown has over 11 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the trace metals, radiochemistry, and wet chemistry areas for major Federal and commercial projects. Her laboratory experience includes hands-on CLP and SW-846 ICP/CVAA analysis and overall technical review of data deliverables.

  Ms. Rink-Ashdown specializes in the data validation of radiochemistry, trace metals, wet chemistry, and methyl mercury and analyses under MARLAP and USEPA functional guidelines or equivalent protocol. Over the past two years, she has worked under various DoD, CERCLA and EPA data validation guidelines for the various CERCLA, Navy, Army Corps, AFCEE/AFCEC and commercial projects. She is also certified as a “Radiometric Data Validation Specialist” through course work and testing by the Radiochemistry Society.

- **Shauna McKellar, Chemist / Project Manager**
  Project Role: Chemist
  Data Validation Experience: 8 years
  Overall Laboratory and Data Validation Experience: 14 years
  B.S. Environmental Toxicology, UC Davis, 2006

  Ms. McKellar has over 14 years of environmental consulting and data validation experience. She has worked under EPA data validation guidelines for the past 6 years and has inorganic and organic data validation experience using USEPA functional guidelines, Navy procedures, project QAPPs, ADEC checklists, and other applicable documents for EPA, DoD and commercial projects.

  Ms. McKellar specializes in the data validation and contract compliance screening using LDC's Automated Data Review (ADR) software, and is familiar with a variety of different Electronic Data Deliverable formats, including SEDD and NEDD. She has supervised large data validation projects under the USACE and Navy Southwest Division RAC contracts

- **Linda Ta, Chemist / Project Manager**
  Project Role: Chemist
  Data Validation Experience: 1 year
  Overall Laboratory and Data Validation Experience: 5 years
  B.S. Geology, CSU Long Beach, 2012

  Although Ms. Ta has less than one year of experience at LDC, she is proficient in data validation for GC and GCMS methods for Level II and III.

  Ms. Ta has so far become responsible for writing project data quality assessment reports (DQAR), has learned to use ADR for validation, and is in training to perform ERPIMS database tasks.

- **Tony Rommelfanger, Data Control Manager**
  Project Role: Data Custodian

  Mr. Rommelfanger will perform the role of data custodian for this project. He will perform the log-in of all data packages into the LDC tracking system. This system will generate spreadsheets for identifying all samples, their collection date, analysis performed, matrix, and report due date. Upon the completion of each delivery order, he will archive and catalog all reports and data in a secured storage area.

  Mr. Rommelfanger has over 26 years of experience in laboratory and data management experience. He has experience in organizing, logging in, and tracking data packages for technical staff.

Resumes of Key Staff

- Stella Cuenco, Senior Chemist
- Pei Geng, Senior Chemist
- Richard Amano, Principal Chemist
- Linda Rauto, Principal Chemist
- Christina Rink-Ashdown, Inorganic Chemist
- Shauna McKellar, Chemist/EDD Specialist
- Linda Ta, Chemist

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RESUME
STELLA S. CUENCO

EDUCATION

B.S. Chemistry, 1991
University of the Philippines (UP)

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Senior Chemist
1996 to present

Ceimic Corporation
GC/MS Chemist
1996

Analytical Technologies, Inc.
GC/MS VOA Group Leader
1992 to 1996

Analytical Technologies, Inc.
GC/MS Chemist
1991 to 1992

Natural Products Research, UP
Research Assistant
1990 to 1991

REPRESENTATIVE EXPERIENCE

Ms. Cuenco has over 27 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the GC and GC/MS areas for major Federal projects. She has performed large validation projects under Boeing, Navy Southwest, Northwest and Pacific Division, EPA Region IX ESAT, USACE and AFCEE/AFCEC programs. Her laboratory experience includes hands-on CLP and EPA analysis of GC and GC/MS volatile organic compounds.

Specifically, Ms. Cuenco has over 22 years organic data validation experience using USEPA (including Region III) functional guidelines and other applicable documents.

- As senior chemist with LDC, Ms. Cuenco specializes in the data validation and contract compliance screening of gas chromatography-mass spectrometry analyses as well as gas chromatography analyses. She has a thorough knowledge and understanding of gas chromatography and gas chromatography-mass spectrometry (GCMS) and high resolution GCMS methods referenced in EPA CLP, SW-846, EPA 500, 600 and 1600 series documents. She has performed large data validation under Boeing, Navy Southwest and Pacific Divisions and EPA Region IX ESAT, USACE and AFCEE/AFCEC projects.

Ms. Cuenco has over 5 years experience in an environmental laboratory performing the analysis of organic parameters.

- As GC/MS chemist at Ceimic Corporation, a full service environmental analytical chemistry facility, Ms. Cuenco performed GC and GC/MS volatile analyses. She was responsible for the final reporting of analytical data for this section.

- As GC/MS VOA Group Leader at Analytical Technologies Inc., a full service environmental analytical chemistry facility, Ms. Cuenco was responsible for all GC/MS functions which included overseeing daily operations, training staff, final reporting of analytical data, and compliance with method requirements.

- As research assistant at Natural Products Research, UP, Ms. Cuenco researched chemical literature for plants with known medicinal properties as well as performed microbiological and pharmacological tests on plant extracts.

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RESUME
PEI GENG

EDUCATION

M.S. Organic Chemistry, 1989
Sam Houston State University

B.S. Environmental Chemistry, 1983
Nankai University

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Senior Chemist
1997 to present

Ceimic Corporation
GC/MS and GC Chemist
1996 to 1997

PACE Analytical Service Inc.
GC/MS and GC Chemist
1990 to 1996

REPRESENTATIVE EXPERIENCE

Ms. Geng has over 28 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the GC and GC/MS areas for major Federal projects. She has performed large validation projects under Boeing, Navy Southwest, Northwest and Pacific Division, EPA Region IX ESAT, USACE and AFCEE/AFCEC programs. Her laboratory experience includes hands-on CLP and EPA analysis of GC and GC/MS volatile organic compounds.

Specifically, Ms. Geng has over 21 years organic data validation experience using USEPA CLP (including Region III) functional guidelines and other applicable documents.

- As chemist with LDC, Ms. Geng specializes in the data validation and contract compliance screening of gas chromatography-mass spectrometry analyses as well as gas chromatography analyses. She has a thorough knowledge and understanding of gas chromatography and gas chromatography-mass spectrometry (GCMS) and high resolution GCMS methods referenced in EPA CLP, SW-846, EPA 500, 600 and 1600 series documents. She has performed large data validation under Boeing, Navy Southwest and Pacific Divisions and EPA Region IX ESAT, USACE and AFCEE/AFCEC projects.

Ms. Geng has over 7 years of experience in an environmental laboratory performing the analysis of organic parameters.

- As both a GC and GC/MS chemist at Ceimic Corporation, a full service environmental analytical chemistry facility, Ms. Geng performed GC and GC/MS volatile and semivolatile analyses.

- As both a GC and GC/MS chemist at PACE Analytical Service Inc., a full service environmental analytical chemistry facility, Ms. Geng performed GC and GC/MS volatile and semivolatile analyses as well as overseeing the final reporting of analytical data, and compliance with method requirements.

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RESUME
RICHARD M. AMANO

EDUCATION

B.S. Biochemistry
University of California, Los Angeles, 1979

A.A. Chemistry
El Camino College, 1977

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Program Manager/Principal Scientist
2011-present
President/Principal Chemist,
1991 to 2011

Analytical Technologies, Inc
Laboratory Director
1986 to 1991

Brown & Caldwell
Laboratory Supervisor
1983 to 1986

West Coast Technical Service
Senior Chemist
1980 to 1983

University of California, Los Angeles
Laboratory Technician
1979 to 1980

REPRESENTATIVE EXPERIENCE

Mr. Amano has over 38 years of combined environmental laboratory, QA/QC, laboratory auditing, data management, environmental software development, and data validation experience. Prior to founding LDC in 1991, he directed to two major laboratories, Analytical Technologies, Inc. (San Diego) and Brown and Caldwell. His experience includes oversight and direction of major QA/QC and data validation efforts for confidential petroleum spill projects, Boeing sites, Superfund sites, DoE sites, Navy RI/FS projects, Army Corps of Engineers investigations, and AFCEE/AFCEC projects. He has also overseen several laboratory audits for major analytical testing programs and large scale environmental software development for the US Army Corps of Engineers (USACE).

Specifically, Mr. Amano has over 26 years of experience with validation of organic, inorganic, and radiochemical analyses using USEPA, Navy, USACE, DoD, AFCEE/AFCEC, and other applicable guidance documents.

- As program manager/principal scientist with LDC, Mr. Amano provides management and technical support to the data validation, data quality, and software group. He oversees and directs all environmental software projects developed for the USACE. Additionally, he acts as the primary LDC/USACE contract manager for software development projects. He is the primary author of the nationally distributed Automated Data Review (ADR) software used by the USACE, Navy, DTSC, and commercial clients.

- As President/principal chemist with LDC, Mr. Amano provided management and technical support to the data validation, data quality, and software group. He provided technical support in the organic, inorganic, and radiochemical areas. Under several major QA/QC and data validation programs, he provided, as needed, a final review of data validation and assessment reports. Mr. Amano specializes in the evaluation, validation, and interpretation of environmental testing data. Additional responsibilities include laboratory QA/QC and NELAC audits, implementation and support of QA/QC programs and data management support for engineering firms, environmental lab training, consultation on LIMS data base designs for environmental laboratories, and expert witness litigation support. Mr. Amano has managed and directed several major data validation and QA/QC projects for Army Corps, Navy, Air Force, and commercial contracts. Industrial projects include major petroleum oil spill related data validation and assessment of hydrocarbon analyses. The DoD projects include Southwest Division CLEAN 1 (Jacobs Engineering/IT Corporation/CH2M Hill), Southwest Division CLEAN 2 (Bechtel National), Pacific Northwest Division CLEAN (URS Greiner), Southern Division CLEAN (ABB Environmental), Atlantic Division CLEAN (EA Engineering), Southwest Division RAC (OHM Remediation), Pacific Division CLEAN (Earth Tech), AFCEE/AFCEC Mather AFB (Montgomery Watson), AFCEE/AFCEC Pease AFB (Bechtel Environmental), AFCEE/AFCEC England AFB (Law Environmental), Army Corps Travis AFB (CH2M Hill), Army Corps Hawthorne Army Depot (Tetra Tech), Nevada Test Site (IT Corp), and Army Corps Fort Ord (Harding Lawson). He provided oversight and direction for major USACE environmental software development including Automated Data Review (ADR), FUDSFORUM, MRSPP, and FUDSCHEM. He has a thorough knowledge and understanding of EPA CLP, SW-846, EPA 500, EPA 900, and EPA 600 series methods. He additionally has supported attorneys as an expert witness and has taught data integrity and lab ethics courses for several organizations.

Mr. Amano has over 12 years environmental laboratory experience in commercial laboratories supervising or performing the analyses of organic, inorganic, and radiochemical parameters.

- As laboratory director and technical director of Analytical Technologies, Inc, a full service environmental analytical chemistry facility, Mr. Amano was responsible for all facets of operations. These responsibilities include direct technical input for GC, GC/MS, and inorganic operations, personnel selection, assisting in method development, and selection of non-routine analysis. In addition, Mr. Amano was responsible for supervision of the 80 scientists employed at ATI's San Diego laboratory with all group supervisors, quality assurance and safety coordinators reporting directly to him. Mr. Amano has managed numerous analytical testing programs including the North Island Navy Confirmation Study, Miramar Air Force Base Confirmation Study, and investigations at several of the EPA Superfund sites. His environmental expertise focuses on the chemical testing related to hazardous waste investigations, site remediation, and groundwater monitoring programs.

- While at Brown & Caldwell, Mr. Amano's responsibilities encompassed supervision of daily operations of the laboratory, personnel staffing, technical advisor for operation of the gas chromatograph/mass spectrometer (GC/MS) section, maintenance of QA/QC programs, and coordination between engineers, clients, and laboratory analysts. Additionally, he supervised the daily operation of all radiochemistry activities which included alpha, beta, and radium analyses.

- At West Coast Technical Service, Mr. Amano was responsible for daily operation and quality control of the GC/MS group. Mr. Amano was highly involved with the USEPA hazardous waste contracts. Some special projects included dioxin selected ion monitoring analysis, EPA method 624 and 625 validation studies, and low level drinking water evaluations.

TECHNICAL PRESENTATIONS

"Understanding the Workings of an Environmental Laboratory"
Southern California Department of Health Services, 1984
Hargis & Associates, Inc, La Jolla, CA, 1987
Hargis & Associates, Inc, Tucson, AZ, 1987
Westec Services, San Diego, CA, 1987
Applied Hydrogeologic, Inc, San Diego, CA 1989

"Data Validation, QA/QC, and Environmental Analysis"
Van, Waters, and Rogers, Seattle, WA, 1990
ERC Environmental, Honolulu, HI, 1991
Harding Lawson Associates, Honolulu, HI, 1991
Pacific Division Naval Engineering Group, Honolulu, HI, 1991
OHM, Irvine, CA, 1996
Southwest Division Naval Engineering Group, San Diego, CA, 1996
Navy Public Works Center, San Diego, CA 1996

"GC versus GC/MS"
J.H. Kleinfelder & Associates, Artesia, CA 1986
Hargis & Associates, Inc, La Jolla, CA 1987

"Analytical Methods and QA/QC Procedures for Environmental Analysis"
County of San Diego Department of Health Services, San Diego, CA 1989
Regional Water Quality Control Board, San Diego, CA 1990
ERC Environmental, San Diego, CA 1990
Mittlehauser Corporation, Laguna Hills, CA 1991

"Hydrocarbon Testing Related to Underground Storage Tanks (UST)"
San Diego County DOHS, San Diego, CA, 1986
J.H. Kleinfelder & Associates, Artesia, CA 1986
Woodward Clyde Consultants, San Diego, CA 1987

Engineering Enterprises, Long Beach, CA 1987

"Quality Control/Quality Assurance in Laboratories"
Assoc of Hazardous Materials Professionals, Anaheim, CA 1986
R.L. Stollar & Associates, Santa Ana, CA 1989

"The Influence of Sample Matrix on Environmental Analysis"
Assoc of Hazardous Materials Professionals, San Diego, CA 1990

"Comparison of Air Sampling Media"
Assoc of Hazardous Materials Professionals, Anaheim, CA 1991

"Building a Second Generation LIMS for Commercial Laboratory Operations"
Pittsburgh Conference, New York, NY, 1990 (Invited Speaker)

"Employment Outlook in Environmental Laboratories"
Southern California American Chemical Society, 1985

"Opportunities in the Environmental Lab in the 1990's"
American Chemical Society, 1990

"Data Validation of Radiochemical Analyses"
Hargis + Associates, La Jolla, CA 1991

"Detection Limits - MDL, PQL, RDL, LOD ?"
Analytical Technologies, Inc., 1991

"Poor QA/QC or Laboratory Fraud: Have labs crossed the fine line?"
Environmental Professionals Organization, Newport Beach, CA 1996

"Electronic Data Deliverables and Automated Data Review/Validation"
Army Corps of Engineers, Sacramento District, Sacramento, CA 1996

"Navy Environmental Data Transfer Standards"
Kleinfelder, San Diego, CA 1997

"Laboratory QA/QC Update for DoD Programs"
ACTLabs, Long Beach, CA 1997

LECTURING AND TEACHING

"Instrumental Analysis of Hazardous Materials"
University of California, San Diego 1988 - 1995

"Field Monitoring & Laboratory Analysis of Hazardous Materials"

University of California, San Diego 1995 - 1998

California State Fullerton, Guest Lecturer, 1985 & 1990

San Diego State University, Hydrology Department, Guest Lecturer, 1988

"EPA Level 4 Data Validation" Workshop
Applied Geotechnology, Inc., Bellevue, WA, 1993

"Environmental Analyses in the 90's"

National University, Guest Lecturer, 1993

"Data Quality Objectives for Federal Environmental Programs"
University of California, San Diego 1993

"Data Integrity and Data Management for Federal Environmental Programs"
University of California, San Diego 1994

"Laboratory QA/QC and Electronic Data Requirements for DoD Programs"
University of California, San Diego 1995

"Application and Utilization of Department of Defense (DoD) Guidance Documents"
University of California, San Diego 1996

"Laboratory Quality Assurance for Department of Defense Programs"
University of California, San Diego 1997

PUBLICATIONS

"Managing an Environmental Chemistry Laboratory for Profit",
John H. Taylor, Jr and Richard M. Amano,
Journal of Chromatographic Science, 1987

MEMBERSHIPS AND AFFILIATIONS

American Chemical Society
Association of Hazardous Materials Professionals, (Steering Committee 1988-1994)
Association of California Testing Laboratories, (Board Member 1989-1991)
County of San Diego, Site Assessment and Mitigation Technical Forum (Steering Committee 1990-2000)
American Society Quality Control (1992-2005)

FOUNDATIONS

Golf for Autistic Children in America (GACA), Founder/President (2011)

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RESUME
ERLINDA T. RAUTO

EDUCATION

B.S. Chemical Engineering 1967
Feati University - Manila, Philippines

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Senior Chemist/Validation Group Manager
1993 to present

Appropriate Technologies, Inc.
Chemist II
1992 to 1993

AECOS Inc.
Laboratory Supervisor
1989 to 1992

PWCSA #4 County Complex
Laboratory Analyst
1986 to 1989

Kalama Specialty Chemical
Chemist
1980 to 1982

REPRESENTATIVE EXPERIENCE

Ms. Rauto has over 38 years combined environmental laboratory, QA/QC, and data validation experience. Her experience includes performance of data validation in the GC, trace metals, and wet chemistry areas for major Federal projects. Her laboratory experience includes hands-on CLP and EPA ICP/GFAA analysis, pesticide/PCBs and wet chemistry analysis.

Specifically, Ms. Rauto has over 25 years of experience with organic data validation and assessment using USEPA (including Region III) functional guidelines and other applicable documents.

- As a Principal chemist with LDC, Ms. Rauto provides management and technical support to the data validation group. She specializes in the data validation and compliance screening of gas chromatography organic analyses. This validation includes EPA CLP, SW-846, and EPA Water and Wastewater methods. Over the past 16 years, Ms. Rauto has performed USEPA Level 3 and Level 4 (including NFESC Level C and D) validation for projects including Boeing SSFL, Southwest Division CLEAN 1 (Jacobs Engineering/IT Corporation/CH2M Hill), Southwest Division CLEAN 2 (Bechtel National), Pacific Northwest Division CLEAN (URS Greiner), Southern Division CLEAN (ABB Environmental), Atlantic Division CLEAN (EA Engineering), Southwest Division RAC (OHM Remediation), Pacific Division CLEAN (Earth Tech), DoE Atomic City (Jacobs

Engineering Group), Army Corps of Engineers, Travis AFB (CH2M Hill), Army Corps of Engineers, Camp Navajo (Tetra Tech), AFCEE/AFCEC Mather AFB (Montgomery Watson), AFCEE/AFCEC Pease AFB (Bechtel Environmental), AFCEE/AFCEC England AFB (Law Environmental), Army Corps of Engineers, Hawthorne Army Depot (Tetra Tech), Army Corps of Engineers, Fort Ord (Harding Lawson), Nevada Test Site (IT Corp), and AFCEE/AFCEC Beale AFB (Law/Crandall, Inc.).

Ms. Rauto has organic laboratory experience with over 13 years of experience in an environmental laboratory supervising or performing the analyses of organic parameters.

- As a chemist II at Appropriate Technologies, Inc., a hazardous waste disposal facility, Ms. Rauto was responsible for the operation of the gas chromatographs. Organochlorine pesticides and PCBs analysis was the primary method performed. In addition, Ms. Rauto performed ICP analyses for trace metals, as well as, supported engineers in developing waste treatment processes.

- As the laboratory supervisor at AECOS Inc., Ms. Rauto supervised and directed operation of gas chromatography, atomic absorption, and wet chemistry instrumentation. She interfaced with state and federal agencies to maintain certification and developed a written QA/QC plan for the laboratory.

- As chemist at Kalama Specialty Chemical, Ms. Rauto performed gas chromatography analysis on raw materials and finished products. She worked on the research and development of new chemicals.

Additionally, Ms. Rauto has 2 years inorganic/conventional analytical experience.

- While employed at the Prince William County laboratory, Ms. Rauto was involved in the analysis of water and wastewater for metals and wet chemistry parameters. This included BOD, COD, nitrate, nitrite, sulfate, chloride, fluoride, TDS, conductivity, pH, cyanide, and phenols analyses. She maintained the QA/QC program to assure compliance with EPA guidelines.

AFFILIATIONS
American Society for Quality Control

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RESUME
CHRISTINA RINK-ASHDOWN

EDUCATION

BS Biology, 2006
University of California, San Diego

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Inorganic Chemist
2009 to present

Enviromatrix Analytical, Inc.
Metals Chemist
2007 to 2009

REPRESENTATIVE EXPERIENCE

Ms. Rink-Ashdown has over 11 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the trace metals, radiochemistry, and wet chemistry areas for major Federal and commercial projects. Her laboratory experience includes hands-on CLP and SW-846 ICP/CVAA analysis and overall technical review of data deliverables. Specifically, Ms. Rink-Ashdown has over 6 years inorganic and radiochemistry data validation experience using USEPA (including Region III) functional guidelines and other applicable documents.

As chemist with LDC, Ms. Rink-Ashdown specializes in the data validation of trace metals, wet chemistry, methyl mercury and radiochemistry analyses using USEPA functional guidelines or equivalent protocol. She has worked under various CERCLA and EPA data validation guidelines for the various CERCLA, Navy, Army Corps, AFCEE/AFCEC and commercial projects. She is certified as a “Radiometric Data Validation Specialist” through course work and testing by the Radiochemistry Society. **Ms. Rink-Ashdown has validated over 2,000 samples for various isotopes in the last two years.**

Ms. Rink-Ashdown has over 2 years of environmental laboratory experience in a laboratory performing the analyses of inorganic parameters.

As lead inorganic chemist at Enviromatrix Analytical, Inc., Ms. Rink-Ashdown managed the inorganic chemistry section which performed techniques such as atomic absorption and inductively coupled argon plasma spectrometry. These analyses were performed from methods referenced in EPA CLP, SW-846, and Standard Methods documents.

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RESUME
SHAUNA McKELLAR

EDUCATION

B.S. Environmental Toxicology, 2006
University of California at Davis

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Project Manager / Chemist
May 2010 to present

D-Max Engineering, Inc.
Assistant Project Scientist
January 2007 to May 2010

University of California at Davis
Undergraduate Researcher
March 2005 to June 2006

REPRESENTATIVE EXPERIENCE

Ms. McKellar has over 14 years combined consulting, field sampling, database management, data validation, and automated data review experience. Her experience includes performance of automated data validation for major Navy Southwest Division, US Army Corps of Engineers, and Alaska DEC projects as well as data management for commercial and litigation projects. Her field sampling experience includes surface water sampling in both wet and dry weather conditions, and her laboratory experience includes preparation and analysis of samples utilizing HPLC and UV-vis spectrometry, instrument maintenance, and data evaluation.

Specifically, Ms. McKellar has over 6 years of inorganic and organic data validation experience using USEPA functional guidelines, Navy procedures, QAPP, ADEC checklists, and other applicable documents, in addition to more than 3 years of experience working in the environmental compliance field, and over one year working in a research laboratory.

- As chemist with LDC, Ms. McKellar specializes in the data validation and contract compliance screening using LDC's Automated Data Review (ADR) software, and is familiar with a variety of different Electronic Data Deliverable formats, including SEDD and NEDD. She has supervised large data validation projects under the USACE and Navy Southwest Division RAC contracts.

- As an assistant project scientist with D-Max Engineering, Ms. McKellar performed wet and dry weather surface water sampling related to compliance with Regional Water Quality Control Board NPDES Permits. She also maintained large project databases related to stormwater inspection and monitoring programs for various municipalities.

- As an undergraduate researcher at the University of California at Davis, Ms. McKellar conducted an independent atmospheric chemistry research project utilizing HPLC and UV-Vis spectroscopy. She was responsible for the instrument calibration, verifying sample analyses, and routine instrument maintenance.

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RESUME
LINDA TA

EDUCATION

B.S. Geology, 2012
California State University Long Beach

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc.
Chemist and Project Manager
July 2018 to present

Eurofins Calscience
Project Manager Assistant
02/2014-07/2018

Eurofins Calscience
Chemist
10/2013-02/2014

REPRESENTATIVE EXPERIENCE

Although Ms. Ta has less than one year of experience at LDC, she is proficient in data validation for GC and GCMS methods for Level II and III.

- As a project manager with LDC, Ms. Ta assists the other project managers through project set-up, validation, report review, and writing project data quality assessment reports. Ms. Ta is also in training to perform ADR validation and ERPIMS database tasks. She is also the administrative support specialist for LDC Advantage secure data sharing portal where she assists with project and client set-up.

Ms. Ta has 5 years of experience in an environmental laboratory performing the analysis of organic parameters.

- As a GC/MS chemist at Eurofins Calscience, a full service environmental analytical chemistry facility, Ms. Ta performed GC/MS volatile analyses using various EPA Methods in accordance with standard operating procedures. Ms. Ta utilized Agilent Chemstation and Laboratory Information Management Systems (LIMS) to analyze and report data.

- As a Project Manager Assistant at Eurofins Calscience, Ms. Ta assisted multiple Project Managers to oversee all laboratory functions for various projects. In addition, she managed several minor projects for various Environmental consultants. She served as the secondary point of contact for clients, ensured that Chain of Custodies are accurate and analyses are logged in correctly, directed preparation of bottle orders, scheduled pickups and deliveries, coordinated subcontracted analyses, provided quality control review of project-related documents and compliance to project criteria, worked closely with lab group supervisors and executive managers in planning new projects and managed ongoing analytical work. Ms. Ta evaluated analytical data, prepared project

case narratives and summaries, compiled laboratory reports for external validation, and worked closely with chemists and lab group supervisors in resolving quality assurance and quality control issues. She prepared detailed project billing and generated multiple Electronic Data Deliverables. She was also responsible for training new Project Manager Assistants on various PM tasks, data review and compilation of laboratory Level III/IV QC Data Deliverables.

Below is a partial listing of clients and projects which Ms. Ta has assisted:

-Department of Defense Sites
- Edwards AFB
- George AFB
- Vandenberg AFB

-SSFL NASA
-BP/ARCO
-Aerospace Company

Below is a listing of various database management software which Ms. Ta has extensive training on:

-ERPIMS
-EQUIS
-Envirodata
-NEDD
-ADR
-Geotracker

Relevant Project Experience

LDC has performed data validation and Quality Assurance services for contaminated sites overseen by AFCEE/AFCEC, Navy Southwest Division, DoE, DoD, EPA Superfund projects overseen by EPA Regions II, III, IV, IX, X, USACE projects reviewed by the Alaska, Baltimore, Louisville, Albuquerque, Seattle, Philadelphia, and Sacramento Districts, and Navy projects reviewed by NFESC.

LDC is the software developer and expert in the use of the Automated Data Review (ADR) software. LDC has been using the ADR.NET version for over 2 years and has the current Version in full implementation. LDC has performed over 1000 ADR projects in the past 10 years' worth over $2,000,000 in revenue. ADR clients include, but are not limited to: Tetra Tech EC, Sealaska, AMEC, EPA, California DTSC, MWH, Trevet, Brown & Caldwell, AECOM, Shaw, ITSI, CDM, Weston Solutions and the San Gabriel Watermaster.

LDC has validated over 1,000,000 samples for analyses such as volatile organics (CLP, EPA Method 8240/8260), semivolatile organics (CLP, EPA Method 8270), organochlorine pesticides/PCBs (CLP, EPA Method 8081/8082), chlorinated herbicides (EPA Method 8151), purgeable halocarbons and aromatics (EPA Method 8021), trace metals (CLP, EPA Method 6010/6020/7000), PAHs by EPA 8310 and 8270,TOC analyses, hexavalent chromium, total petroleum hydrocarbons (EPA Method 8015/CDOHS LUFT), radiochemical constituents including gross alpha/beta, alpha spec, gamma spec, tritium, and uranium, and general minerals.

LDC has met their contractual turnaround time and quality requirements on over 99% of the projects completed.

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Project References/Experience

Name and Address, Contact Person, Telephone	Work Description and Location	Requested Deliverables	Number of samples/ Matrix	Value ($)	Start/Stop
Washington State Department of Transportation Environmental Services Office P.O. Box 47332 Olympia, WA 98504 ATTN: Mr. Brad Archbold ArchboB@wsdot.wa.gov 360-570-6636	WSDOT NPDES Stormwater Monitoring LDC performed Stage2A, 2B and 4 data validation for a full suite of analyses including GCMS, GC, Metals, and Wet Chemistry analyses.	Stage 2A, 2B, and 4 data validation reports. Work conducted under Washington State Department of Transportation Stormwater Monitoring	>3,800 Soil and Water	$48,332	04/2013-07/2016
Leighton Consulting, Inc. 17781 Cowan Irvine, CA 92614 ATTN: Mr. Mark Withrow mwithrow@leightongroup.com cell: 949-394-2194 office: 949-681-4211	San Onofre Nuclear Generating Station (SONGS) Mesa Facility LDC performed EPA Level III and IV equivalent data validation for a full suite of analyses. Analyses included GCMS, GC, Metals, and Wet Chemistry analyses.	EPA Level III and IV data validation reports. Work conducted under USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG).	>3,600 Soil, Water, and Air	$66,225	09/2015-present
Leighton Consulting, Inc. 17781 Cowan Irvine, CA 92614 ATTN: Ms. Julie Harriman jharriman@leightongroup.com Direct : (949) 681-4264 Cell: (949) 572-8129	Aliso Canyon LDC performed EPA Level II equivalent data validation. Analyses included VOA, SVOA, Total Hydrocarbons, Isopropyl Alcohol, Total Dust, and Sulfur Compounds.	EPA Level II data validation reports and PARCC summary report. Work conducted under USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG).	>1,200 Air, Wipe, and Disk	$15,749	07/2016-08/2016
Tetra Tech, EM Inc. 1999 Harrison Street, Suite 500 Oakland, CA 94612 ATTN: Ms. Sara Woolley Sara.Woolley@tetratech.com Direct: 510.302.6311 Main: 510.302.6300	Subcontract 161408 For Various project sites including: EAGLE NEST INVESTIGATION FORT IRWIN GOLD BEACH MILL HPNS MARE ISLAND MOTCO LITIGATION NAF EL CENTRO NWS CONCORD LDC performed Cursory and Full data validation for a full suite of analyses using specified EPA Guidelines, DoD QSM Version 4.2, and Tetra Tech EMI, Inc. validation documents.	TTEMI Format data validation reports and EDD using Tetra Tech's validate program.	>3000 Soil and Water	$39,785	10/2011 – 10/2013

Name and Address, Contact Person, Telephone	Work Description and Location	Requested Deliverables	Number of samples/ Matrix	Value ($)	Start/Stop
GEI Consultants, Inc. 455 Winding Brook Drive Glastonbury, CT 06033 (860) 368-5342 direct (860) 368-5300 main Jaimie Wargo JWargo@geiconsultants.com	Various NYSDEC sites LDC performed Category B equivalent data validation Analyses included: VOC, SVOC, Pesticide, PCB, Herbicide, Steroids, Metals, Wet Chemistry	Category B data validation and NYSDEC DUSR reports	>1,700 Soil and Water	$72,000	2010-present
TetraTech EC 17885 Von Karman Ave, Suite 500 Irvine, CA 92614 Attn: Lisa Bienkowski (949) 809-5028 Lisa.Bienkowski@tetratech.com	Tetra Tech Hunter's Point CA LDC performed EPA Level III and IV equivalent data validation for a full suite of analyses on more than 50,000 soil and water samples. Analyses included tritium, isotopic thorium, uranium and plutonium, and gross alpha/beta. Expedited turnaround times were included (5 day TAT)	EPA Level III and IV data validation reports. Work conducted under US Navy RAC program, Southwest Div.	>50,000 Soil and Water	$645,733	02/2001-present
AECOM (Earth Tech) 700 Bishop Street Honolulu, HI 96813 Contact: Scott Lewis (808) 523-8874 Scott.Lewis@aecom.com	Data validation per EPA level "3/C" and "4/D" guidelines for volatile organic, semivolatile organic, pesticides/PCBs, herbicides, phenols, phosphorus pesticides, dioxin, radiochemical, and trace metal analyses in soil, water, and tissue matrices. (Navy PACDIV CLEAN, Honolulu, HI)	LDC worksheets and validation reports	>10,000 samples Water/Soil/Air	$750,000	4/98-present
CBI (formerly Shaw E&I) 3347 Michelson Drive, Ste 200 Irvine, CA 92612 Contact: Mr. Dwayne Ishida Phone: (949) 660-7561 Dwayne.Ishida@CBIFederalServices.com	Data validation per EPA level "3" and "4" and AFCEE/AFCEC guidelines for volatile organic, semivolatile organic, pesticides/PCBs, herbicides, phenols, phosphorus pesticides, dioxin, radiochemical, and trace metal analyses in soil, water, and tissue matrices. (Navy Southwest Division RAC, San Diego, CA and various AFCEE/AFCEC projects)	LDC worksheets and validation reports	>5000 samples Water/Soil/Air	$350,000	6/06-present

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760/827-1100 Fax: 760/827-1099

Name and Address, Contact Person, Telephone	Work Description and Location	Requested Deliverables	Number of samples/ Matrix	Value ($)	Start/Stop
Santa Clara Pueblo Office of Environmental Affairs 578 Kee Street Espanola, New Mexico, 87532 Ms. Ernestine Naranjo 505-692-6270 phone 505-747-2728 fax enaranjo@santaclarapueblo.org	Data validation per EPA level "III" SCP-OEA-DEPO, Data Validation using ADR For full suite of Organic, Inorganic, and Radiochemical analyses. Radiochemical analyses including Gross alpha & beta, Gamma Spectroscopy, Iodine, Radium-226/228, Strontium-90, Isotopic Pu, Th, and U, Tritium, and Americium by various EPA and GA methods.	Level III validation using ADR	>750 Soil, Water, and Air	$11,987.05	12/2015 - present
Anchor Environmental, LLC 720 Olive Way, Suite 1900 Seattle, WA 98101 Ms. Joy Dunay 206.287.9130, jdunay@anchorqea.com	Data validation per Level “C” Newtown Creek Phase 2: Third Party Data Validation of laboratory results, EDD population, and Data Quality Assessment Reports (DQAR) for various methods Subcontractor	LDC worksheets and validation reports	>63,000 Soil and Water	$743,793.88	6/14-1/16
Tradebe Environmental Services, LLC. 628 South Saratoga Street Cohoes, NY 12047 Attn: Accounts Payable Mr. Tom VanVranken (518) 235-0401 tom.vanvranken@tradebe.com	Norlite MACT Project LDC performed Category B equivalent data validation Analyses included: Metals, Mercury, Heat Content, Ash Content, Chlorine, Density, and Dioxins	Category B data validation and NYSDEC DUSR reports	11 Soil, Air and Water	$2,000.00	9/2013
P.W.Grosser Consulting2015 630 Johnson Ave, Suite 7 Bohemia, NY 11716 Attn: Mr. Derek Ersbak w. 631.589.6353 f. 631.589.8705 dereke@pwgrosser.com	Former Arkansas Chemical Co.Site and Former Ronkonkoma Wallpaper Site 203 Jay St. LDC performed Category B equivalent data validation Analyses included: VOC, SVOC, Pesticide, PCB, Metals, Wet Chemistry	Category B data validation and NYSDEC DUSR reports	>200 Soil and Water	$3,024.00	11/2014-present

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760/827-1100 Fax: 760/827-1099

Name and Address, Contact Person, Telephone	Work Description and Location	Requested Deliverables	Number of samples/ Matrix	Value ($)	Start/Stop
Amec Foster Wheeler Environment and Infrastructure, Inc. 9210 Sky Park Court, Suite 200 San Diego, CA 92123 Attn: Mr. Rolf Schottle rolf.schottle@amecfw.com Tel +1 (858) 300 4300, Fax +1 (858) 300 4301, Direct +1 (858) 300 4323	Regional Harbor Monitoring Program (RHMP), San Diego, California Third party validation of LDC performed EPA Level III and IV equivalent data validation for a full suite of analyses.	LDC worksheets and validation reports	>200 Water	$9,011.40	3/15–6/16

Note: All above projects were 100% self-performed by LDC

Appendix D

Data Usability Summary Report

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact Environmental
170 Keyland Court
Bohemia, NY 11716
ATTN: Mr. Christopher Connolly
CConnolly@impactenvironmental.com

May 20, 2021

SUBJECT: 100 S 4th Street, Brooklyn, NY, Data Validation

Dear Mr. Connolly,

Enclosed is the final validation report for the fraction listed below. This SDG was received on April 23, 2021. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #50968:

SDG #	Fraction
L2112425	Volatiles

The data validation was performed under Category B guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA Region 2 Analysis of Volatile Organic Compounds in Air Contained Canisters, SOP HW-31, Revision 6; September 2016
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, EPA-R-2017-002; January 2017

Please feel free to contact us if you have any questions.

Sincerely,

Christina Rink

Christina Rink
crink@lab-data.com
Project Manager/Senior Chemist

207 pages-ADV

Attachment 1

Category B EDD DUSR **LDC #50968 (Impact Enviromental, Bohemia, NY / 100 S 4th Street, Brooklyn, NY)**

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (TO-15)																																	
Matrix:	Air/Water/Soil			A	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	L2112425	04/23/21	05/14/21	26	0																																

Site: 100 South 4th Street, Brooklyn, NY
Laboratory: Alpha Analytical, Inc.
Report No.: L2112425
Reviewer: Felomina Tanguilig and Christina Rink/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date: May 13, 2021

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SV-1A	L2112425-01	VOC
SV-1B	L2112425-02	VOC
SV-2A	L2112425-03	VOC
SV-2B	L2112425-04	VOC
SV-3B	L2112425-05	VOC
SV-3A	L2112425-06	VOC
SV-4	L2112425-07	VOC
SV-5A	L2112425-08	VOC
SV-5B	L2112425-09	VOC
SV-DUP-1	L2112425-10	VOC
SV-DUP-2	L2112425-11	VOC
IA-1	L2112425-12	VOC
IA-2	L2112425-13	VOC
IA-3	L2112425-14	VOC
IA-4A	L2112425-15	VOC
IA-4B	L2112425-16	VOC
IA-4C	L2112425-17	VOC
IA-4CDL	L2112425-17DL	VOC
IA-4D	L2112425-18	VOC
IA-4E	L2112425-19	VOC
IA-4F	L2112425-20	VOC
IA-4G	L2112425-21	VOC
IA-4GDL	L2112425-21DL	VOC
IA-4H	L2112425-22	VOC
IA-5	L2112425-23	VOC
IA-DUP-1	L2112425-24	VOC
IA-DUP-2	L2112425-25	VOC
OA-1	L2112425-26	VOC
IA-2DUP	L2112425-13DUP	VOC
IA-4DDUP	L2112425-18DUP	VOC

Associated QC Samples(s):

Field/Trip Blanks:	None Associated
Field Duplicate pair:	SV-1A and SV-DUP-1
	SV-4 and SV-DUP-2
	IA-4A and IA-DUP-1
	IA-5 and IA-DUP-2

The above-listed air samples were collected on March 12, 2021 and were analyzed for volatile organic compounds (VOCs) by methods TO-15 and TO-15 in selected ion monitoring (SIM) mode. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers with the exception listed below.

Samples IA-4C and IA-4G were diluted for ethanol due to original analyses exceeding the calibration range. For ethanol results in samples IA-4C and IA-4G, the diluted results should be considered the most usable. The IA-4C and IA-4G results should not be considered usable for ethanol

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICV %D	Associated Samples		Validation Action
12/21/20	ICV-AIRLAB17	1,2,4-Trichlorobenzene	34.1	IA-4C	SS	UJ nondetects
		Hexachlorobutadiene	35.4	IA-4D	SS	UJ nondetects
				IA-4E		
				IA-4F		
				IA-4G		
				IA-4H		
				IA-5		
				IA-DUP-1		
				IA-DUP-2		
				OA-1		

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,2,4-trichlorobenzene and hexachlorobutadiene results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were performed on samples IA-2 and IA-4D for VOC analyses. All criteria were met.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples SV-1A and SV-DUP-1, samples SV-4 and SV-DUP-2, samples IA-4A and IA-DUP-1, and samples IA-5 and IA-DUP-2 were submitted as the field duplicate pairs with this sample group. The following table summarizes the concentrations and validation actions taken.

Compound	Concentration (ppbv)		RPD
	SV-1A	SV-DUP-1	
Dichlorodifluoromethane	0.409	0.403	1
Ethanol	81.2	68.2	17
Acetone	193	120	47
Isopropanol	6.29	6.29	0
tert-Butyl alcohol	1.72	0.508	109
Carbon disulfide	0.200U	0.403	Not comparable
1,1-Dichloroethane	0.809	0.353	78
2-Butanone	2.79	1.39	67
cis-1,2-Dichloroethene	1.93	0.645	100
Chloroform	0.390	0.408	5
n-Hexane	0.222	0.200U	Not comparable
1,1,1-Trichloroethane	1.30	0.857	41
Benzene	0.262	0.212	21
Trichloroethene	22.4	16.9	28
Toluene	0.552	0.527	5
2-Hexanone	0.319	0.200U	Not comparable
Tetrachloroethene	6.78	5.60	19

Compound	Concentration (ppbv)		RPD
	SV-4	SV-DUP-2	
Dichlorodifluoromethane	0.582	0.503	15
Chloromethane	0.200U	0.373	Not comparable
Ethanol	24.4	42.0	53
Acetone	3.86	5.98	43
Isopropanol	4.20	9.86	81
tert-Butyl alcohol	0.782	1.78	78
2-Butanone	1.24	1.74	34
Chloroform	2.18	0.643	109
Trichloroethene	3.90	3.03	25
Toluene	0.589	1.02	54
2-Hexanone	0.216	0.371	53
Tetrachloroethene	0.687	0.835	19
Ethylbenzene	0.459	0.790	53
m,p-Xylene	0.812	1.43	55
o-Xylene	0.430	0.670	44
1,3,5-Trimethylbenzene	0.200U	0.347	Not comparable
1,2,4-Trimethylbenzene	0.200U	0.341	Not comparable

Compound	Concentration (ppbv)		RPD
	IA-4A	IA-DUP-1	
Dichlorodifluoromethane	0.408	0.497	20
Chloromethane	0.532	0.524	2
Ethanol	472	438	7
Acetone	15.3	16.4	7
Trichlorofluoromethane	0.226	0.336	39
Isopropanol	93.4	104	11
2-Butanone	0.521	0.519	0
Ethyl acetate	0.733	0.955	26
n-Hexane	0.247	0.242	2
Benzene	0.341	0.336	1
Cyclohexane	0.565	0.533	6
n-Heptane	8.56	8.44	1
Toluene	1.41	1.37	3
m,p-Xylene	0.442	0.481	8
Carbon tetrachloride	0.062	0.082	28
Trichloroethene	0.064	0.069	8
Tetrachloroethene	0.153	0.153	0

Compound	Concentration (ppbv)		RPD
	IA-5	IA-DUP-2	
Dichlorodifluoromethane	0.492	0.491	0
Chloromethane	0.476	0.473	1
Ethanol	479	467	3
Acetone	10.2	10.1	1
Trichlorofluoromethane	1.11	1.06	5
Isopropanol	47.4	46.4	2
2-Butanone	0.797	0.838	5
Ethyl acetate	2.47	2.37	4

Compound	Concentration (ppbv)		RPD
	IA-5	IA-DUP-2	
Chloroform	0.271	0.257	5
n-Hexane	0.200U	0.212	Not comparable
Benzene	0.329	0.331	1
n-Heptane	0.202	0.204	1
Toluene	0.742	0.739	0
m,p-Xylene	0.456	0.431	6
1,2,4-Trimethylbenzene	0.283	0.246	14
Carbon tetrachloride	0.093	0.083	11
Trichloroethene	0.055	0.054	2
Tetrachloroethene	0.078	0.077	1

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analyses.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analyses Reported
SV-1B	3.125-fold dilution due to nature of sample matrix
SV-2B	10-fold dilution due to nature of sample matrix
SV-3A	2.941-fold dilution due to nature of sample matrix
IA-4CDL	5-fold dilution due to high compound level for ethanol
IA-4GDL	2.5-fold dilution due to high compound level for ethanol

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 50968A48 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/21
SDG #: L2112425 Category B Page: 1 of 2
Laboratory: Alpha Analytical, Inc. Reviewer: CF
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA Method TO-15) + TO-15 SIM

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/SW	%RSD/ICV ≤ 30
IV.	Continuing calibration	A	CCV ≤ 30
V.	Laboratory Blanks / canister check per batch	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates / DUP	N/A	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	SW	D = 1, 10 7, 11, 15, 24 23, 25
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	No Results < RL > MDL
XIII.	Target analyte identification	A	
XIV.	System performance	A	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	SW	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SV-1A	D	L2112425-01	Air	03/12/21
2	SV-1B	3.125 X	L2112425-02	Air	03/12/21
3	SV-2A		L2112425-03	Air	03/12/21
4	SV-2B	10X	L2112425-04	Air	03/12/21
5	SV-3B		L2112425-05	Air	03/12/21
6	SV-3A	2.941 X	L2112425-06	Air	03/12/21
7	SV-4	D_1	L2112425-07	Air	03/12/21
8	SV-5A		L2112425-08	Air	03/12/21
9	SV-5B		L2112425-09	Air	03/12/21
10	SV-DUP-1	D	L2112425-10	Air	03/12/21
11	SV-DUP-2	D_1	L2112425-11	Air	03/12/21
12	IA-1		L2112425-12	Air	03/12/21
13	IA-2		L2112425-13	Air	03/12/21

12 → 16 C_6H_6, QQQ, N, O, S, AA were analyzed as SIM

LDC #: 50968A48 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/21
SDG #: L2112425 Category B Page: 2 of 2
Laboratory: Alpha Analytical, Inc. Reviewer: PT
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA Method TO-15)

	Client ID		Lab ID	Matrix	Date
14	3 IA-3		L2112425-14	Air	03/12/21
15 1	3 IA-4A	D_2	L2112425-15	Air	03/12/21
16 1	3 IA-4B		L2112425-16	Air	03/12/21
17 2	4 IA-4C	~~wwww = 5X all others = 1X~~	L2112425-17	Air	03/12/21
18 2	4 IA-4D		L2112425-18	Air	03/12/21
19 2	4 IA-4E		L2112425-19	Air	03/12/21
20 2	4 IA-4F		L2112425-20	Air	03/12/21
21 2	4 IA-4G		L2112425-21	Air	03/12/21
22 2	4 IA-4H		L2112425-22	Air	03/12/21
23 2	4 IA-5	D_3	L2112425-23	Air	03/12/21
24 2	4 IA-DUP-1	D_2	L2112425-24	Air	03/12/21
25 2	4 IA-DUP-2	D_3	L2112425-25	Air	03/12/21
26 2	4 OA-1		L2112425-26	Air	03/12/21
27 1	4 IA-2DUP		L2112425-13DUP	Air	03/12/21
28 2	4 IA-4DDUP		L2112425-18DUP	Air	03/12/21
29	#17 DL	wwww only 5X			
30	#21 DL	wwww only 2.5X			
31					

Notes:

1	WG1476560-4						
2	WG1476567-4						
3	WG1476562-4	(SIM)					
4	WG1476568-4	(SIM)					

LDC #: 50968A48

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?			✓	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	✓			
Were the relative percent differences (RPD) within the QC limits?	✓			

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	✓		✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Compound	Finding	Associated Samples	Qualifications
		~~FT~~ WWW	x'd cal Range	17, 21	NR/A

Comments: _____

_____

LDC #: 50968A14

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?
Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: <30.0%)	Associated Samples	Qualifications
2	12/21/20	ICV-AIRLAB17	KKK	34.1	17-D 26, 28,	J/UJ/P ND
	10:29		LLL	35.4	WG1471567-4	↓

LDC#:_50968A48 **VALIDATION FINDINGS WORKSHEET** Page:_1__of_1__
Field Duplicates Reviewer:__FT____

METHOD: GCMS VOA (EPA Method TO-15)

Compound	Concentration (ppbv		RPD
	1	10	
JJ	0.409	0.403	1
WWW	81.2	68.2	17
F	193	120	47
Isopropanol	6.29	6.29	0
ZZZ	1.72	0.508	109
G	0.200U	0.403	NC
I	0.809	0.353	78
M	2.79	1.39	67
QQQ	1.93	0.645	100
K	0.390	0.408	5
n-B1	0.222	0.200U	NC
N	1.30	0.857	41
V	0.262	0.212	21
S	22.4	16.9	28
CC	0.552	0.527	5
Z	0.319	0.200U	NC
AA	6.78	5.60	19

LDC#:_50968A48 **VALIDATION FINDINGS WORKSHEET** Page:_1__of_1__
Field Duplicates Reviewer:__FT_____

METHOD: GCMS VOA (EPA Method TO-15)

Compound	Concentration (ppbv		RPD
	7	11	
JJ	0.582	0.503	15
A	0.200U	0.373	NC
WWW	24.4	42.0	53
F	3.86	5.98	43
Isopropanol	4.20	9.86	81
ZZZ	0.782	1.78	78
M	1.24	1.74	34
K	2.18	0.643	109
S	3.90	3.03	25
CC	0.589	1.02	54
Z	0.216	0.371	53
AA	0.687	0.835	19
EE	0.459	0.790	53
RRR	0.812	1.43	55
SSS	0.430	0.670	44
AAA	0.200U	0.347	NC
DDD	0.200U	0.341	NC

LDC#:_50968A48 **VALIDATION FINDINGS WORKSHEET** Page:_1__of_1__
Field Duplicates Reviewer:__FT____

METHOD: GCMS VOA (EPA Method TO-15)

Compound	Concentration (ppbv)		RPD
	15	24	
JJ	0.408	0.497	20
A	0.532	0.524	2
WWW	472	438	7
F	15.3	16.4	7
KK	0.226	0.336	39
Isopropanol	93.4	104	11
M	0.521	0.519	0
RRRR	0.733	0.955	26
n-B1	0.247	0.242	2
V	0.341	0.336	1
SSSS	0.565	0.533	6
n-C1	8.56	8.44	1
CC	1.41	1.37	3
RRR	0.442	0.481	8
O	0.062	~~0~~ 0.082	~~200~~ 28
S	0.064	~~0~~ 0.069	~~200~~ 8
AA	0.153	? 0.153	~~200~~ 0

LDC#:_50968A48 **VALIDATION FINDINGS WORKSHEET** Page:_1__of_1__
Field Duplicates Reviewer:__FT____

METHOD: GCMS VOA (EPA Method TO-15)

Compound	Concentration (ppbv)		RPD
	23	25	
JJ	0.492	0.491	0
A	0.476	0.473	1
WWW	479	467	3
F	10.2	10.1	1
KK	1.11	1.06	5
Isopropanol	47.4	46.4	2
M	0.797	0.838	5
RRRR	2.47	2.37	4
K	0.271	0.257	5
n-B1	0.200U	0.212	NC
V	0.329	0.331	1
n-C1	0.202	0.204	1
CC	0.742	0.739	0
RRR	0.456	0.431	6
DDD	0.283	0.246	14
~~need to add sim analytes~~ when f/up ~~arrive~~			??
Θ	0.093	0.083	~~??~~ 11
S	0.055	0.054	~~??~~ 2
AD	0.078	0.077	~~??~~ 1
			??

V:\FIELD DUPLICATES\Field Duplicates\FD_Organics\2021\50968A48.wpd

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (std) 10 ppbv	RRF (std) 10 ppbv	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL AIRLAB17	12/20/20	QQQ	0.863	0.863	0.860	0.860	4.47	4.47
			V	0.658	0.658	0.678	0.678	9.93	9.93
			CC	5.257	5.257	5.482	5.482	10.72	10.72
2	ICAL AIRLAB16	3/18/21	QQQ	0.680	0.680	0.6663	0.6663	7.77	7.77
			V	0.758	0.758	0.7682	0.7682	11.85	11.85
			CC	5.199	5.199	5.3109	5.3109	15.79	15.79
3	ICAL AIRLAB16 TO15 SIM	3/18/21	C	0.494	0.494	0.5265	0.5265	7.54	7.54
			S	0.325	0.325	0.3375	0.3375	8.27	8.27
			AA	2.508	2.508	2.5844	2.5844	6.91	6.91

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: ___ of ___
Reviewer: _____

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL AIRLAB17 SIM	12/20/20	C	0.681	0.681	0.6950	0.6950	4.24	4.24
			S	0.289	0.289	0.2998	0.2998	6.77	6.77
			AA	2.100	2.100	2.1773	2.1773	5.26	5.26
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	3 CCV	3/19/21	QQQ	0.860	0.785	0.785	8.7	8.7
	AIRLAB 17		V	0.678	0.545	0.545	19.6	19.6
	~~1129~~ 1151		CC	5.482	4.402	4.402	19.7	19.7
2	CCV	3/19/21	QQQ	0.6663	0.661	0.661	0.8	0.8
	AIRLAB16		V	0.7682	0.739	0.739	3.8	3.8
	1129		CC	5.3109	5.017	5.017	5.5	5.5
3	CCV SIM	3/19/21	C	0.5265	0.486	0.486	7.6	7.6
	1208		S	0.3375	0.313	0.313	7.1	7.1
	AIRLAB16		AA	2.5844	2.472	2.472	4.3	4.3

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC _____ HPLC ____ GCMS TOF

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 1:14 AIRLAB FT	3/19/21	C	0.6950	0.585	0.585	15.8	15.8
			S	0.2998	0.273	0.273	9.0	9.0
			AA	2.1773	2.010	2.010	7.7	7.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: WG1476560-3

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
W	10	NA	9.91	NA	99	99				
A	↓	↓	9.12	↓	91	91				
C			9.67		97	97				
B			9.56		96	96				
D			9.32		93	93				
F	50		38.6		77	77	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 50968A48

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, QQQ:

Conc. = $\frac{(48432)(10.0)}{(377429)(0.6663)}$

= 1.9258 ppbv

#	Sample ID	Compound	Reported Concentration (ppbv)	Calculated Concentration (ppbv)	Qualification
	#1	QQQ	1.93	1.9258	
	#12	AA	0.164	0.164	
	#12 SIM	AA			
	$\frac{3890(10)}{(91750)(2.5844)}$ = 0.164				

100 S 4th Street, Brooklyn, NY - LDC# 50968

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1A	L2112425-01	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-1A	L2112425-01	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-1A	L2112425-01	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-1A	L2112425-01	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-1A	L2112425-01	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-1A	L2112425-01	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-1A	L2112425-01	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-1A	L2112425-01	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-1A	L2112425-01	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-1A	L2112425-01	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-1A	L2112425-01	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-1A	L2112425-01	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-1A	L2112425-01	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-1A	L2112425-01	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-1A	L2112425-01	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-1A	L2112425-01	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-1A	L2112425-01	CHLOROMETHANE	3/19/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-1A	L2112425-01	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
SV-1A	L2112425-01	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-1A	L2112425-01	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-1A	L2112425-01	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
SV-1A	L2112425-01	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-1A	L2112425-01	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1A	L2112425-01	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-1A	L2112425-01	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-1A	L2112425-01	TETRACHLOROETHENE	3/19/2021	46	Y	Y				1.36	0.444	ug/m3
SV-1A	L2112425-01	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-1A	L2112425-01	1,1,1-TRICHLOROETHANE	3/19/2021	7.09	Y	Y				1.09	0.273	ug/m3
SV-1A	L2112425-01	1,1-DICHLOROETHANE	3/19/2021	3.27	Y	Y				0.809	0.254	ug/m3
SV-1A	L2112425-01	2-BUTANONE	3/19/2021	8.23	Y	Y				1.47	0.142	ug/m3
SV-1A	L2112425-01	2-HEXANONE	3/19/2021	1.31	Y	Y				0.82	0.266	ug/m3
SV-1A	L2112425-01	ACETONE	3/19/2021	458	Y	Y				2.38	1.64	ug/m3
SV-1A	L2112425-01	BENZENE	3/19/2021	0.837	Y	Y				0.639	0.156	ug/m3
SV-1A	L2112425-01	CHLOROFORM	3/19/2021	1.9	Y	Y				0.977	0.309	ug/m3
SV-1A	L2112425-01	DICHLORODIFLUOROMETHANE	3/19/2021	2.02	Y	Y				0.989	0.288	ug/m3
SV-1A	L2112425-01	ETHYL ALCOHOL	3/19/2021	153	Y	Y				9.42	1.38	ug/m3
SV-1A	L2112425-01	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-1A	L2112425-01	TERT-BUTYL ALCOHOL	3/19/2021	5.21	Y	Y				1.52	0.141	ug/m3
SV-1A	L2112425-01	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-1A	L2112425-01	TOLUENE	3/19/2021	2.08	Y	Y				0.754	0.196	ug/m3
SV-1A	L2112425-01	TRICHLOROETHENE	3/19/2021	120	Y	Y				1.07	0.271	ug/m3
SV-1A	L2112425-01	CIS-1,2-DICHLOROETHENE	3/19/2021	7.65	Y	Y				0.793	0.464	ug/m3
SV-1A	L2112425-01	N-HEXANE	3/19/2021	0.782	Y	Y				0.705	0.128	ug/m3
SV-1A	L2112425-01	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-1A	L2112425-01	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-1A	L2112425-01	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-1A	L2112425-01	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-1A	L2112425-01	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1A	L2112425-01	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-1A	L2112425-01	ISO-PROPYL ALCOHOL	3/19/2021	15.5	Y	Y				1.23	1.17	ug/m3
SV-1A	L2112425-01	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-1A	L2112425-01	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-1A	L2112425-01	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-1A	L2112425-01	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-1A	L2112425-01	P/M-XYLENE	3/19/2021		Y	N	U		U	1.74	0.395	ug/m3
SV-1A	L2112425-01	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
SV-1A	L2112425-01	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-1A	L2112425-01	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-1A	L2112425-01	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	1.12	0.386	ug/m3
SV-1A	L2112425-01	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-1A	L2112425-01	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
SV-1A	L2112425-01	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-1A	L2112425-01	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-1B	L2112425-02	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	4.37	1.29	ug/m3
SV-1B	L2112425-02	ETHYL ALCOHOL	3/19/2021	795	Y	Y				29.4	4.31	ug/m3
SV-1B	L2112425-02	ETHYLBENZENE	3/19/2021	4.04	Y	Y				2.71	0.586	ug/m3
SV-1B	L2112425-02	ISO-PROPYL ALCOHOL	3/19/2021	7.67	Y	Y				3.83	3.66	ug/m3
SV-1B	L2112425-02	TETRACHLOROETHENE	3/19/2021	1240	Y	Y				4.24	1.39	ug/m3
SV-1B	L2112425-02	TOLUENE	3/19/2021	4.94	Y	Y				2.36	0.61	ug/m3
SV-1B	L2112425-02	TRICHLOROETHENE	3/19/2021	1000	Y	Y				3.36	0.849	ug/m3
SV-1B	L2112425-02	CIS-1,2-DICHLOROETHENE	3/19/2021	88	Y	Y				2.48	1.45	ug/m3
SV-1B	L2112425-02	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	6.67	1.76	ug/m3
SV-1B	L2112425-02	P/M-XYLENE	3/19/2021	7.43	Y	Y				5.43	1.23	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1B	L2112425-02	HEPTANE	3/19/2021		Y	N	U		U	2.56	0.602	ug/m3
SV-1B	L2112425-02	ACETONE	3/19/2021	21.1	Y	Y				7.41	5.11	ug/m3
SV-1B	L2112425-02	CARBON DISULFIDE	3/19/2021		Y	N	U		U	1.95	0.545	ug/m3
SV-1B	L2112425-02	O-XYLENE	3/19/2021	3.87	Y	Y				2.71	0.617	ug/m3
SV-1B	L2112425-02	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	3.93	0.981	ug/m3
SV-1B	L2112425-02	ETHYL ACETATE	3/19/2021		Y	N	U		U	5.62	1.37	ug/m3
SV-1B	L2112425-02	DICHLORODIFLUOROMETHANE	3/19/2021		Y	N	U		U	3.09	0.9	ug/m3
SV-1B	L2112425-02	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	5.32	1.64	ug/m3
SV-1B	L2112425-02	CYCLOHEXANE	3/19/2021		Y	N	U		U	2.15	0.396	ug/m3
SV-1B	L2112425-02	CHLOROMETHANE	3/19/2021		Y	N	U		U	1.29	0.444	ug/m3
SV-1B	L2112425-02	CHLOROFORM	3/19/2021		Y	N	U		U	3.05	0.967	ug/m3
SV-1B	L2112425-02	BROMOFORM	3/19/2021		Y	N	U		U	6.46	2.07	ug/m3
SV-1B	L2112425-02	CHLOROBENZENE	3/19/2021		Y	N	U		U	2.88	0.898	ug/m3
SV-1B	L2112425-02	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	6.39	0.541	ug/m3
SV-1B	L2112425-02	VINYL CHLORIDE	3/19/2021		Y	N	U		U	1.6	0.501	ug/m3
SV-1B	L2112425-02	BROMOMETHANE	3/19/2021		Y	N	U		U	2.43	0.94	ug/m3
SV-1B	L2112425-02	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	2.25	0.591	ug/m3
SV-1B	L2112425-02	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	4.19	1.06	ug/m3
SV-1B	L2112425-02	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	3.24	0.782	ug/m3
SV-1B	L2112425-02	BENZENE	3/19/2021		Y	N	U		U	2	0.486	ug/m3
SV-1B	L2112425-02	CHLOROETHANE	3/19/2021		Y	N	U		U	1.65	0.665	ug/m3
SV-1B	L2112425-02	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	3.07	0.565	ug/m3
SV-1B	L2112425-02	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	3.51	1.2	ug/m3
SV-1B	L2112425-02	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	3.07	1.04	ug/m3
SV-1B	L2112425-02	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	2.89	0.883	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1B	L2112425-02	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	2.84	0.617	ug/m3
SV-1B	L2112425-02	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	2.53	0.761	ug/m3
SV-1B	L2112425-02	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.76	1.18	ug/m3
SV-1B	L2112425-02	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	4.8	1.34	ug/m3
SV-1B	L2112425-02	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.76	1.2	ug/m3
SV-1B	L2112425-02	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	4.64	1.57	ug/m3
SV-1B	L2112425-02	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	2.48	0.797	ug/m3
SV-1B	L2112425-02	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	2.53	0.793	ug/m3
SV-1B	L2112425-02	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	3.41	1.14	ug/m3
SV-1B	L2112425-02	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	4.29	1.32	ug/m3
SV-1B	L2112425-02	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	3.41	0.851	ug/m3
SV-1B	L2112425-02	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.76	1.18	ug/m3
SV-1B	L2112425-02	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	2.48	0.797	ug/m3
SV-1B	L2112425-02	STYRENE	3/19/2021		Y	N	U		U	2.66	0.579	ug/m3
SV-1B	L2112425-02	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	4.73	0.443	ug/m3
SV-1B	L2112425-02	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	4.6	0.525	ug/m3
SV-1B	L2112425-02	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	4.79	1.57	ug/m3
SV-1B	L2112425-02	VINYL BROMIDE	3/19/2021		Y	N	U		U	2.73	0.979	ug/m3
SV-1B	L2112425-02	1,3-BUTADIENE	3/19/2021		Y	N	U		U	1.38	0.462	ug/m3
SV-1B	L2112425-02	N-HEXANE	3/19/2021		Y	N	U		U	2.2	0.402	ug/m3
SV-1B	L2112425-02	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	5.42	1.46	ug/m3
SV-1B	L2112425-02	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	3.07	0.57	ug/m3
SV-1B	L2112425-02	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	1.96	0.573	ug/m3
SV-1B	L2112425-02	2-HEXANONE	3/19/2021		Y	N	U		U	2.56	0.828	ug/m3
SV-1B	L2112425-02	2-BUTANONE	3/19/2021		Y	N	U		U	4.6	0.445	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-1B	L2112425-02	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	2.92	0.528	ug/m3
SV-1B	L2112425-02	1,4-DIOXANE	3/19/2021		Y	N	U		U	2.25	0.908	ug/m3
SV-1B	L2112425-02	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	2.84	0.581	ug/m3
SV-2A	L2112425-03	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.273	ug/m3
SV-2A	L2112425-03	ETHYL ALCOHOL	3/19/2021	524	Y	Y				9.42	1.38	ug/m3
SV-2A	L2112425-03	TETRACHLOROETHENE	3/19/2021	5.2	Y	Y				1.36	0.444	ug/m3
SV-2A	L2112425-03	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-2A	L2112425-03	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-2A	L2112425-03	P/M-XYLENE	3/19/2021	25.4	Y	Y				1.74	0.395	ug/m3
SV-2A	L2112425-03	O-XYLENE	3/19/2021	14.3	Y	Y				0.869	0.197	ug/m3
SV-2A	L2112425-03	CIS-1,2-DICHLOROETHENE	3/19/2021	5.35	Y	Y				0.793	0.464	ug/m3
SV-2A	L2112425-03	VINYL CHLORIDE	3/19/2021	0.537	Y	Y				0.511	0.16	ug/m3
SV-2A	L2112425-03	ACETONE	3/19/2021	19.9	Y	Y				2.38	1.64	ug/m3
SV-2A	L2112425-03	TOLUENE	3/19/2021	15	Y	Y				0.754	0.196	ug/m3
SV-2A	L2112425-03	2-BUTANONE	3/19/2021	1.8	Y	Y				1.47	0.142	ug/m3
SV-2A	L2112425-03	TERT-BUTYL ALCOHOL	3/19/2021	5.73	Y	Y				1.52	0.141	ug/m3
SV-2A	L2112425-03	STYRENE	3/19/2021	1.28	Y	Y				0.852	0.185	ug/m3
SV-2A	L2112425-03	ISO-PROPYL ALCOHOL	3/19/2021	2.04	Y	Y				1.23	1.17	ug/m3
SV-2A	L2112425-03	ETHYLBENZENE	3/19/2021	15.3	Y	Y				0.869	0.188	ug/m3
SV-2A	L2112425-03	DICHLORODIFLUOROMETHANE	3/19/2021	2.02	Y	Y				0.989	0.288	ug/m3
SV-2A	L2112425-03	2-HEXANONE	3/19/2021	1.41	Y	Y				0.82	0.266	ug/m3
SV-2A	L2112425-03	TRICHLOROETHENE	3/19/2021	16.5	Y	Y				1.07	0.271	ug/m3
SV-2A	L2112425-03	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
SV-2A	L2112425-03	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-2A	L2112425-03	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-2A	L2112425-03	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-2A	L2112425-03	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-2A	L2112425-03	BENZENE	3/19/2021		Y	N	U		U	0.639	0.156	ug/m3
SV-2A	L2112425-03	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-2A	L2112425-03	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-2A	L2112425-03	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-2A	L2112425-03	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	1.12	0.386	ug/m3
SV-2A	L2112425-03	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-2A	L2112425-03	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-2A	L2112425-03	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-2A	L2112425-03	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-2A	L2112425-03	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-2A	L2112425-03	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-2A	L2112425-03	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-2A	L2112425-03	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-2A	L2112425-03	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-2A	L2112425-03	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-2A	L2112425-03	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-2A	L2112425-03	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-2A	L2112425-03	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-2A	L2112425-03	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
SV-2A	L2112425-03	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-2A	L2112425-03	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-2A	L2112425-03	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-2A	L2112425-03	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-2A	L2112425-03	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-2A	L2112425-03	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-2A	L2112425-03	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-2A	L2112425-03	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-2A	L2112425-03	CHLOROMETHANE	3/19/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-2A	L2112425-03	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-2A	L2112425-03	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-2A	L2112425-03	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-2A	L2112425-03	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-2A	L2112425-03	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-2A	L2112425-03	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-2A	L2112425-03	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-2A	L2112425-03	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-2A	L2112425-03	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-2A	L2112425-03	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-2A	L2112425-03	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-2B	L2112425-04	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	9.83	1.81	ug/m3
SV-2B	L2112425-04	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	9.83	3.32	ug/m3
SV-2B	L2112425-04	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	9.34	1.69	ug/m3
SV-2B	L2112425-04	TRICHLOROETHENE	3/19/2021	3260	Y	Y				10.7	2.71	ug/m3
SV-2B	L2112425-04	TOLUENE	3/19/2021	7.88	Y	Y				7.54	1.96	ug/m3
SV-2B	L2112425-04	TETRACHLOROETHENE	3/19/2021	2710	Y	Y				13.6	4.44	ug/m3
SV-2B	L2112425-04	ETHYL ALCOHOL	3/19/2021	537	Y	Y				94.2	13.8	ug/m3
SV-2B	L2112425-04	ACETONE	3/19/2021	304	Y	Y				23.8	16.4	ug/m3
SV-2B	L2112425-04	1,4-DIOXANE	3/19/2021		Y	N	U		U	7.21	2.9	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-2B	L2112425-04	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	12	3.82	ug/m3
SV-2B	L2112425-04	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	7.93	2.55	ug/m3
SV-2B	L2112425-04	1,3-BUTADIENE	3/19/2021		Y	N	U		U	4.42	1.48	ug/m3
SV-2B	L2112425-04	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	10.9	2.73	ug/m3
SV-2B	L2112425-04	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	9.24	2.82	ug/m3
SV-2B	L2112425-04	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	8.09	2.44	ug/m3
SV-2B	L2112425-04	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	12	3.78	ug/m3
SV-2B	L2112425-04	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	15.4	4.31	ug/m3
SV-2B	L2112425-04	N-HEXANE	3/19/2021		Y	N	U		U	7.05	1.28	ug/m3
SV-2B	L2112425-04	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	14.8	5	ug/m3
SV-2B	L2112425-04	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	8.09	2.54	ug/m3
SV-2B	L2112425-04	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	10.9	3.66	ug/m3
SV-2B	L2112425-04	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	13.7	4.22	ug/m3
SV-2B	L2112425-04	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	12	3.77	ug/m3
SV-2B	L2112425-04	BROMOFORM	3/19/2021		Y	N	U		U	20.7	6.63	ug/m3
SV-2B	L2112425-04	P/M-XYLENE	3/19/2021		Y	N	U		U	17.4	3.95	ug/m3
SV-2B	L2112425-04	CYCLOHEXANE	3/19/2021		Y	N	U		U	6.88	1.27	ug/m3
SV-2B	L2112425-04	CHLOROMETHANE	3/19/2021		Y	N	U		U	4.13	1.42	ug/m3
SV-2B	L2112425-04	CHLOROFORM	3/19/2021		Y	N	U		U	9.77	3.09	ug/m3
SV-2B	L2112425-04	CHLOROETHANE	3/19/2021		Y	N	U		U	5.28	2.12	ug/m3
SV-2B	L2112425-04	CHLOROBENZENE	3/19/2021		Y	N	U		U	9.21	2.87	ug/m3
SV-2B	L2112425-04	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	12.6	3.14	ug/m3
SV-2B	L2112425-04	DICHLORODIFLUOROMETHANE	3/19/2021		Y	N	U		U	9.89	2.88	ug/m3
SV-2B	L2112425-04	BROMOMETHANE	3/19/2021		Y	N	U		U	7.77	3	ug/m3
SV-2B	L2112425-04	ETHYL ACETATE	3/19/2021		Y	N	U		U	18	4.4	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-2B	L2112425-04	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	13.4	3.38	ug/m3
SV-2B	L2112425-04	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	10.4	2.5	ug/m3
SV-2B	L2112425-04	BENZENE	3/19/2021		Y	N	U		U	6.39	1.56	ug/m3
SV-2B	L2112425-04	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	20.5	1.73	ug/m3
SV-2B	L2112425-04	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	9.83	1.82	ug/m3
SV-2B	L2112425-04	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	6.26	1.83	ug/m3
SV-2B	L2112425-04	2-HEXANONE	3/19/2021		Y	N	U		U	8.2	2.66	ug/m3
SV-2B	L2112425-04	2-BUTANONE	3/19/2021		Y	N	U		U	14.7	1.42	ug/m3
SV-2B	L2112425-04	CARBON DISULFIDE	3/19/2021		Y	N	U		U	6.23	1.74	ug/m3
SV-2B	L2112425-04	STYRENE	3/19/2021		Y	N	U		U	8.52	1.85	ug/m3
SV-2B	L2112425-04	CIS-1,2-DICHLOROETHENE	3/19/2021	379	Y	Y				7.93	4.64	ug/m3
SV-2B	L2112425-04	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	9.08	1.98	ug/m3
SV-2B	L2112425-04	O-XYLENE	3/19/2021		Y	N	U		U	8.69	1.97	ug/m3
SV-2B	L2112425-04	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	9.08	1.86	ug/m3
SV-2B	L2112425-04	VINYL CHLORIDE	3/19/2021		Y	N	U		U	5.11	1.6	ug/m3
SV-2B	L2112425-04	VINYL BROMIDE	3/19/2021		Y	N	U		U	8.74	3.13	ug/m3
SV-2B	L2112425-04	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	11.2	3.86	ug/m3
SV-2B	L2112425-04	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	17	5.23	ug/m3
SV-2B	L2112425-04	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	15.2	1.41	ug/m3
SV-2B	L2112425-04	TRANS-1,2-DICHLOROETHENE	3/19/2021	8.21	Y	Y				7.93	2.55	ug/m3
SV-2B	L2112425-04	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	17.4	4.66	ug/m3
SV-2B	L2112425-04	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	7.21	1.89	ug/m3
SV-2B	L2112425-04	ISO-PROPYL ALCOHOL	3/19/2021		Y	N	U		U	12.3	11.7	ug/m3
SV-2B	L2112425-04	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	21.3	5.64	ug/m3
SV-2B	L2112425-04	HEPTANE	3/19/2021		Y	N	U		U	8.2	1.93	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-2B	L2112425-04	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	14	4.13	ug/m3
SV-2B	L2112425-04	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	15.3	5.03	ug/m3
SV-2B	L2112425-04	ETHYLBENZENE	3/19/2021		Y	N	U		U	8.69	1.88	ug/m3
SV-2B	L2112425-04	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	14.7	1.68	ug/m3
SV-3B	L2112425-05	DICHLORODIFLUOROMETHANE	3/19/2021	2.1	Y	Y				0.989	0.288	ug/m3
SV-3B	L2112425-05	P/M-XYLENE	3/19/2021	11.3	Y	Y				1.74	0.395	ug/m3
SV-3B	L2112425-05	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-3B	L2112425-05	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-3B	L2112425-05	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-3B	L2112425-05	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-3B	L2112425-05	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-3B	L2112425-05	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-3B	L2112425-05	2-BUTANONE	3/19/2021	5.9	Y	Y				1.47	0.142	ug/m3
SV-3B	L2112425-05	2-HEXANONE	3/19/2021	2.07	Y	Y				0.82	0.266	ug/m3
SV-3B	L2112425-05	ACETONE	3/19/2021	53.7	Y	Y				2.38	1.64	ug/m3
SV-3B	L2112425-05	BENZENE	3/19/2021	2.02	Y	Y				0.639	0.156	ug/m3
SV-3B	L2112425-05	BROMODICHLOROMETHANE	3/19/2021	1.96	Y	Y				1.34	0.338	ug/m3
SV-3B	L2112425-05	CARBON DISULFIDE	3/19/2021	9.09	Y	Y				0.623	0.174	ug/m3
SV-3B	L2112425-05	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-3B	L2112425-05	TETRACHLOROETHENE	3/19/2021	138	Y	Y				1.36	0.444	ug/m3
SV-3B	L2112425-05	O-XYLENE	3/19/2021	6.52	Y	Y				0.869	0.197	ug/m3
SV-3B	L2112425-05	N-HEXANE	3/19/2021	1.56	Y	Y				0.705	0.128	ug/m3
SV-3B	L2112425-05	CIS-1,2-DICHLOROETHENE	3/19/2021	24.1	Y	Y				0.793	0.464	ug/m3
SV-3B	L2112425-05	TRICHLOROFLUOROMETHANE	3/19/2021	1.12	Y	Y				1.12	0.386	ug/m3
SV-3B	L2112425-05	TRICHLOROETHENE	3/19/2021	321	Y	Y				1.07	0.271	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-3B	L2112425-05	CHLOROFORM	3/19/2021	78.6	Y	Y				0.977	0.309	ug/m3
SV-3B	L2112425-05	TETRAHYDROFURAN	3/19/2021	2.22	Y	Y				1.47	0.168	ug/m3
SV-3B	L2112425-05	CYCLOHEXANE	3/19/2021	2.34	Y	Y				0.688	0.127	ug/m3
SV-3B	L2112425-05	TERT-BUTYL ALCOHOL	3/19/2021	4.67	Y	Y				1.52	0.141	ug/m3
SV-3B	L2112425-05	ISO-PROPYL ALCOHOL	3/19/2021	20.9	Y	Y				1.23	1.17	ug/m3
SV-3B	L2112425-05	HEPTANE	3/19/2021	0.84	Y	Y				0.82	0.193	ug/m3
SV-3B	L2112425-05	ETHYLBENZENE	3/19/2021	6.39	Y	Y				0.869	0.188	ug/m3
SV-3B	L2112425-05	ETHYL ALCOHOL	3/19/2021	492	Y	Y				9.42	1.38	ug/m3
SV-3B	L2112425-05	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-3B	L2112425-05	TOLUENE	3/19/2021	8.03	Y	Y				0.754	0.196	ug/m3
SV-3B	L2112425-05	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-3B	L2112425-05	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-3B	L2112425-05	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-3B	L2112425-05	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-3B	L2112425-05	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-3B	L2112425-05	CHLOROMETHANE	3/19/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-3B	L2112425-05	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-3B	L2112425-05	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-3B	L2112425-05	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-3B	L2112425-05	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-3B	L2112425-05	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-3B	L2112425-05	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-3B	L2112425-05	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-3B	L2112425-05	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
SV-3B	L2112425-05	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-3B	L2112425-05	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-3B	L2112425-05	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-3B	L2112425-05	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-3B	L2112425-05	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-3B	L2112425-05	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-3B	L2112425-05	1,1,1-TRICHLOROETHANE	3/19/2021	1.58	Y	Y				1.09	0.273	ug/m3
SV-3B	L2112425-05	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-3B	L2112425-05	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-3B	L2112425-05	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-3B	L2112425-05	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
SV-3B	L2112425-05	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-3B	L2112425-05	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-3B	L2112425-05	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-3B	L2112425-05	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-3B	L2112425-05	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-3B	L2112425-05	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-3B	L2112425-05	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-3A	L2112425-06	CHLOROFORM	3/19/2021	54.7	Y	Y				2.87	0.908	ug/m3
SV-3A	L2112425-06	CIS-1,2-DICHLOROETHENE	3/19/2021	20	Y	Y				2.33	1.36	ug/m3
SV-3A	L2112425-06	VINYL CHLORIDE	3/19/2021		Y	N	U		U	1.5	0.47	ug/m3
SV-3A	L2112425-06	VINYL BROMIDE	3/19/2021		Y	N	U		U	2.57	0.923	ug/m3
SV-3A	L2112425-06	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	3.3	1.14	ug/m3
SV-3A	L2112425-06	N-HEXANE	3/19/2021		Y	N	U		U	2.07	0.377	ug/m3
SV-3A	L2112425-06	1,1,1-TRICHLOROETHANE	3/19/2021	3.79	Y	Y				3.21	0.802	ug/m3
SV-3A	L2112425-06	CHLOROETHANE	3/19/2021		Y	N	U		U	1.55	0.625	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-3A	L2112425-06	ETHYL ALCOHOL	3/19/2021	41.5	Y	Y				27.7	4.07	ug/m3
SV-3A	L2112425-06	ETHYLBENZENE	3/19/2021	11.9	Y	Y				2.55	0.552	ug/m3
SV-3A	L2112425-06	TERT-BUTYL ALCOHOL	3/19/2021	7.82	Y	Y				4.46	0.415	ug/m3
SV-3A	L2112425-06	TETRACHLOROETHENE	3/19/2021	460	Y	Y				3.99	1.31	ug/m3
SV-3A	L2112425-06	TOLUENE	3/19/2021	12	Y	Y				2.22	0.577	ug/m3
SV-3A	L2112425-06	TRICHLOROETHENE	3/19/2021	967	Y	Y				3.16	0.795	ug/m3
SV-3A	L2112425-06	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	4.34	0.493	ug/m3
SV-3A	L2112425-06	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	4.52	1.27	ug/m3
SV-3A	L2112425-06	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	3.04	0.735	ug/m3
SV-3A	L2112425-06	CHLOROBENZENE	3/19/2021		Y	N	U		U	2.71	0.847	ug/m3
SV-3A	L2112425-06	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	2.89	0.973	ug/m3
SV-3A	L2112425-06	1,3-BUTADIENE	3/19/2021		Y	N	U		U	1.3	0.436	ug/m3
SV-3A	L2112425-06	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	2.72	0.827	ug/m3
SV-3A	L2112425-06	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	2.67	0.545	ug/m3
SV-3A	L2112425-06	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.54	1.11	ug/m3
SV-3A	L2112425-06	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	5.01	1.53	ug/m3
SV-3A	L2112425-06	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	2.89	0.531	ug/m3
SV-3A	L2112425-06	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	4.36	1.47	ug/m3
SV-3A	L2112425-06	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	2.33	0.749	ug/m3
SV-3A	L2112425-06	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	2.33	0.749	ug/m3
SV-3A	L2112425-06	CYCLOHEXANE	3/19/2021		Y	N	U		U	2.02	0.372	ug/m3
SV-3A	L2112425-06	CHLOROMETHANE	3/19/2021		Y	N	U		U	1.21	0.419	ug/m3
SV-3A	L2112425-06	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	2.38	0.716	ug/m3
SV-3A	L2112425-06	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	6.02	0.508	ug/m3
SV-3A	L2112425-06	1,4-DIOXANE	3/19/2021		Y	N	U		U	2.12	0.854	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-3A	L2112425-06	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	3.94	0.992	ug/m3
SV-3A	L2112425-06	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	2.75	0.495	ug/m3
SV-3A	L2112425-06	BROMOFORM	3/19/2021		Y	N	U		U	6.08	1.94	ug/m3
SV-3A	L2112425-06	CARBON DISULFIDE	3/19/2021		Y	N	U		U	1.83	0.511	ug/m3
SV-3A	L2112425-06	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.54	1.12	ug/m3
SV-3A	L2112425-06	ACETONE	3/19/2021		Y	N	U		U	6.98	4.82	ug/m3
SV-3A	L2112425-06	BROMOMETHANE	3/19/2021		Y	N	U		U	2.28	0.881	ug/m3
SV-3A	L2112425-06	2-BUTANONE	3/19/2021		Y	N	U		U	4.34	0.419	ug/m3
SV-3A	L2112425-06	O-XYLENE	3/19/2021	11.2	Y	Y				2.55	0.578	ug/m3
SV-3A	L2112425-06	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	2.67	0.581	ug/m3
SV-3A	L2112425-06	2-HEXANONE	3/19/2021		Y	N	U		U	2.41	0.779	ug/m3
SV-3A	L2112425-06	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	1.84	0.538	ug/m3
SV-3A	L2112425-06	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	2.89	0.536	ug/m3
SV-3A	L2112425-06	BENZENE	3/19/2021		Y	N	U		U	1.88	0.457	ug/m3
SV-3A	L2112425-06	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	4.11	1.22	ug/m3
SV-3A	L2112425-06	P/M-XYLENE	3/19/2021	19.8	Y	Y				5.13	1.16	ug/m3
SV-3A	L2112425-06	STYRENE	3/19/2021		Y	N	U		U	2.5	0.545	ug/m3
SV-3A	L2112425-06	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	5.11	1.37	ug/m3
SV-3A	L2112425-06	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	2.12	0.555	ug/m3
SV-3A	L2112425-06	ISO-PROPYL ALCOHOL	3/19/2021		Y	N	U		U	3.61	3.44	ug/m3
SV-3A	L2112425-06	HEPTANE	3/19/2021		Y	N	U		U	2.41	0.566	ug/m3
SV-3A	L2112425-06	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	3.54	1.11	ug/m3
SV-3A	L2112425-06	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	4.51	1.48	ug/m3
SV-3A	L2112425-06	CARBON TETRACHLORIDE	3/19/2021		Y	N	U		U	3.7	0.925	ug/m3
SV-3A	L2112425-06	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	2.38	0.749	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-3A	L2112425-06	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	3.21	1.07	ug/m3
SV-3A	L2112425-06	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	4.04	1.24	ug/m3
SV-3A	L2112425-06	ETHYL ACETATE	3/19/2021		Y	N	U		U	5.3	1.29	ug/m3
SV-3A	L2112425-06	DICHLORODIFLUOROMETHANE	3/19/2021		Y	N	U		U	2.91	0.846	ug/m3
SV-3A	L2112425-06	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	6.27	1.66	ug/m3
SV-4	L2112425-07	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-4	L2112425-07	CARBON DISULFIDE	3/20/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-4	L2112425-07	CARBON TETRACHLORIDE	3/20/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-4	L2112425-07	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-4	L2112425-07	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-4	L2112425-07	CHLOROMETHANE	3/20/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-4	L2112425-07	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-4	L2112425-07	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-4	L2112425-07	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-4	L2112425-07	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-4	L2112425-07	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-4	L2112425-07	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-4	L2112425-07	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-4	L2112425-07	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-4	L2112425-07	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-4	L2112425-07	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-4	L2112425-07	CYCLOHEXANE	3/20/2021		Y	N	U		U	0.688	0.127	ug/m3
SV-4	L2112425-07	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-4	L2112425-07	CIS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.464	ug/m3
SV-4	L2112425-07	STYRENE	3/20/2021		Y	N	U		U	0.852	0.185	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-4	L2112425-07	1,1,1-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.273	ug/m3
SV-4	L2112425-07	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-4	L2112425-07	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-4	L2112425-07	1,1-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.254	ug/m3
SV-4	L2112425-07	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-4	L2112425-07	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-4	L2112425-07	1,2,4-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-4	L2112425-07	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-4	L2112425-07	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-4	L2112425-07	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-4	L2112425-07	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-4	L2112425-07	1,3,5-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-4	L2112425-07	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-4	L2112425-07	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-4	L2112425-07	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-4	L2112425-07	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-4	L2112425-07	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-4	L2112425-07	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-4	L2112425-07	BENZENE	3/20/2021		Y	N	U		U	0.639	0.156	ug/m3
SV-4	L2112425-07	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-4	L2112425-07	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-4	L2112425-07	2-BUTANONE	3/20/2021	3.66	Y	Y				1.47	0.142	ug/m3
SV-4	L2112425-07	O-XYLENE	3/20/2021	1.87	Y	Y				0.869	0.197	ug/m3
SV-4	L2112425-07	TOLUENE	3/20/2021	2.22	Y	Y				0.754	0.196	ug/m3
SV-4	L2112425-07	TETRACHLOROETHENE	3/20/2021	4.66	Y	Y				1.36	0.444	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-4	L2112425-07	TERT-BUTYL ALCOHOL	3/20/2021	2.37	Y	Y				1.52	0.141	ug/m3
SV-4	L2112425-07	ISO-PROPYL ALCOHOL	3/20/2021	10.3	Y	Y				1.23	1.17	ug/m3
SV-4	L2112425-07	ETHYLBENZENE	3/20/2021	1.99	Y	Y				0.869	0.188	ug/m3
SV-4	L2112425-07	ETHYL ALCOHOL	3/20/2021	46	Y	Y				9.42	1.38	ug/m3
SV-4	L2112425-07	DICHLORODIFLUOROMETHANE	3/20/2021	2.88	Y	Y				0.989	0.288	ug/m3
SV-4	L2112425-07	CHLOROFORM	3/20/2021	10.6	Y	Y				0.977	0.309	ug/m3
SV-4	L2112425-07	ACETONE	3/20/2021	9.17	Y	Y				2.38	1.64	ug/m3
SV-4	L2112425-07	TRICHLOROETHENE	3/20/2021	21	Y	Y				1.07	0.271	ug/m3
SV-4	L2112425-07	2-HEXANONE	3/20/2021	0.885	Y	Y				0.82	0.266	ug/m3
SV-4	L2112425-07	P/M-XYLENE	3/20/2021	3.53	Y	Y				1.74	0.395	ug/m3
SV-4	L2112425-07	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-4	L2112425-07	TETRAHYDROFURAN	3/20/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-4	L2112425-07	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-4	L2112425-07	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-4	L2112425-07	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-4	L2112425-07	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-4	L2112425-07	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-4	L2112425-07	TRICHLOROFLUOROMETHANE	3/20/2021		Y	N	U		U	1.12	0.386	ug/m3
SV-5A	L2112425-08	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-5A	L2112425-08	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-5A	L2112425-08	CIS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.464	ug/m3
SV-5A	L2112425-08	P/M-XYLENE	3/20/2021	21.6	Y	Y				1.74	0.395	ug/m3
SV-5A	L2112425-08	ETHYL ALCOHOL	3/20/2021	746	Y	Y				9.42	1.38	ug/m3
SV-5A	L2112425-08	TRICHLOROFLUOROMETHANE	3/20/2021	2.86	Y	Y				1.12	0.386	ug/m3
SV-5A	L2112425-08	TRICHLOROETHENE	3/20/2021	7.9	Y	Y				1.07	0.271	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-5A	L2112425-08	TOLUENE	3/20/2021	13.1	Y	Y				0.754	0.196	ug/m3
SV-5A	L2112425-08	TETRAHYDROFURAN	3/20/2021	3.33	Y	Y				1.47	0.168	ug/m3
SV-5A	L2112425-08	TETRACHLOROETHENE	3/20/2021	9.56	Y	Y				1.36	0.444	ug/m3
SV-5A	L2112425-08	TERT-BUTYL ALCOHOL	3/20/2021	11.7	Y	Y				1.52	0.141	ug/m3
SV-5A	L2112425-08	STYRENE	3/20/2021	1.09	Y	Y				0.852	0.185	ug/m3
SV-5A	L2112425-08	2-BUTANONE	3/20/2021	2.91	Y	Y				1.47	0.142	ug/m3
SV-5A	L2112425-08	ETHYLBENZENE	3/20/2021	13.1	Y	Y				0.869	0.188	ug/m3
SV-5A	L2112425-08	O-XYLENE	3/20/2021	12.5	Y	Y				0.869	0.197	ug/m3
SV-5A	L2112425-08	DICHLORODIFLUOROMETHANE	3/20/2021	1.95	Y	Y				0.989	0.288	ug/m3
SV-5A	L2112425-08	CYCLOHEXANE	3/20/2021	0.747	Y	Y				0.688	0.127	ug/m3
SV-5A	L2112425-08	CHLOROFORM	3/20/2021	2.13	Y	Y				0.977	0.309	ug/m3
SV-5A	L2112425-08	ACETONE	3/20/2021	55.8	Y	Y				2.38	1.64	ug/m3
SV-5A	L2112425-08	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-5A	L2112425-08	2-HEXANONE	3/20/2021	1.62	Y	Y				0.82	0.266	ug/m3
SV-5A	L2112425-08	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-5A	L2112425-08	ISO-PROPYL ALCOHOL	3/20/2021	42.3	Y	Y				1.23	1.17	ug/m3
SV-5A	L2112425-08	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-5A	L2112425-08	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-5A	L2112425-08	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-5A	L2112425-08	1,2,4-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-5A	L2112425-08	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-5A	L2112425-08	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-5A	L2112425-08	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-5A	L2112425-08	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-5A	L2112425-08	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-5A	L2112425-08	BENZENE	3/20/2021		Y	N	U		U	0.639	0.156	ug/m3
SV-5A	L2112425-08	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-5A	L2112425-08	1,3,5-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-5A	L2112425-08	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-5A	L2112425-08	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-5A	L2112425-08	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-5A	L2112425-08	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-5A	L2112425-08	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-5A	L2112425-08	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-5A	L2112425-08	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-5A	L2112425-08	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-5A	L2112425-08	CHLOROMETHANE	3/20/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-5A	L2112425-08	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-5A	L2112425-08	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-5A	L2112425-08	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-5A	L2112425-08	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-5A	L2112425-08	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-5A	L2112425-08	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-5A	L2112425-08	1,1,1-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.273	ug/m3
SV-5A	L2112425-08	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-5A	L2112425-08	1,1-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.254	ug/m3
SV-5A	L2112425-08	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-5A	L2112425-08	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-5A	L2112425-08	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-5A	L2112425-08	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-5A	L2112425-08	CARBON TETRACHLORIDE	3/20/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-5A	L2112425-08	CARBON DISULFIDE	3/20/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-5A	L2112425-08	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-5A	L2112425-08	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-5A	L2112425-08	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-5A	L2112425-08	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-5B	L2112425-09	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-5B	L2112425-09	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-5B	L2112425-09	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-5B	L2112425-09	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-5B	L2112425-09	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-5B	L2112425-09	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-5B	L2112425-09	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-5B	L2112425-09	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-5B	L2112425-09	1,2,4-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-5B	L2112425-09	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-5B	L2112425-09	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-5B	L2112425-09	1,1-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.254	ug/m3
SV-5B	L2112425-09	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-5B	L2112425-09	1,1,1-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.273	ug/m3
SV-5B	L2112425-09	1,3,5-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-5B	L2112425-09	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-5B	L2112425-09	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-5B	L2112425-09	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-5B	L2112425-09	BENZENE	3/20/2021		Y	N	U		U	0.639	0.156	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-5B	L2112425-09	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-5B	L2112425-09	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-5B	L2112425-09	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-5B	L2112425-09	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-5B	L2112425-09	CARBON DISULFIDE	3/20/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-5B	L2112425-09	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-5B	L2112425-09	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-5B	L2112425-09	CHLOROMETHANE	3/20/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-5B	L2112425-09	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-5B	L2112425-09	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-5B	L2112425-09	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-5B	L2112425-09	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-5B	L2112425-09	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-5B	L2112425-09	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-5B	L2112425-09	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-5B	L2112425-09	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-5B	L2112425-09	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-5B	L2112425-09	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-5B	L2112425-09	CIS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.464	ug/m3
SV-5B	L2112425-09	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-5B	L2112425-09	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-5B	L2112425-09	TETRAHYDROFURAN	3/20/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-5B	L2112425-09	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-5B	L2112425-09	ETHYL ALCOHOL	3/20/2021	28.6	Y	Y				9.42	1.38	ug/m3
SV-5B	L2112425-09	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-5B	L2112425-09	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-5B	L2112425-09	ISO-PROPYL ALCOHOL	3/20/2021	3.98	Y	Y				1.23	1.17	ug/m3
SV-5B	L2112425-09	STYRENE	3/20/2021	1.41	Y	Y				0.852	0.185	ug/m3
SV-5B	L2112425-09	TETRACHLOROETHENE	3/20/2021	59.8	Y	Y				1.36	0.444	ug/m3
SV-5B	L2112425-09	ETHYLBENZENE	3/20/2021	15.8	Y	Y				0.869	0.188	ug/m3
SV-5B	L2112425-09	TOLUENE	3/20/2021	14.9	Y	Y				0.754	0.196	ug/m3
SV-5B	L2112425-09	DICHLORODIFLUOROMETHANE	3/20/2021	2.05	Y	Y				0.989	0.288	ug/m3
SV-5B	L2112425-09	TRICHLOROETHENE	3/20/2021	5.7	Y	Y				1.07	0.271	ug/m3
SV-5B	L2112425-09	TRICHLOROFLUOROMETHANE	3/20/2021	1.83	Y	Y				1.12	0.386	ug/m3
SV-5B	L2112425-09	2-BUTANONE	3/20/2021	1.89	Y	Y				1.47	0.142	ug/m3
SV-5B	L2112425-09	P/M-XYLENE	3/20/2021	26.4	Y	Y				1.74	0.395	ug/m3
SV-5B	L2112425-09	CYCLOHEXANE	3/20/2021	0.826	Y	Y				0.688	0.127	ug/m3
SV-5B	L2112425-09	CHLOROFORM	3/20/2021	38.7	Y	Y				0.977	0.309	ug/m3
SV-5B	L2112425-09	CARBON TETRACHLORIDE	3/20/2021	2.68	Y	Y				1.26	0.314	ug/m3
SV-5B	L2112425-09	ACETONE	3/20/2021	12.6	Y	Y				2.38	1.64	ug/m3
SV-5B	L2112425-09	2-HEXANONE	3/20/2021	4.75	Y	Y				0.82	0.266	ug/m3
SV-5B	L2112425-09	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-5B	L2112425-09	O-XYLENE	3/20/2021	14.9	Y	Y				0.869	0.197	ug/m3
SV-5B	L2112425-09	TERT-BUTYL ALCOHOL	3/20/2021	17.6	Y	Y				1.52	0.141	ug/m3
SV-DUP-	L2112425-10	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-DUP-	L2112425-10	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-DUP-	L2112425-10	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3
SV-DUP-	L2112425-10	1,3,5-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.332	ug/m3
SV-DUP-	L2112425-10	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-DUP-	L2112425-10	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-DUP-	L2112425-10	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-DUP-	L2112425-10	1,2,4-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.181	ug/m3
SV-DUP-	L2112425-10	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-DUP-	L2112425-10	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-DUP-	L2112425-10	ETHYLBENZENE	3/20/2021		Y	N	U		U	0.869	0.188	ug/m3
SV-DUP-	L2112425-10	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-DUP-	L2112425-10	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-DUP-	L2112425-10	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-DUP-	L2112425-10	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-DUP-	L2112425-10	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-DUP-	L2112425-10	CHLOROMETHANE	3/20/2021		Y	N	U		U	0.413	0.142	ug/m3
SV-DUP-	L2112425-10	CYCLOHEXANE	3/20/2021		Y	N	U		U	0.688	0.127	ug/m3
SV-DUP-	L2112425-10	ACETONE	3/20/2021	285	Y	Y				2.38	1.64	ug/m3
SV-DUP-	L2112425-10	2-BUTANONE	3/20/2021	4.1	Y	Y				1.47	0.142	ug/m3
SV-DUP-	L2112425-10	1,1-DICHLOROETHANE	3/20/2021	1.43	Y	Y				0.809	0.254	ug/m3
SV-DUP-	L2112425-10	1,1,1-TRICHLOROETHANE	3/20/2021	4.68	Y	Y				1.09	0.273	ug/m3
SV-DUP-	L2112425-10	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-DUP-	L2112425-10	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-DUP-	L2112425-10	CARBON TETRACHLORIDE	3/20/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-DUP-	L2112425-10	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-DUP-	L2112425-10	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-DUP-	L2112425-10	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-DUP-	L2112425-10	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-DUP-	L2112425-10	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-DUP-	L2112425-10	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3

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Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-DUP-	L2112425-10	2-HEXANONE	3/20/2021		Y	N	U		U	0.82	0.266	ug/m3
SV-DUP-	L2112425-10	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-DUP-	L2112425-10	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-DUP-	L2112425-10	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-DUP-	L2112425-10	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-DUP-	L2112425-10	O-XYLENE	3/20/2021		Y	N	U		U	0.869	0.197	ug/m3
SV-DUP-	L2112425-10	TOLUENE	3/20/2021	1.99	Y	Y				0.754	0.196	ug/m3
SV-DUP-	L2112425-10	TRICHLOROETHENE	3/20/2021	90.8	Y	Y				1.07	0.271	ug/m3
SV-DUP-	L2112425-10	CIS-1,2-DICHLOROETHENE	3/20/2021	2.56	Y	Y				0.793	0.464	ug/m3
SV-DUP-	L2112425-10	TERT-BUTYL ALCOHOL	3/20/2021	1.54	Y	Y				1.52	0.141	ug/m3
SV-DUP-	L2112425-10	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-DUP-	L2112425-10	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-DUP-	L2112425-10	CARBON DISULFIDE	3/20/2021	1.25	Y	Y				0.623	0.174	ug/m3
SV-DUP-	L2112425-10	ISO-PROPYL ALCOHOL	3/20/2021	15.5	Y	Y				1.23	1.17	ug/m3
SV-DUP-	L2112425-10	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-DUP-	L2112425-10	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-DUP-	L2112425-10	TETRACHLOROETHENE	3/20/2021	38	Y	Y				1.36	0.444	ug/m3
SV-DUP-	L2112425-10	P/M-XYLENE	3/20/2021		Y	N	U		U	1.74	0.395	ug/m3
SV-DUP-	L2112425-10	TETRAHYDROFURAN	3/20/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-DUP-	L2112425-10	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-DUP-	L2112425-10	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-DUP-	L2112425-10	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-DUP-	L2112425-10	CHLOROFORM	3/20/2021	1.99	Y	Y				0.977	0.309	ug/m3
SV-DUP-	L2112425-10	DICHLORODIFLUOROMETHANE	3/20/2021	1.99	Y	Y				0.989	0.288	ug/m3
SV-DUP-	L2112425-10	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-DUP-	L2112425-10	STYRENE	3/20/2021		Y	N	U		U	0.852	0.185	ug/m3
SV-DUP-	L2112425-10	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-DUP-	L2112425-10	TRICHLOROFLUOROMETHANE	3/20/2021		Y	N	U		U	1.12	0.386	ug/m3
SV-DUP-	L2112425-10	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-DUP-	L2112425-10	BENZENE	3/20/2021	0.677	Y	Y				0.639	0.156	ug/m3
SV-DUP-	L2112425-10	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-DUP-	L2112425-10	ETHYL ALCOHOL	3/20/2021	129	Y	Y				9.42	1.38	ug/m3
SV-DUP-	L2112425-11	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-DUP-	L2112425-11	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
SV-DUP-	L2112425-11	TETRAHYDROFURAN	3/20/2021		Y	N	U		U	1.47	0.168	ug/m3
SV-DUP-	L2112425-11	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
SV-DUP-	L2112425-11	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U		U	2.13	0.564	ug/m3
SV-DUP-	L2112425-11	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
SV-DUP-	L2112425-11	STYRENE	3/20/2021		Y	N	U		U	0.852	0.185	ug/m3
SV-DUP-	L2112425-11	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3
SV-DUP-	L2112425-11	TRICHLOROFLUOROMETHANE	3/20/2021		Y	N	U		U	1.12	0.386	ug/m3
SV-DUP-	L2112425-11	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
SV-DUP-	L2112425-11	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3
SV-DUP-	L2112425-11	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
SV-DUP-	L2112425-11	CIS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.464	ug/m3
SV-DUP-	L2112425-11	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
SV-DUP-	L2112425-11	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
SV-DUP-	L2112425-11	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
SV-DUP-	L2112425-11	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3
SV-DUP-	L2112425-11	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-DUP-	L2112425-11	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.511	0.16	ug/m3
SV-DUP-	L2112425-11	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3
SV-DUP-	L2112425-11	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
SV-DUP-	L2112425-11	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
SV-DUP-	L2112425-11	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
SV-DUP-	L2112425-11	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
SV-DUP-	L2112425-11	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3
SV-DUP-	L2112425-11	CYCLOHEXANE	3/20/2021		Y	N	U		U	0.688	0.127	ug/m3
SV-DUP-	L2112425-11	BENZENE	3/20/2021		Y	N	U		U	0.639	0.156	ug/m3
SV-DUP-	L2112425-11	ETHYLBENZENE	3/20/2021	3.43	Y	Y				0.869	0.188	ug/m3
SV-DUP-	L2112425-11	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
SV-DUP-	L2112425-11	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
SV-DUP-	L2112425-11	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
SV-DUP-	L2112425-11	CARBON DISULFIDE	3/20/2021		Y	N	U		U	0.623	0.174	ug/m3
SV-DUP-	L2112425-11	CARBON TETRACHLORIDE	3/20/2021		Y	N	U		U	1.26	0.314	ug/m3
SV-DUP-	L2112425-11	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
SV-DUP-	L2112425-11	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
SV-DUP-	L2112425-11	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
SV-DUP-	L2112425-11	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3
SV-DUP-	L2112425-11	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
SV-DUP-	L2112425-11	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
SV-DUP-	L2112425-11	2-BUTANONE	3/20/2021	5.13	Y	Y				1.47	0.142	ug/m3
SV-DUP-	L2112425-11	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
SV-DUP-	L2112425-11	ISO-PROPYL ALCOHOL	3/20/2021	24.2	Y	Y				1.23	1.17	ug/m3
SV-DUP-	L2112425-11	1,1-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.254	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SV-DUP-	L2112425-11	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U		U	1.48	0.5	ug/m3
SV-DUP-	L2112425-11	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
SV-DUP-	L2112425-11	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
SV-DUP-	L2112425-11	1,1,1-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.273	ug/m3
SV-DUP-	L2112425-11	1,3,5-TRIMETHYLBENZENE	3/20/2021	1.71	Y	Y				0.983	0.332	ug/m3
SV-DUP-	L2112425-11	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
SV-DUP-	L2112425-11	2-HEXANONE	3/20/2021	1.52	Y	Y				0.82	0.266	ug/m3
SV-DUP-	L2112425-11	ACETONE	3/20/2021	14.2	Y	Y				2.38	1.64	ug/m3
SV-DUP-	L2112425-11	CHLOROFORM	3/20/2021	3.14	Y	Y				0.977	0.309	ug/m3
SV-DUP-	L2112425-11	CHLOROMETHANE	3/20/2021	0.77	Y	Y				0.413	0.142	ug/m3
SV-DUP-	L2112425-11	DICHLORODIFLUOROMETHANE	3/20/2021	2.49	Y	Y				0.989	0.288	ug/m3
SV-DUP-	L2112425-11	ETHYL ALCOHOL	3/20/2021	79.1	Y	Y				9.42	1.38	ug/m3
SV-DUP-	L2112425-11	1,2,4-TRIMETHYLBENZENE	3/20/2021	1.68	Y	Y				0.983	0.181	ug/m3
SV-DUP-	L2112425-11	TRICHLOROETHENE	3/20/2021	16.3	Y	Y				1.07	0.271	ug/m3
SV-DUP-	L2112425-11	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
SV-DUP-	L2112425-11	O-XYLENE	3/20/2021	2.91	Y	Y				0.869	0.197	ug/m3
SV-DUP-	L2112425-11	TOLUENE	3/20/2021	3.84	Y	Y				0.754	0.196	ug/m3
SV-DUP-	L2112425-11	TETRACHLOROETHENE	3/20/2021	5.66	Y	Y				1.36	0.444	ug/m3
SV-DUP-	L2112425-11	TERT-BUTYL ALCOHOL	3/20/2021	5.4	Y	Y				1.52	0.141	ug/m3
SV-DUP-	L2112425-11	P/M-XYLENE	3/20/2021	6.21	Y	Y				1.74	0.395	ug/m3
IA-1	L2112425-12	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
IA-1	L2112425-12	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-1	L2112425-12	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-1	L2112425-12	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-1	L2112425-12	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-1	L2112425-12	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-1	L2112425-12	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-1	L2112425-12	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-1	L2112425-12	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-1	L2112425-12	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-1	L2112425-12	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-1	L2112425-12	P/M-XYLENE	3/19/2021		Y	N	U		U	1.74	0.395	ug/m3
IA-1	L2112425-12	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-1	L2112425-12	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-1	L2112425-12	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-1	L2112425-12	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
IA-1	L2112425-12	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-1	L2112425-12	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-1	L2112425-12	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-1	L2112425-12	ACETONE	3/19/2021		Y	N	U		U	2.38	1.64	ug/m3
IA-1	L2112425-12	DICHLORODIFLUOROMETHANE	3/19/2021	1.99	Y	Y				0.989	0.288	ug/m3
IA-1	L2112425-12	CHLOROMETHANE	3/19/2021	0.888	Y	Y				0.413	0.142	ug/m3
IA-1	L2112425-12	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-1	L2112425-12	BENZENE	3/19/2021	0.879	Y	Y				0.639	0.156	ug/m3
IA-1	L2112425-12	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
IA-1	L2112425-12	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-1	L2112425-12	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-1	L2112425-12	TRICHLOROFLUOROMETHANE	3/19/2021		Y	N	U		U	1.12	0.386	ug/m3
IA-1	L2112425-12	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-1	L2112425-12	2-BUTANONE	3/19/2021		Y	N	U		U	1.47	0.142	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-1	L2112425-12	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-1	L2112425-12	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-1	L2112425-12	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-1	L2112425-12	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-1	L2112425-12	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-1	L2112425-12	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-1	L2112425-12	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-1	L2112425-12	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-1	L2112425-12	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-1	L2112425-12	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-1	L2112425-12	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-1	L2112425-12	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
IA-1	L2112425-12	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-1	L2112425-12	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-1	L2112425-12	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-1	L2112425-12	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-1	L2112425-12	ETHYL ALCOHOL	3/19/2021	28.6	Y	Y				9.42	1.38	ug/m3
IA-1	L2112425-12	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-1	L2112425-12	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-1	L2112425-12	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-1	L2112425-12	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-1	L2112425-12	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-1	L2112425-12	TOLUENE	3/19/2021	2.09	Y	Y				0.754	0.196	ug/m3
IA-1	L2112425-12	ISO-PROPYL ALCOHOL	3/19/2021	3.37	Y	Y				1.23	1.17	ug/m3
IA-1	L2112425-12	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-1	L2112425-12	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-2	L2112425-13	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-2	L2112425-13	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-2	L2112425-13	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-2	L2112425-13	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-2	L2112425-13	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-2	L2112425-13	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-2	L2112425-13	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-2	L2112425-13	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-2	L2112425-13	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-2	L2112425-13	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-2	L2112425-13	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-2	L2112425-13	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
IA-2	L2112425-13	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-2	L2112425-13	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-2	L2112425-13	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-2	L2112425-13	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-2	L2112425-13	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-2	L2112425-13	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-2	L2112425-13	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-2	L2112425-13	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-2	L2112425-13	2-BUTANONE	3/19/2021		Y	N	U		U	1.47	0.142	ug/m3
IA-2	L2112425-13	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-2	L2112425-13	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-2	L2112425-13	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-2	L2112425-13	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-2	L2112425-13	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-2	L2112425-13	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-2	L2112425-13	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-2	L2112425-13	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
IA-2	L2112425-13	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
IA-2	L2112425-13	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-2	L2112425-13	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-2	L2112425-13	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-2	L2112425-13	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-2	L2112425-13	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-2	L2112425-13	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-2	L2112425-13	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-2	L2112425-13	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-2	L2112425-13	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-2	L2112425-13	TOLUENE	3/19/2021	2.36	Y	Y				0.754	0.196	ug/m3
IA-2	L2112425-13	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-2	L2112425-13	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-2	L2112425-13	P/M-XYLENE	3/19/2021	4.6	Y	Y				1.74	0.395	ug/m3
IA-2	L2112425-13	O-XYLENE	3/19/2021	1.32	Y	Y				0.869	0.197	ug/m3
IA-2	L2112425-13	TRICHLOROFLUOROMETHANE	3/19/2021	1.26	Y	Y				1.12	0.386	ug/m3
IA-2	L2112425-13	ISO-PROPYL ALCOHOL	3/19/2021	6.02	Y	Y				1.23	1.17	ug/m3
IA-2	L2112425-13	ETHYLBENZENE	3/19/2021	1.23	Y	Y				0.869	0.188	ug/m3
IA-2	L2112425-13	ETHYL ALCOHOL	3/19/2021	447	Y	Y				9.42	1.38	ug/m3
IA-2	L2112425-13	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-2	L2112425-13	CHLOROMETHANE	3/19/2021	0.964	Y	Y				0.413	0.142	ug/m3
IA-2	L2112425-13	BENZENE	3/19/2021	1.04	Y	Y				0.639	0.156	ug/m3
IA-2	L2112425-13	ACETONE	3/19/2021	47	Y	Y				2.38	1.64	ug/m3
IA-2	L2112425-13	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.25	Y	Y				0.983	0.181	ug/m3
IA-2	L2112425-13	DICHLORODIFLUOROMETHANE	3/19/2021	2.08	Y	Y				0.989	0.288	ug/m3
IA-2	L2112425-13	N-HEXANE	3/19/2021	0.73	Y	Y				0.705	0.128	ug/m3
IA-2	L2112425-13	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-3	L2112425-14	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
IA-3	L2112425-14	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-3	L2112425-14	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-3	L2112425-14	P/M-XYLENE	3/19/2021	1.91	Y	Y				1.74	0.395	ug/m3
IA-3	L2112425-14	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-3	L2112425-14	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-3	L2112425-14	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-3	L2112425-14	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-3	L2112425-14	BENZENE	3/19/2021	1.16	Y	Y				0.639	0.156	ug/m3
IA-3	L2112425-14	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-3	L2112425-14	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-3	L2112425-14	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-3	L2112425-14	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-3	L2112425-14	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-3	L2112425-14	TRICHLOROFLUOROMETHANE	3/19/2021	1.29	Y	Y				1.12	0.386	ug/m3
IA-3	L2112425-14	TOLUENE	3/19/2021	2.08	Y	Y				0.754	0.196	ug/m3
IA-3	L2112425-14	ISO-PROPYL ALCOHOL	3/19/2021	6.22	Y	Y				1.23	1.17	ug/m3
IA-3	L2112425-14	ETHYL ALCOHOL	3/19/2021	203	Y	Y				9.42	1.38	ug/m3

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Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-3	L2112425-14	DICHLORODIFLUOROMETHANE	3/19/2021	2.13	Y	Y				0.989	0.288	ug/m3
IA-3	L2112425-14	CHLOROFORM	3/19/2021	2.08	Y	Y				0.977	0.309	ug/m3
IA-3	L2112425-14	ACETONE	3/19/2021	18.2	Y	Y				2.38	1.64	ug/m3
IA-3	L2112425-14	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.64	Y	Y				0.983	0.181	ug/m3
IA-3	L2112425-14	2-BUTANONE	3/19/2021		Y	N	U		U	1.47	0.142	ug/m3
IA-3	L2112425-14	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-3	L2112425-14	CHLOROMETHANE	3/19/2021	0.989	Y	Y				0.413	0.142	ug/m3
IA-3	L2112425-14	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-3	L2112425-14	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-3	L2112425-14	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
IA-3	L2112425-14	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
IA-3	L2112425-14	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-3	L2112425-14	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-3	L2112425-14	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-3	L2112425-14	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-3	L2112425-14	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-3	L2112425-14	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-3	L2112425-14	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-3	L2112425-14	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-3	L2112425-14	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-3	L2112425-14	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-3	L2112425-14	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-3	L2112425-14	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-3	L2112425-14	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-3	L2112425-14	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-3	L2112425-14	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-3	L2112425-14	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-3	L2112425-14	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-3	L2112425-14	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-3	L2112425-14	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-3	L2112425-14	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-3	L2112425-14	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-3	L2112425-14	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-3	L2112425-14	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-3	L2112425-14	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-3	L2112425-14	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-3	L2112425-14	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
IA-3	L2112425-14	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4A	L2112425-15	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4A	L2112425-15	2-BUTANONE	3/19/2021	1.54	Y	Y				1.47	0.142	ug/m3
IA-4A	L2112425-15	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4A	L2112425-15	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-4A	L2112425-15	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4A	L2112425-15	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4A	L2112425-15	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4A	L2112425-15	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
IA-4A	L2112425-15	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-4A	L2112425-15	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4A	L2112425-15	ETHYL ACETATE	3/19/2021	2.64	Y	Y				1.8	0.44	ug/m3
IA-4A	L2112425-15	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4A	L2112425-15	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4A	L2112425-15	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4A	L2112425-15	ACETONE	3/19/2021	36.3	Y	Y				2.38	1.64	ug/m3
IA-4A	L2112425-15	BENZENE	3/19/2021	1.09	Y	Y				0.639	0.156	ug/m3
IA-4A	L2112425-15	CHLOROMETHANE	3/19/2021	1.1	Y	Y				0.413	0.142	ug/m3
IA-4A	L2112425-15	CYCLOHEXANE	3/19/2021	1.94	Y	Y				0.688	0.127	ug/m3
IA-4A	L2112425-15	ETHYL ALCOHOL	3/19/2021	889	Y	Y				9.42	1.38	ug/m3
IA-4A	L2112425-15	HEPTANE	3/19/2021	35.1	Y	Y				0.82	0.193	ug/m3
IA-4A	L2112425-15	ISO-PROPYL ALCOHOL	3/19/2021	230	Y	Y				1.23	1.17	ug/m3
IA-4A	L2112425-15	TOLUENE	3/19/2021	5.31	Y	Y				0.754	0.196	ug/m3
IA-4A	L2112425-15	TRICHLOROFLUOROMETHANE	3/19/2021	1.27	Y	Y				1.12	0.386	ug/m3
IA-4A	L2112425-15	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4A	L2112425-15	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4A	L2112425-15	P/M-XYLENE	3/19/2021	1.92	Y	Y				1.74	0.395	ug/m3
IA-4A	L2112425-15	N-HEXANE	3/19/2021	0.871	Y	Y				0.705	0.128	ug/m3
IA-4A	L2112425-15	DICHLORODIFLUOROMETHANE	3/19/2021	2.02	Y	Y				0.989	0.288	ug/m3
IA-4A	L2112425-15	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4A	L2112425-15	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4A	L2112425-15	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4A	L2112425-15	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4A	L2112425-15	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4A	L2112425-15	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4A	L2112425-15	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
IA-4A	L2112425-15	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-4A	L2112425-15	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4A	L2112425-15	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4A	L2112425-15	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4A	L2112425-15	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4A	L2112425-15	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4A	L2112425-15	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4A	L2112425-15	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4A	L2112425-15	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4A	L2112425-15	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4A	L2112425-15	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4A	L2112425-15	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4A	L2112425-15	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4A	L2112425-15	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4A	L2112425-15	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4A	L2112425-15	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4A	L2112425-15	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4A	L2112425-15	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4A	L2112425-15	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4A	L2112425-15	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4A	L2112425-15	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4B	L2112425-16	DICHLORODIFLUOROMETHANE	3/19/2021	2.05	Y	Y				0.989	0.288	ug/m3
IA-4B	L2112425-16	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4B	L2112425-16	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4B	L2112425-16	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4B	L2112425-16	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U		U	1.48	0.5	ug/m3
IA-4B	L2112425-16	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4B	L2112425-16	ACETONE	3/19/2021	15.6	Y	Y				2.38	1.64	ug/m3
IA-4B	L2112425-16	O-XYLENE	3/19/2021	1.3	Y	Y				0.869	0.197	ug/m3
IA-4B	L2112425-16	CHLOROMETHANE	3/19/2021	1	Y	Y				0.413	0.142	ug/m3
IA-4B	L2112425-16	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4B	L2112425-16	ETHYL ALCOHOL	3/19/2021	196	Y	Y				9.42	1.38	ug/m3
IA-4B	L2112425-16	ETHYLBENZENE	3/19/2021	1.13	Y	Y				0.869	0.188	ug/m3
IA-4B	L2112425-16	HEPTANE	3/19/2021	1.75	Y	Y				0.82	0.193	ug/m3
IA-4B	L2112425-16	ISO-PROPYL ALCOHOL	3/19/2021	35.2	Y	Y				1.23	1.17	ug/m3
IA-4B	L2112425-16	TOLUENE	3/19/2021	2.58	Y	Y				0.754	0.196	ug/m3
IA-4B	L2112425-16	TRICHLOROFLUOROMETHANE	3/19/2021	1.27	Y	Y				1.12	0.386	ug/m3
IA-4B	L2112425-16	BENZENE	3/19/2021	1.08	Y	Y				0.639	0.156	ug/m3
IA-4B	L2112425-16	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-4B	L2112425-16	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4B	L2112425-16	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4B	L2112425-16	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4B	L2112425-16	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-4B	L2112425-16	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4B	L2112425-16	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4B	L2112425-16	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4B	L2112425-16	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4B	L2112425-16	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4B	L2112425-16	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4B	L2112425-16	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4B	L2112425-16	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U		U	2.13	0.564	ug/m3
IA-4B	L2112425-16	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4B	L2112425-16	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4B	L2112425-16	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4B	L2112425-16	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4B	L2112425-16	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4B	L2112425-16	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4B	L2112425-16	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4B	L2112425-16	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4B	L2112425-16	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4B	L2112425-16	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4B	L2112425-16	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4B	L2112425-16	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4B	L2112425-16	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
IA-4B	L2112425-16	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4B	L2112425-16	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4B	L2112425-16	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4B	L2112425-16	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4B	L2112425-16	P/M-XYLENE	3/19/2021	4.43	Y	Y				1.74	0.395	ug/m3
IA-4B	L2112425-16	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4B	L2112425-16	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-4B	L2112425-16	2-BUTANONE	3/19/2021		Y	N	U		U	1.47	0.142	ug/m3
IA-4B	L2112425-16	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4B	L2112425-16	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4B	L2112425-16	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4B	L2112425-16	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4B	L2112425-16	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4C	L2112425-17	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4C	L2112425-17	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4C	L2112425-17	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4C	L2112425-17	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4C	L2112425-17	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4C	L2112425-17	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4C	L2112425-17	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4C	L2112425-17	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4C	L2112425-17	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4C	L2112425-17	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4C	L2112425-17	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4C	L2112425-17	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4C	L2112425-17	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4C	L2112425-17	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4C	L2112425-17	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4C	L2112425-17	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4C	L2112425-17	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4C	L2112425-17	1,2-DICHLOROETHANE	3/19/2021	1.04	Y	Y				0.809	0.244	ug/m3
IA-4C	L2112425-17	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4C	L2112425-17	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4C	L2112425-17	CHLOROFORM	3/19/2021	4.68	Y	Y				0.977	0.309	ug/m3
IA-4C	L2112425-17	P/M-XYLENE	3/19/2021	1.85	Y	Y				1.74	0.395	ug/m3
IA-4C	L2112425-17	N-HEXANE	3/19/2021	0.765	Y	Y				0.705	0.128	ug/m3
IA-4C	L2112425-17	TRICHLOROFLUOROMETHANE	3/19/2021	2.28	Y	Y				1.12	0.386	ug/m3
IA-4C	L2112425-17	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4C	L2112425-17	TOLUENE	3/19/2021	3	Y	Y				0.754	0.196	ug/m3
IA-4C	L2112425-17	ISO-PROPYL ALCOHOL	3/19/2021	91.4	Y	Y				1.23	1.17	ug/m3
IA-4C	L2112425-17	HEPTANE	3/19/2021	2.73	Y	Y				0.82	0.193	ug/m3
IA-4C	L2112425-17	ETHYL ACETATE	3/19/2021	13.8	Y	Y				1.8	0.44	ug/m3
IA-4C	L2112425-17	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4C	L2112425-17	CHLOROMETHANE	3/19/2021	1.33	Y	Y				0.413	0.142	ug/m3
IA-4C	L2112425-17	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4C	L2112425-17	BENZENE	3/19/2021	1.17	Y	Y				0.639	0.156	ug/m3
IA-4C	L2112425-17	ACETONE	3/19/2021	67.5	Y	Y				2.38	1.64	ug/m3
IA-4C	L2112425-17	2-BUTANONE	3/19/2021	2.12	Y	Y				1.47	0.142	ug/m3
IA-4C	L2112425-17	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4C	L2112425-17	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4C	L2112425-17	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4C	L2112425-17	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4C	L2112425-17	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-4C	L2112425-17	DICHLORODIFLUOROMETHANE	3/19/2021	2.5	Y	Y				0.989	0.288	ug/m3
IA-4C	L2112425-17	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4C	L2112425-17	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4C	L2112425-17	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4C	L2112425-17	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4C	L2112425-17	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4C	L2112425-17	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4C	L2112425-17	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4C	L2112425-17	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4C	L2112425-17	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4C	L2112425-17	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4C	L2112425-17	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4C	L2112425-17	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4C	L2112425-17	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4C	L2112425-17	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-4C	L2112425-17	ETHYL ALCOHOL	3/20/2021	1810	Y	Y				47.1	6.9	ug/m3
IA-4D	L2112425-18	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4D	L2112425-18	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4D	L2112425-18	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-4D	L2112425-18	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4D	L2112425-18	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4D	L2112425-18	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4D	L2112425-18	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4D	L2112425-18	1,3-BUTADIENE	3/19/2021	0.763	Y	Y				0.442	0.148	ug/m3
IA-4D	L2112425-18	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4D	L2112425-18	ETHYL ACETATE	3/19/2021	3.57	Y	Y				1.8	0.44	ug/m3
IA-4D	L2112425-18	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4D	L2112425-18	2-BUTANONE	3/19/2021	2	Y	Y				1.47	0.142	ug/m3
IA-4D	L2112425-18	ACETONE	3/19/2021	31.4	Y	Y				2.38	1.64	ug/m3
IA-4D	L2112425-18	BENZENE	3/19/2021	1.57	Y	Y				0.639	0.156	ug/m3
IA-4D	L2112425-18	CHLOROMETHANE	3/19/2021	1.67	Y	Y				0.413	0.142	ug/m3
IA-4D	L2112425-18	CYCLOHEXANE	3/19/2021	0.723	Y	Y				0.688	0.127	ug/m3
IA-4D	L2112425-18	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4D	L2112425-18	ETHYL ALCOHOL	3/19/2021	433	Y	Y				9.42	1.38	ug/m3
IA-4D	L2112425-18	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4D	L2112425-18	HEPTANE	3/19/2021	8.57	Y	Y				0.82	0.193	ug/m3
IA-4D	L2112425-18	ISO-PROPYL ALCOHOL	3/19/2021	61.9	Y	Y				1.23	1.17	ug/m3
IA-4D	L2112425-18	TOLUENE	3/19/2021	3.73	Y	Y				0.754	0.196	ug/m3
IA-4D	L2112425-18	TRICHLOROFLUOROMETHANE	3/19/2021	1.47	Y	Y				1.12	0.386	ug/m3
IA-4D	L2112425-18	N-HEXANE	3/19/2021	0.885	Y	Y				0.705	0.128	ug/m3
IA-4D	L2112425-18	P/M-XYLENE	3/19/2021	2.14	Y	Y				1.74	0.395	ug/m3
IA-4D	L2112425-18	DICHLORODIFLUOROMETHANE	3/19/2021	2.26	Y	Y				0.989	0.288	ug/m3
IA-4D	L2112425-18	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4D	L2112425-18	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4D	L2112425-18	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4D	L2112425-18	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4D	L2112425-18	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4D	L2112425-18	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4D	L2112425-18	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4D	L2112425-18	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4D	L2112425-18	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4D	L2112425-18	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4D	L2112425-18	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4D	L2112425-18	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4D	L2112425-18	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4D	L2112425-18	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-4D	L2112425-18	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4D	L2112425-18	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4D	L2112425-18	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4D	L2112425-18	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3

SDG: L2112425

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4D	L2112425-18	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4D	L2112425-18	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4D	L2112425-18	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4D	L2112425-18	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4D	L2112425-18	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4D	L2112425-18	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4D	L2112425-18	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4D	L2112425-18	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4D	L2112425-18	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4D	L2112425-18	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4D	L2112425-18	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4D	L2112425-18	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4E	L2112425-19	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4E	L2112425-19	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4E	L2112425-19	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4E	L2112425-19	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4E	L2112425-19	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4E	L2112425-19	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4E	L2112425-19	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4E	L2112425-19	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4E	L2112425-19	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4E	L2112425-19	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4E	L2112425-19	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-4E	L2112425-19	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4E	L2112425-19	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4E	L2112425-19	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4E	L2112425-19	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4E	L2112425-19	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4E	L2112425-19	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4E	L2112425-19	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4E	L2112425-19	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4E	L2112425-19	2-BUTANONE	3/19/2021		Y	N	U		U	1.47	0.142	ug/m3
IA-4E	L2112425-19	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4E	L2112425-19	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4E	L2112425-19	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4E	L2112425-19	DICHLORODIFLUOROMETHANE	3/19/2021	2.49	Y	Y				0.989	0.288	ug/m3
IA-4E	L2112425-19	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4E	L2112425-19	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-4E	L2112425-19	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-4E	L2112425-19	P/M-XYLENE	3/19/2021		Y	N	U		U	1.74	0.395	ug/m3
IA-4E	L2112425-19	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4E	L2112425-19	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4E	L2112425-19	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4E	L2112425-19	CHLOROMETHANE	3/19/2021	0.975	Y	Y				0.413	0.142	ug/m3
IA-4E	L2112425-19	ACETONE	3/19/2021	11.5	Y	Y				2.38	1.64	ug/m3
IA-4E	L2112425-19	ETHYL ALCOHOL	3/19/2021	105	Y	Y				9.42	1.38	ug/m3
IA-4E	L2112425-19	ISO-PROPYL ALCOHOL	3/19/2021	23.9	Y	Y				1.23	1.17	ug/m3
IA-4E	L2112425-19	TOLUENE	3/19/2021	1.62	Y	Y				0.754	0.196	ug/m3
IA-4E	L2112425-19	TRICHLOROFLUOROMETHANE	3/19/2021	1.83	Y	Y				1.12	0.386	ug/m3
IA-4E	L2112425-19	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4E	L2112425-19	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4E	L2112425-19	BENZENE	3/19/2021	0.847	Y	Y				0.639	0.156	ug/m3
IA-4E	L2112425-19	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4E	L2112425-19	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4E	L2112425-19	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4E	L2112425-19	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4E	L2112425-19	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4E	L2112425-19	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4E	L2112425-19	ETHYL ACETATE	3/19/2021		Y	N	U		U	1.8	0.44	ug/m3
IA-4E	L2112425-19	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4E	L2112425-19	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4E	L2112425-19	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4E	L2112425-19	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4E	L2112425-19	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4E	L2112425-19	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4E	L2112425-19	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4E	L2112425-19	HEPTANE	3/19/2021		Y	N	U		U	0.82	0.193	ug/m3
IA-4E	L2112425-19	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-4F	L2112425-20	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4F	L2112425-20	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4F	L2112425-20	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4F	L2112425-20	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.19	Y	Y				0.983	0.181	ug/m3
IA-4F	L2112425-20	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4F	L2112425-20	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4F	L2112425-20	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4F	L2112425-20	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4F	L2112425-20	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4F	L2112425-20	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4F	L2112425-20	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4F	L2112425-20	STYRENE	3/19/2021	1.01	Y	Y				0.852	0.185	ug/m3
IA-4F	L2112425-20	TOLUENE	3/19/2021	3.84	Y	Y				0.754	0.196	ug/m3
IA-4F	L2112425-20	DICHLORODIFLUOROMETHANE	3/19/2021	2.49	Y	Y				0.989	0.288	ug/m3
IA-4F	L2112425-20	CHLOROMETHANE	3/19/2021	1.03	Y	Y				0.413	0.142	ug/m3
IA-4F	L2112425-20	BENZENE	3/19/2021	0.926	Y	Y				0.639	0.156	ug/m3
IA-4F	L2112425-20	P/M-XYLENE	3/19/2021	5.99	Y	Y				1.74	0.395	ug/m3
IA-4F	L2112425-20	2-BUTANONE	3/19/2021	2.23	Y	Y				1.47	0.142	ug/m3
IA-4F	L2112425-20	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4F	L2112425-20	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4F	L2112425-20	O-XYLENE	3/19/2021	1.74	Y	Y				0.869	0.197	ug/m3
IA-4F	L2112425-20	N-HEXANE	3/19/2021	0.737	Y	Y				0.705	0.128	ug/m3
IA-4F	L2112425-20	TRICHLOROFLUOROMETHANE	3/19/2021	2.42	Y	Y				1.12	0.386	ug/m3
IA-4F	L2112425-20	ACETONE	3/19/2021	44.2	Y	Y				2.38	1.64	ug/m3
IA-4F	L2112425-20	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4F	L2112425-20	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4F	L2112425-20	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4F	L2112425-20	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4F	L2112425-20	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4F	L2112425-20	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4F	L2112425-20	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4F	L2112425-20	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4F	L2112425-20	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4F	L2112425-20	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4F	L2112425-20	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4F	L2112425-20	ISO-PROPYL ALCOHOL	3/19/2021	45.2	Y	Y				1.23	1.17	ug/m3
IA-4F	L2112425-20	HEPTANE	3/19/2021	1.45	Y	Y				0.82	0.193	ug/m3
IA-4F	L2112425-20	ETHYLBENZENE	3/19/2021	1.54	Y	Y				0.869	0.188	ug/m3
IA-4F	L2112425-20	ETHYL ACETATE	3/19/2021	3.68	Y	Y				1.8	0.44	ug/m3
IA-4F	L2112425-20	ETHYL ALCOHOL	3/19/2021	205	Y	Y				9.42	1.38	ug/m3
IA-4F	L2112425-20	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4F	L2112425-20	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4F	L2112425-20	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4F	L2112425-20	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4F	L2112425-20	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4F	L2112425-20	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4F	L2112425-20	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4F	L2112425-20	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4F	L2112425-20	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4F	L2112425-20	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4F	L2112425-20	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4F	L2112425-20	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4F	L2112425-20	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4F	L2112425-20	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4F	L2112425-20	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4F	L2112425-20	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4G	L2112425-21	TOLUENE	3/19/2021	3.04	Y	Y				0.754	0.196	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4G	L2112425-21	ACETONE	3/19/2021	62.7	Y	Y				2.38	1.64	ug/m3
IA-4G	L2112425-21	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4G	L2112425-21	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4G	L2112425-21	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.06	Y	Y				0.983	0.181	ug/m3
IA-4G	L2112425-21	1,2-DICHLOROETHANE	3/19/2021	1.6	Y	Y				0.809	0.244	ug/m3
IA-4G	L2112425-21	2-BUTANONE	3/19/2021	3.51	Y	Y				1.47	0.142	ug/m3
IA-4G	L2112425-21	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4G	L2112425-21	BENZENE	3/19/2021	1.35	Y	Y				0.639	0.156	ug/m3
IA-4G	L2112425-21	CHLOROFORM	3/19/2021	3.04	Y	Y				0.977	0.309	ug/m3
IA-4G	L2112425-21	CHLOROMETHANE	3/19/2021	1.23	Y	Y				0.413	0.142	ug/m3
IA-4G	L2112425-21	DICHLORODIFLUOROMETHANE	3/19/2021	2.48	Y	Y				0.989	0.288	ug/m3
IA-4G	L2112425-21	ETHYL ACETATE	3/19/2021	8.61	Y	Y				1.8	0.44	ug/m3
IA-4G	L2112425-21	ISO-PROPYL ALCOHOL	3/19/2021	93.9	Y	Y				1.23	1.17	ug/m3
IA-4G	L2112425-21	TRICHLOROFLUOROMETHANE	3/19/2021	4.9	Y	Y				1.12	0.386	ug/m3
IA-4G	L2112425-21	N-HEXANE	3/19/2021	0.712	Y	Y				0.705	0.128	ug/m3
IA-4G	L2112425-21	O-XYLENE	3/19/2021	0.934	Y	Y				0.869	0.197	ug/m3
IA-4G	L2112425-21	P/M-XYLENE	3/19/2021	2.53	Y	Y				1.74	0.395	ug/m3
IA-4G	L2112425-21	HEPTANE	3/19/2021	1.08	Y	Y				0.82	0.193	ug/m3
IA-4G	L2112425-21	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4G	L2112425-21	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4G	L2112425-21	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4G	L2112425-21	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4G	L2112425-21	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4G	L2112425-21	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4G	L2112425-21	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4G	L2112425-21	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4G	L2112425-21	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4G	L2112425-21	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4G	L2112425-21	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4G	L2112425-21	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4G	L2112425-21	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4G	L2112425-21	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4G	L2112425-21	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4G	L2112425-21	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4G	L2112425-21	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4G	L2112425-21	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4G	L2112425-21	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4G	L2112425-21	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4G	L2112425-21	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4G	L2112425-21	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4G	L2112425-21	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4G	L2112425-21	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-4G	L2112425-21	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4G	L2112425-21	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4G	L2112425-21	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4G	L2112425-21	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4G	L2112425-21	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4G	L2112425-21	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4G	L2112425-21	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-4G	L2112425-21	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4G	L2112425-21	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4G	L2112425-21	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4G	L2112425-21	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4G	L2112425-21	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4G	L2112425-21	ETHYL ALCOHOL	3/20/2021	784	Y	Y				23.6	3.45	ug/m3
IA-4H	L2112425-22	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-4H	L2112425-22	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-4H	L2112425-22	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-4H	L2112425-22	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-4H	L2112425-22	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-4H	L2112425-22	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-4H	L2112425-22	P/M-XYLENE	3/19/2021	2.06	Y	Y				1.74	0.395	ug/m3
IA-4H	L2112425-22	TRICHLOROFLUOROMETHANE	3/19/2021	2.5	Y	Y				1.12	0.386	ug/m3
IA-4H	L2112425-22	TOLUENE	3/19/2021	2.48	Y	Y				0.754	0.196	ug/m3
IA-4H	L2112425-22	ISO-PROPYL ALCOHOL	3/19/2021	52.1	Y	Y				1.23	1.17	ug/m3
IA-4H	L2112425-22	HEPTANE	3/19/2021	1.88	Y	Y				0.82	0.193	ug/m3
IA-4H	L2112425-22	ETHYL ACETATE	3/19/2021	2.52	Y	Y				1.8	0.44	ug/m3
IA-4H	L2112425-22	ETHYL ALCOHOL	3/19/2021	288	Y	Y				9.42	1.38	ug/m3
IA-4H	L2112425-22	DICHLORODIFLUOROMETHANE	3/19/2021	2.46	Y	Y				0.989	0.288	ug/m3
IA-4H	L2112425-22	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-4H	L2112425-22	CHLOROMETHANE	3/19/2021	1.08	Y	Y				0.413	0.142	ug/m3
IA-4H	L2112425-22	BENZENE	3/19/2021	1.02	Y	Y				0.639	0.156	ug/m3
IA-4H	L2112425-22	ACETONE	3/19/2021	24.7	Y	Y				2.38	1.64	ug/m3
IA-4H	L2112425-22	2-BUTANONE	3/19/2021	1.7	Y	Y				1.47	0.142	ug/m3
IA-4H	L2112425-22	1,2,4-TRIMETHYLBENZENE	3/19/2021	0.998	Y	Y				0.983	0.181	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4H	L2112425-22	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-4H	L2112425-22	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-4H	L2112425-22	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-4H	L2112425-22	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-4H	L2112425-22	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-4H	L2112425-22	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-4H	L2112425-22	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-4H	L2112425-22	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-4H	L2112425-22	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-4H	L2112425-22	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-4H	L2112425-22	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-4H	L2112425-22	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-4H	L2112425-22	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-4H	L2112425-22	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-4H	L2112425-22	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-4H	L2112425-22	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-4H	L2112425-22	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-4H	L2112425-22	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-4H	L2112425-22	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-4H	L2112425-22	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-4H	L2112425-22	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-4H	L2112425-22	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-4H	L2112425-22	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-4H	L2112425-22	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-4H	L2112425-22	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3

SDG: L2112425

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4H	L2112425-22	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-4H	L2112425-22	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-4H	L2112425-22	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-4H	L2112425-22	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-4H	L2112425-22	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-4H	L2112425-22	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-4H	L2112425-22	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-4H	L2112425-22	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-4H	L2112425-22	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-4H	L2112425-22	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-4H	L2112425-22	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-5	L2112425-23	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-5	L2112425-23	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-5	L2112425-23	ISO-PROPYL ALCOHOL	3/19/2021	117	Y	Y				1.23	1.17	ug/m3
IA-5	L2112425-23	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-5	L2112425-23	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-5	L2112425-23	P/M-XYLENE	3/19/2021	1.98	Y	Y				1.74	0.395	ug/m3
IA-5	L2112425-23	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-5	L2112425-23	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-5	L2112425-23	N-HEXANE	3/19/2021		Y	N	U		U	0.705	0.128	ug/m3
IA-5	L2112425-23	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-5	L2112425-23	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-5	L2112425-23	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-5	L2112425-23	TOLUENE	3/19/2021	2.8	Y	Y				0.754	0.196	ug/m3
IA-5	L2112425-23	HEPTANE	3/19/2021	0.828	Y	Y				0.82	0.193	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-5	L2112425-23	CHLOROMETHANE	3/19/2021	0.983	Y	Y				0.413	0.142	ug/m3
IA-5	L2112425-23	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-5	L2112425-23	ETHYL ACETATE	3/19/2021	8.9	Y	Y				1.8	0.44	ug/m3
IA-5	L2112425-23	ETHYL ALCOHOL	3/19/2021	903	Y	Y				9.42	1.38	ug/m3
IA-5	L2112425-23	DICHLORODIFLUOROMETHANE	3/19/2021	2.43	Y	Y				0.989	0.288	ug/m3
IA-5	L2112425-23	TRICHLOROFLUOROMETHANE	3/19/2021	6.24	Y	Y				1.12	0.386	ug/m3
IA-5	L2112425-23	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-5	L2112425-23	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-5	L2112425-23	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-5	L2112425-23	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-5	L2112425-23	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-5	L2112425-23	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-5	L2112425-23	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-5	L2112425-23	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-5	L2112425-23	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-5	L2112425-23	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-5	L2112425-23	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-5	L2112425-23	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-5	L2112425-23	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-5	L2112425-23	CHLOROFORM	3/19/2021	1.32	Y	Y				0.977	0.309	ug/m3
IA-5	L2112425-23	BENZENE	3/19/2021	1.05	Y	Y				0.639	0.156	ug/m3
IA-5	L2112425-23	ACETONE	3/19/2021	24.2	Y	Y				2.38	1.64	ug/m3
IA-5	L2112425-23	2-BUTANONE	3/19/2021	2.35	Y	Y				1.47	0.142	ug/m3
IA-5	L2112425-23	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.39	Y	Y				0.983	0.181	ug/m3
IA-5	L2112425-23	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3

SDG: L2112425

Analytical Method TO15

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-5	L2112425-23	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-5	L2112425-23	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-5	L2112425-23	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-5	L2112425-23	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-5	L2112425-23	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-5	L2112425-23	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-5	L2112425-23	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-5	L2112425-23	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-5	L2112425-23	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-5	L2112425-23	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-5	L2112425-23	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-5	L2112425-23	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-5	L2112425-23	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-5	L2112425-23	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-5	L2112425-23	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-5	L2112425-23	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-5	L2112425-23	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-DUP-1	L2112425-24	TOLUENE	3/19/2021	5.16	Y	Y				0.754	0.196	ug/m3
IA-DUP-1	L2112425-24	TRICHLOROFLUOROMETHANE	3/19/2021	1.89	Y	Y				1.12	0.386	ug/m3
IA-DUP-1	L2112425-24	N-HEXANE	3/19/2021	0.853	Y	Y				0.705	0.128	ug/m3
IA-DUP-1	L2112425-24	P/M-XYLENE	3/19/2021	2.09	Y	Y				1.74	0.395	ug/m3
IA-DUP-1	L2112425-24	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-DUP-1	L2112425-24	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-DUP-1	L2112425-24	ISO-PROPYL ALCOHOL	3/19/2021	256	Y	Y				1.23	1.17	ug/m3
IA-DUP-1	L2112425-24	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-1	L2112425-24	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-DUP-1	L2112425-24	HEPTANE	3/19/2021	34.6	Y	Y				0.82	0.193	ug/m3
IA-DUP-1	L2112425-24	ETHYL ACETATE	3/19/2021	3.44	Y	Y				1.8	0.44	ug/m3
IA-DUP-1	L2112425-24	ETHYL ALCOHOL	3/19/2021	825	Y	Y				9.42	1.38	ug/m3
IA-DUP-1	L2112425-24	DICHLORODIFLUOROMETHANE	3/19/2021	2.46	Y	Y				0.989	0.288	ug/m3
IA-DUP-1	L2112425-24	CYCLOHEXANE	3/19/2021	1.83	Y	Y				0.688	0.127	ug/m3
IA-DUP-1	L2112425-24	CHLOROMETHANE	3/19/2021	1.08	Y	Y				0.413	0.142	ug/m3
IA-DUP-1	L2112425-24	BENZENE	3/19/2021	1.07	Y	Y				0.639	0.156	ug/m3
IA-DUP-1	L2112425-24	2-BUTANONE	3/19/2021	1.53	Y	Y				1.47	0.142	ug/m3
IA-DUP-1	L2112425-24	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
IA-DUP-1	L2112425-24	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-DUP-1	L2112425-24	ACETONE	3/19/2021	39	Y	Y				2.38	1.64	ug/m3
IA-DUP-1	L2112425-24	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-DUP-1	L2112425-24	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-DUP-1	L2112425-24	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-DUP-1	L2112425-24	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-DUP-1	L2112425-24	CHLOROFORM	3/19/2021		Y	N	U		U	0.977	0.309	ug/m3
IA-DUP-1	L2112425-24	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-DUP-1	L2112425-24	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-DUP-1	L2112425-24	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-DUP-1	L2112425-24	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-DUP-1	L2112425-24	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-DUP-1	L2112425-24	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3
IA-DUP-1	L2112425-24	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-DUP-1	L2112425-24	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-1	L2112425-24	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-DUP-1	L2112425-24	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3
IA-DUP-1	L2112425-24	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-DUP-1	L2112425-24	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-DUP-1	L2112425-24	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-DUP-1	L2112425-24	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-DUP-1	L2112425-24	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-DUP-1	L2112425-24	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-DUP-1	L2112425-24	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-DUP-1	L2112425-24	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-DUP-1	L2112425-24	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-DUP-1	L2112425-24	1,2,4-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.181	ug/m3
IA-DUP-1	L2112425-24	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-DUP-1	L2112425-24	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-DUP-1	L2112425-24	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-DUP-1	L2112425-24	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-DUP-1	L2112425-24	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-DUP-1	L2112425-24	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-DUP-1	L2112425-24	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-DUP-1	L2112425-24	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-DUP-1	L2112425-24	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-DUP-1	L2112425-24	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-DUP-1	L2112425-24	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-DUP-2	L2112425-25	1,4-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.382	ug/m3
IA-DUP-2	L2112425-25	ACETONE	3/19/2021	24	Y	Y				2.38	1.64	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-2	L2112425-25	1,3,5-TRIMETHYLBENZENE	3/19/2021		Y	N	U		U	0.983	0.332	ug/m3
IA-DUP-2	L2112425-25	1,2,4-TRIMETHYLBENZENE	3/19/2021	1.21	Y	Y				0.983	0.181	ug/m3
IA-DUP-2	L2112425-25	1,2-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.378	ug/m3
IA-DUP-2	L2112425-25	1,2-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.244	ug/m3
IA-DUP-2	L2112425-25	1,2-DICHLOROPROPANE	3/19/2021		Y	N	U		U	0.924	0.282	ug/m3
IA-DUP-2	L2112425-25	P/M-XYLENE	3/19/2021	1.87	Y	Y				1.74	0.395	ug/m3
IA-DUP-2	L2112425-25	N-HEXANE	3/19/2021	0.747	Y	Y				0.705	0.128	ug/m3
IA-DUP-2	L2112425-25	2-BUTANONE	3/19/2021	2.47	Y	Y				1.47	0.142	ug/m3
IA-DUP-2	L2112425-25	CHLOROFORM	3/19/2021	1.26	Y	Y				0.977	0.309	ug/m3
IA-DUP-2	L2112425-25	CHLOROMETHANE	3/19/2021	0.977	Y	Y				0.413	0.142	ug/m3
IA-DUP-2	L2112425-25	DICHLORODIFLUOROMETHANE	3/19/2021	2.43	Y	Y				0.989	0.288	ug/m3
IA-DUP-2	L2112425-25	1,1,2,2-TETRACHLOROETHANE	3/19/2021		Y	N	U		U	1.37	0.422	ug/m3
IA-DUP-2	L2112425-25	ETHYL ALCOHOL	3/19/2021	880	Y	Y				9.42	1.38	ug/m3
IA-DUP-2	L2112425-25	ETHYL ACETATE	3/19/2021	8.58	Y	Y				1.8	0.44	ug/m3
IA-DUP-2	L2112425-25	HEPTANE	3/19/2021	0.836	Y	Y				0.82	0.193	ug/m3
IA-DUP-2	L2112425-25	ISO-PROPYL ALCOHOL	3/19/2021	114	Y	Y				1.23	1.17	ug/m3
IA-DUP-2	L2112425-25	1,1,2-TRICHLOROETHANE	3/19/2021		Y	N	U		U	1.09	0.366	ug/m3
IA-DUP-2	L2112425-25	1,1-DICHLOROETHANE	3/19/2021		Y	N	U		U	0.809	0.254	ug/m3
IA-DUP-2	L2112425-25	1,2,4-TRICHLOROBENZENE	3/19/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
IA-DUP-2	L2112425-25	1,2-DIBROMOETHANE	3/19/2021		Y	N	U		U	1.54	0.431	ug/m3
IA-DUP-2	L2112425-25	TOLUENE	3/19/2021	2.78	Y	Y				0.754	0.196	ug/m3
IA-DUP-2	L2112425-25	TRICHLOROFLUOROMETHANE	3/19/2021	5.96	Y	Y				1.12	0.386	ug/m3
IA-DUP-2	L2112425-25	BENZENE	3/19/2021	1.06	Y	Y				0.639	0.156	ug/m3
IA-DUP-2	L2112425-25	METHYLENE CHLORIDE	3/19/2021		Y	N	U		U	1.74	0.466	ug/m3
IA-DUP-2	L2112425-25	4-METHYL-2-PENTANONE	3/19/2021		Y	N	U		U	2.05	0.173	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-2	L2112425-25	BENZYL CHLORIDE	3/19/2021		Y	N	U		U	1.04	0.25	ug/m3
IA-DUP-2	L2112425-25	BROMODICHLOROMETHANE	3/19/2021		Y	N	U		U	1.34	0.338	ug/m3
IA-DUP-2	L2112425-25	BROMOFORM	3/19/2021		Y	N	U		U	2.07	0.663	ug/m3
IA-DUP-2	L2112425-25	BROMOMETHANE	3/19/2021		Y	N	U		U	0.777	0.3	ug/m3
IA-DUP-2	L2112425-25	CARBON DISULFIDE	3/19/2021		Y	N	U		U	0.623	0.174	ug/m3
IA-DUP-2	L2112425-25	CHLOROBENZENE	3/19/2021		Y	N	U		U	0.921	0.287	ug/m3
IA-DUP-2	L2112425-25	CHLOROETHANE	3/19/2021		Y	N	U		U	0.528	0.212	ug/m3
IA-DUP-2	L2112425-25	CYCLOHEXANE	3/19/2021		Y	N	U		U	0.688	0.127	ug/m3
IA-DUP-2	L2112425-25	DIBROMOCHLOROMETHANE	3/19/2021		Y	N	U		U	1.7	0.523	ug/m3
IA-DUP-2	L2112425-25	ETHYLBENZENE	3/19/2021		Y	N	U		U	0.869	0.188	ug/m3
IA-DUP-2	L2112425-25	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/19/2021		Y	N	U		U	1.53	0.503	ug/m3
IA-DUP-2	L2112425-25	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/19/2021		Y	N	U		U	1.4	0.413	ug/m3
IA-DUP-2	L2112425-25	3-CHLOROPROPENE	3/19/2021		Y	N	U		U	0.626	0.183	ug/m3
IA-DUP-2	L2112425-25	TERT-BUTYL ALCOHOL	3/19/2021		Y	N	U		U	1.52	0.141	ug/m3
IA-DUP-2	L2112425-25	1,3-BUTADIENE	3/19/2021		Y	N	U		U	0.442	0.148	ug/m3
IA-DUP-2	L2112425-25	TRANS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.198	ug/m3
IA-DUP-2	L2112425-25	TRANS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.793	0.255	ug/m3
IA-DUP-2	L2112425-25	O-XYLENE	3/19/2021		Y	N	U		U	0.869	0.197	ug/m3
IA-DUP-2	L2112425-25	CIS-1,3-DICHLOROPROPENE	3/19/2021		Y	N	U		U	0.908	0.186	ug/m3
IA-DUP-2	L2112425-25	HEXACHLOROBUTADIENE	3/19/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
IA-DUP-2	L2112425-25	TETRAHYDROFURAN	3/19/2021		Y	N	U		U	1.47	0.168	ug/m3
IA-DUP-2	L2112425-25	METHYL TERT BUTYL ETHER	3/19/2021		Y	N	U		U	0.721	0.189	ug/m3
IA-DUP-2	L2112425-25	1,3-DICHLOROBENZENE	3/19/2021		Y	N	U		U	1.2	0.377	ug/m3
IA-DUP-2	L2112425-25	2-HEXANONE	3/19/2021		Y	N	U		U	0.82	0.266	ug/m3
IA-DUP-2	L2112425-25	2,2,4-TRIMETHYLPENTANE	3/19/2021		Y	N	U		U	0.934	0.169	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-2	L2112425-25	1,4-DIOXANE	3/19/2021		Y	N	U		U	0.721	0.29	ug/m3
IA-DUP-2	L2112425-25	STYRENE	3/19/2021		Y	N	U		U	0.852	0.185	ug/m3
IA-DUP-2	L2112425-25	4-ETHYLTOLUENE	3/19/2021		Y	N	U		U	0.983	0.182	ug/m3
IA-DUP-2	L2112425-25	VINYL BROMIDE	3/19/2021		Y	N	U		U	0.874	0.313	ug/m3
OA-1	L2112425-26	1,1,2-TRICHLOROETHANE	3/20/2021		Y	N	U		U	1.09	0.366	ug/m3
OA-1	L2112425-26	CHLOROMETHANE	3/20/2021	0.892	Y	Y				0.413	0.142	ug/m3
OA-1	L2112425-26	1,1-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.254	ug/m3
OA-1	L2112425-26	BROMOFORM	3/20/2021		Y	N	U		U	2.07	0.663	ug/m3
OA-1	L2112425-26	BROMODICHLOROMETHANE	3/20/2021		Y	N	U		U	1.34	0.338	ug/m3
OA-1	L2112425-26	BENZYL CHLORIDE	3/20/2021		Y	N	U		U	1.04	0.25	ug/m3
OA-1	L2112425-26	1,3,5-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.332	ug/m3
OA-1	L2112425-26	1,2-DICHLOROPROPANE	3/20/2021		Y	N	U		U	0.924	0.282	ug/m3
OA-1	L2112425-26	1,2-DICHLOROETHANE	3/20/2021		Y	N	U		U	0.809	0.244	ug/m3
OA-1	L2112425-26	1,2,4-TRICHLOROBENZENE	3/20/2021		Y	N	U	UJ	UJ	1.48	0.5	ug/m3
OA-1	L2112425-26	1,2,4-TRIMETHYLBENZENE	3/20/2021		Y	N	U		U	0.983	0.181	ug/m3
OA-1	L2112425-26	1,2-DIBROMOETHANE	3/20/2021		Y	N	U		U	1.54	0.431	ug/m3
OA-1	L2112425-26	1,1,2,2-TETRACHLOROETHANE	3/20/2021		Y	N	U		U	1.37	0.422	ug/m3
OA-1	L2112425-26	1,3-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.377	ug/m3
OA-1	L2112425-26	ETHYLBENZENE	3/20/2021		Y	N	U		U	0.869	0.188	ug/m3
OA-1	L2112425-26	DIBROMOCHLOROMETHANE	3/20/2021		Y	N	U		U	1.7	0.523	ug/m3
OA-1	L2112425-26	4-METHYL-2-PENTANONE	3/20/2021		Y	N	U		U	2.05	0.173	ug/m3
OA-1	L2112425-26	ACETONE	3/20/2021	6.39	Y	Y				2.38	1.64	ug/m3
OA-1	L2112425-26	3-CHLOROPROPENE	3/20/2021		Y	N	U		U	0.626	0.183	ug/m3
OA-1	L2112425-26	2-HEXANONE	3/20/2021		Y	N	U		U	0.82	0.266	ug/m3
OA-1	L2112425-26	2-BUTANONE	3/20/2021		Y	N	U		U	1.47	0.142	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
OA-1	L2112425-26	2,2,4-TRIMETHYLPENTANE	3/20/2021		Y	N	U		U	0.934	0.169	ug/m3
OA-1	L2112425-26	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3/20/2021		Y	N	U		U	1.53	0.503	ug/m3
OA-1	L2112425-26	1,4-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.382	ug/m3
OA-1	L2112425-26	ETHYL ACETATE	3/20/2021		Y	N	U		U	1.8	0.44	ug/m3
OA-1	L2112425-26	1,3-BUTADIENE	3/20/2021		Y	N	U		U	0.442	0.148	ug/m3
OA-1	L2112425-26	ETHYL ALCOHOL	3/20/2021	19.4	Y	Y				9.42	1.38	ug/m3
OA-1	L2112425-26	ISO-PROPYL ALCOHOL	3/20/2021	5.14	Y	Y				1.23	1.17	ug/m3
OA-1	L2112425-26	TOLUENE	3/20/2021	1.46	Y	Y				0.754	0.196	ug/m3
OA-1	L2112425-26	TRICHLOROFLUOROMETHANE	3/20/2021	1.69	Y	Y				1.12	0.386	ug/m3
OA-1	L2112425-26	CHLOROBENZENE	3/20/2021		Y	N	U		U	0.921	0.287	ug/m3
OA-1	L2112425-26	CHLOROETHANE	3/20/2021		Y	N	U		U	0.528	0.212	ug/m3
OA-1	L2112425-26	CHLOROFORM	3/20/2021		Y	N	U		U	0.977	0.309	ug/m3
OA-1	L2112425-26	CYCLOHEXANE	3/20/2021		Y	N	U		U	0.688	0.127	ug/m3
OA-1	L2112425-26	1,4-DIOXANE	3/20/2021		Y	N	U		U	0.721	0.29	ug/m3
OA-1	L2112425-26	CIS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.186	ug/m3
OA-1	L2112425-26	BROMOMETHANE	3/20/2021		Y	N	U		U	0.777	0.3	ug/m3
OA-1	L2112425-26	CARBON DISULFIDE	3/20/2021		Y	N	U		U	0.623	0.174	ug/m3
OA-1	L2112425-26	1,2-DICHLOROBENZENE	3/20/2021		Y	N	U		U	1.2	0.378	ug/m3
OA-1	L2112425-26	BENZENE	3/20/2021	0.748	Y	Y				0.639	0.156	ug/m3
OA-1	L2112425-26	DICHLORODIFLUOROMETHANE	3/20/2021	2.41	Y	Y				0.989	0.288	ug/m3
OA-1	L2112425-26	TRANS-1,3-DICHLOROPROPENE	3/20/2021		Y	N	U		U	0.908	0.198	ug/m3
OA-1	L2112425-26	TRANS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.793	0.255	ug/m3
OA-1	L2112425-26	P/M-XYLENE	3/20/2021		Y	N	U		U	1.74	0.395	ug/m3
OA-1	L2112425-26	4-ETHYLTOLUENE	3/20/2021		Y	N	U		U	0.983	0.182	ug/m3
OA-1	L2112425-26	N-HEXANE	3/20/2021		Y	N	U		U	0.705	0.128	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
OA-1	L2112425-26	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	3/20/2021		Y	N	U		U	1.4	0.413	ug/m3
OA-1	L2112425-26	TERT-BUTYL ALCOHOL	3/20/2021		Y	N	U		U	1.52	0.141	ug/m3
OA-1	L2112425-26	TETRAHYDROFURAN	3/20/2021		Y	N	U		U	1.47	0.168	ug/m3
OA-1	L2112425-26	HEPTANE	3/20/2021		Y	N	U		U	0.82	0.193	ug/m3
OA-1	L2112425-26	HEXACHLOROBUTADIENE	3/20/2021		Y	N	U	UJ	UJ	2.13	0.564	ug/m3
OA-1	L2112425-26	METHYL TERT BUTYL ETHER	3/20/2021		Y	N	U		U	0.721	0.189	ug/m3
OA-1	L2112425-26	METHYLENE CHLORIDE	3/20/2021		Y	N	U		U	1.74	0.466	ug/m3
OA-1	L2112425-26	STYRENE	3/20/2021		Y	N	U		U	0.852	0.185	ug/m3
OA-1	L2112425-26	VINYL BROMIDE	3/20/2021		Y	N	U		U	0.874	0.313	ug/m3
OA-1	L2112425-26	O-XYLENE	3/20/2021		Y	N	U		U	0.869	0.197	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-1	L2112425-12	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-1	L2112425-12	TRICHLOROETHENE	3/19/2021	0.435	Y	Y				0.107	0.033	ug/m3
IA-1	L2112425-12	TETRACHLOROETHENE	3/19/2021	1.11	Y	Y				0.136	0.053	ug/m3
IA-1	L2112425-12	CARBON TETRACHLORIDE	3/19/2021	0.396	Y	Y				0.126	0.063	ug/m3
IA-1	L2112425-12	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-1	L2112425-12	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-1	L2112425-12	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-2	L2112425-13	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-2	L2112425-13	TRICHLOROETHENE	3/19/2021	0.408	Y	Y				0.107	0.033	ug/m3
IA-2	L2112425-13	TETRACHLOROETHENE	3/19/2021	0.787	Y	Y				0.136	0.053	ug/m3
IA-2	L2112425-13	CARBON TETRACHLORIDE	3/19/2021	0.421	Y	Y				0.126	0.063	ug/m3
IA-2	L2112425-13	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-2	L2112425-13	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-2	L2112425-13	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-3	L2112425-14	TRICHLOROETHENE	3/19/2021	2.14	Y	Y				0.107	0.033	ug/m3
IA-3	L2112425-14	TETRACHLOROETHENE	3/19/2021	2.09	Y	Y				0.136	0.053	ug/m3
IA-3	L2112425-14	CARBON TETRACHLORIDE	3/19/2021	0.403	Y	Y				0.126	0.063	ug/m3
IA-3	L2112425-14	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-3	L2112425-14	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-3	L2112425-14	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-3	L2112425-14	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4A	L2112425-15	TETRACHLOROETHENE	3/19/2021	1.04	Y	Y				0.136	0.053	ug/m3
IA-4A	L2112425-15	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4A	L2112425-15	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4A	L2112425-15	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4A	L2112425-15	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4A	L2112425-15	CARBON TETRACHLORIDE	3/19/2021	0.39	Y	Y				0.126	0.063	ug/m3
IA-4A	L2112425-15	TRICHLOROETHENE	3/19/2021	0.344	Y	Y				0.107	0.033	ug/m3
IA-4B	L2112425-16	TRICHLOROETHENE	3/19/2021	0.908	Y	Y				0.107	0.033	ug/m3
IA-4B	L2112425-16	TETRACHLOROETHENE	3/19/2021	1.02	Y	Y				0.136	0.053	ug/m3
IA-4B	L2112425-16	CARBON TETRACHLORIDE	3/19/2021	0.421	Y	Y				0.126	0.063	ug/m3
IA-4B	L2112425-16	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4B	L2112425-16	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4B	L2112425-16	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4B	L2112425-16	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4C	L2112425-17	CARBON TETRACHLORIDE	3/19/2021	0.591	Y	Y				0.126	0.063	ug/m3
IA-4C	L2112425-17	TRICHLOROETHENE	3/19/2021	1.23	Y	Y				0.107	0.033	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4C	L2112425-17	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4C	L2112425-17	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4C	L2112425-17	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4C	L2112425-17	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4C	L2112425-17	TETRACHLOROETHENE	3/19/2021	2.55	Y	Y				0.136	0.053	ug/m3
IA-4D	L2112425-18	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4D	L2112425-18	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4D	L2112425-18	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4D	L2112425-18	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4D	L2112425-18	CARBON TETRACHLORIDE	3/19/2021	0.459	Y	Y				0.126	0.063	ug/m3
IA-4D	L2112425-18	TETRACHLOROETHENE	3/19/2021	0.387	Y	Y				0.136	0.053	ug/m3
IA-4D	L2112425-18	TRICHLOROETHENE	3/19/2021		Y	N	U		U	0.107	0.033	ug/m3
IA-4E	L2112425-19	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4E	L2112425-19	CARBON TETRACHLORIDE	3/19/2021	0.478	Y	Y				0.126	0.063	ug/m3
IA-4E	L2112425-19	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4E	L2112425-19	TETRACHLOROETHENE	3/19/2021	0.292	Y	Y				0.136	0.053	ug/m3
IA-4E	L2112425-19	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4E	L2112425-19	TRICHLOROETHENE	3/19/2021		Y	N	U		U	0.107	0.033	ug/m3
IA-4E	L2112425-19	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4F	L2112425-20	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4F	L2112425-20	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4F	L2112425-20	CARBON TETRACHLORIDE	3/19/2021	0.547	Y	Y				0.126	0.063	ug/m3
IA-4F	L2112425-20	TRICHLOROETHENE	3/19/2021	0.516	Y	Y				0.107	0.033	ug/m3
IA-4F	L2112425-20	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4F	L2112425-20	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-4F	L2112425-20	TETRACHLOROETHENE	3/19/2021	0.448	Y	Y				0.136	0.053	ug/m3
IA-4G	L2112425-21	CARBON TETRACHLORIDE	3/19/2021	0.591	Y	Y				0.126	0.063	ug/m3
IA-4G	L2112425-21	TETRACHLOROETHENE	3/19/2021	0.57	Y	Y				0.136	0.053	ug/m3
IA-4G	L2112425-21	TRICHLOROETHENE	3/19/2021	0.333	Y	Y				0.107	0.033	ug/m3
IA-4G	L2112425-21	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4G	L2112425-21	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4G	L2112425-21	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4G	L2112425-21	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4H	L2112425-22	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-4H	L2112425-22	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-4H	L2112425-22	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-4H	L2112425-22	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-4H	L2112425-22	CARBON TETRACHLORIDE	3/19/2021	0.535	Y	Y				0.126	0.063	ug/m3
IA-4H	L2112425-22	TETRACHLOROETHENE	3/19/2021	0.502	Y	Y				0.136	0.053	ug/m3
IA-4H	L2112425-22	TRICHLOROETHENE	3/19/2021	0.253	Y	Y				0.107	0.033	ug/m3
IA-5	L2112425-23	CARBON TETRACHLORIDE	3/19/2021	0.585	Y	Y				0.126	0.063	ug/m3
IA-5	L2112425-23	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-5	L2112425-23	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-5	L2112425-23	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-5	L2112425-23	TETRACHLOROETHENE	3/19/2021	0.529	Y	Y				0.136	0.053	ug/m3
IA-5	L2112425-23	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-5	L2112425-23	TRICHLOROETHENE	3/19/2021	0.296	Y	Y				0.107	0.033	ug/m3
IA-DUP-1	L2112425-24	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-DUP-1	L2112425-24	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-DUP-1	L2112425-24	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
IA-DUP-1	L2112425-24	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-DUP-1	L2112425-24	CARBON TETRACHLORIDE	3/19/2021	0.516	Y	Y				0.126	0.063	ug/m3
IA-DUP-1	L2112425-24	TRICHLOROETHENE	3/19/2021	0.371	Y	Y				0.107	0.033	ug/m3
IA-DUP-1	L2112425-24	TETRACHLOROETHENE	3/19/2021	1.04	Y	Y				0.136	0.053	ug/m3
IA-DUP-2	L2112425-25	CIS-1,2-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.038	ug/m3
IA-DUP-2	L2112425-25	1,1,1-TRICHLOROETHANE	3/19/2021		Y	N	U		U	0.109	0.045	ug/m3
IA-DUP-2	L2112425-25	1,1-DICHLOROETHENE	3/19/2021		Y	N	U		U	0.079	0.033	ug/m3
IA-DUP-2	L2112425-25	VINYL CHLORIDE	3/19/2021		Y	N	U		U	0.051	0.018	ug/m3
IA-DUP-2	L2112425-25	TRICHLOROETHENE	3/19/2021	0.29	Y	Y				0.107	0.033	ug/m3
IA-DUP-2	L2112425-25	TETRACHLOROETHENE	3/19/2021	0.522	Y	Y				0.136	0.053	ug/m3
IA-DUP-2	L2112425-25	CARBON TETRACHLORIDE	3/19/2021	0.522	Y	Y				0.126	0.063	ug/m3
OA-1	L2112425-26	TRICHLOROETHENE	3/20/2021		Y	N	U		U	0.107	0.033	ug/m3
OA-1	L2112425-26	1,1-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.079	0.033	ug/m3
OA-1	L2112425-26	1,1,1-TRICHLOROETHANE	3/20/2021		Y	N	U		U	0.109	0.045	ug/m3
OA-1	L2112425-26	VINYL CHLORIDE	3/20/2021		Y	N	U		U	0.051	0.018	ug/m3
OA-1	L2112425-26	CARBON TETRACHLORIDE	3/20/2021	0.491	Y	Y				0.126	0.063	ug/m3
OA-1	L2112425-26	TETRACHLOROETHENE	3/20/2021	0.325	Y	Y				0.136	0.053	ug/m3
OA-1	L2112425-26	CIS-1,2-DICHLOROETHENE	3/20/2021		Y	N	U		U	0.079	0.038	ug/m3

Appendix E

Laboratory Analytical Report

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

ANALYTICAL REPORT

Lab Number:	L2112425
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	100 SOUTH 4TH ST.
Project Number:	13817
Report Date:	03/22/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2112425-01	SV-1A	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:29	03/12/21
L2112425-02	SV-1B	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:25	03/12/21
L2112425-03	SV-2A	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:40	03/12/21
L2112425-04	SV-2B	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:48	03/12/21
L2112425-05	SV-3B	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:00	03/12/21
L2112425-06	SV-3A	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:10	03/12/21
L2112425-07	SV-4	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:19	03/12/21
L2112425-08	SV-5A	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:50	03/12/21
L2112425-09	SV-5B	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 10:01	03/12/21
L2112425-10	SV-DUP-1	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 00:00	03/12/21
L2112425-11	SV-DUP-2	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 00:00	03/12/21
L2112425-12	IA-1	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:20	03/12/21
L2112425-13	IA-2	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:40	03/12/21
L2112425-14	IA-3	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:09	03/12/21
L2112425-15	IA-4A	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:42	03/12/21
L2112425-16	IA-4B	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:02	03/12/21
L2112425-17	IA-4C	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:15	03/12/21
L2112425-18	IA-4D	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:17	03/12/21
L2112425-19	IA-4E	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:12	03/12/21
L2112425-20	IA-4F	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:11	03/12/21
L2112425-21	IA-4G	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:14	03/12/21
L2112425-22	IA-4H	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 09:00	03/12/21
L2112425-23	IA-5	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 10:07	03/12/21
L2112425-24	IA-DUP-1	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 00:00	03/12/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2112425-25	IA-DUP-2	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 00:00	03/12/21
L2112425-26	OA-1	AIR	100 SOUTH 4TH ST, BROOKLYN	03/12/21 08:59	03/12/21

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 10, 2021. The canister certification results are provided as an addendum.

L2112425-02D,04D,06D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2112425-17,21: The sample was re-analyzed on dilution in order to quantiitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2112425-17D,21D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 03/22/21

AIR

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-01
Client ID: SV-1A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:29
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 20:33
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.409	0.200	--	2.02	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	81.2	5.00	--	153	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	193	1.00	--	458	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	6.29	0.500	--	15.5	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.72	0.500	--	5.21	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	0.809	0.200	--	3.27	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.79	0.500	--	8.23	1.47	--		1
cis-1,2-Dichloroethene	1.93	0.200	--	7.65	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-01
Client ID: SV-1A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:29
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.390	0.200	--	1.90	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.222	0.200	--	0.782	0.705	--		1
1,1,1-Trichloroethane	1.30	0.200	--	7.09	1.09	--		1
Benzene	0.262	0.200	--	0.837	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	22.4	0.200	--	120	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.552	0.200	--	2.08	0.754	--		1
2-Hexanone	0.319	0.200	--	1.31	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	6.78	0.200	--	46.0	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-01
Client ID: SV-1A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:29
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-02 D
Client ID: SV-1B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:25
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 21:09
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.625	--	ND	3.09	--		3.125
Chloromethane	ND	0.625	--	ND	1.29	--		3.125
Freon-114	ND	0.625	--	ND	4.37	--		3.125
Vinyl chloride	ND	0.625	--	ND	1.60	--		3.125
1,3-Butadiene	ND	0.625	--	ND	1.38	--		3.125
Bromomethane	ND	0.625	--	ND	2.43	--		3.125
Chloroethane	ND	0.625	--	ND	1.65	--		3.125
Ethanol	422	15.6	--	795	29.4	--		3.125
Vinyl bromide	ND	0.625	--	ND	2.73	--		3.125
Acetone	8.90	3.12	--	21.1	7.41	--		3.125
Trichlorofluoromethane	ND	0.625	--	ND	3.51	--		3.125
Isopropanol	3.12	1.56	--	7.67	3.83	--		3.125
1,1-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
Tertiary butyl Alcohol	ND	1.56	--	ND	4.73	--		3.125
Methylene chloride	ND	1.56	--	ND	5.42	--		3.125
3-Chloropropene	ND	0.625	--	ND	1.96	--		3.125
Carbon disulfide	ND	0.625	--	ND	1.95	--		3.125
Freon-113	ND	0.625	--	ND	4.79	--		3.125
trans-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
1,1-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
Methyl tert butyl ether	ND	0.625	--	ND	2.25	--		3.125
2-Butanone	ND	1.56	--	ND	4.60	--		3.125
cis-1,2-Dichloroethene	22.2	0.625	--	88.0	2.48	--		3.125

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-02 D
Client ID: SV-1B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:25
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.56	--	ND	5.62	--		3.125
Chloroform	ND	0.625	--	ND	3.05	--		3.125
Tetrahydrofuran	ND	1.56	--	ND	4.60	--		3.125
1,2-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
n-Hexane	ND	0.625	--	ND	2.20	--		3.125
1,1,1-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Benzene	ND	0.625	--	ND	2.00	--		3.125
Carbon tetrachloride	ND	0.625	--	ND	3.93	--		3.125
Cyclohexane	ND	0.625	--	ND	2.15	--		3.125
1,2-Dichloropropane	ND	0.625	--	ND	2.89	--		3.125
Bromodichloromethane	ND	0.625	--	ND	4.19	--		3.125
1,4-Dioxane	ND	0.625	--	ND	2.25	--		3.125
Trichloroethene	186	0.625	--	1000	3.36	--		3.125
2,2,4-Trimethylpentane	ND	0.625	--	ND	2.92	--		3.125
Heptane	ND	0.625	--	ND	2.56	--		3.125
cis-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
4-Methyl-2-pentanone	ND	1.56	--	ND	6.39	--		3.125
trans-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
1,1,2-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Toluene	1.31	0.625	--	4.94	2.36	--		3.125
2-Hexanone	ND	0.625	--	ND	2.56	--		3.125
Dibromochloromethane	ND	0.625	--	ND	5.32	--		3.125
1,2-Dibromoethane	ND	0.625	--	ND	4.80	--		3.125
Tetrachloroethene	183	0.625	--	1240	4.24	--		3.125
Chlorobenzene	ND	0.625	--	ND	2.88	--		3.125
Ethylbenzene	0.931	0.625	--	4.04	2.71	--		3.125

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-02 D
Client ID: SV-1B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:25
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.71	1.25	--	7.43	5.43	--		3.125
Bromoform	ND	0.625	--	ND	6.46	--		3.125
Styrene	ND	0.625	--	ND	2.66	--		3.125
1,1,2,2-Tetrachloroethane	ND	0.625	--	ND	4.29	--		3.125
o-Xylene	0.891	0.625	--	3.87	2.71	--		3.125
4-Ethyltoluene	ND	0.625	--	ND	3.07	--		3.125
1,3,5-Trimethylbenzene	ND	0.625	--	ND	3.07	--		3.125
1,2,4-Trimethylbenzene	ND	0.625	--	ND	3.07	--		3.125
Benzyl chloride	ND	0.625	--	ND	3.24	--		3.125
1,3-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,4-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2,4-Trichlorobenzene	ND	0.625	--	ND	4.64	--		3.125
Hexachlorobutadiene	ND	0.625	--	ND	6.67	--		3.125

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-03
Client ID: SV-2A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 21:49
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.409	0.200	--	2.02	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	0.210	0.200	--	0.537	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	278	5.00	--	524	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.38	1.00	--	19.9	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.830	0.500	--	2.04	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.89	0.500	--	5.73	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.609	0.500	--	1.80	1.47	--		1
cis-1,2-Dichloroethene	1.35	0.200	--	5.35	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-03
Client ID: SV-2A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	3.07	0.200	--	16.5	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	3.98	0.200	--	15.0	0.754	--		1
2-Hexanone	0.344	0.200	--	1.41	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.767	0.200	--	5.20	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.53	0.200	--	15.3	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-03
Client ID: SV-2A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	5.84	0.400	--	25.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.301	0.200	--	1.28	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.30	0.200	--	14.3	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-04 D
Client ID: SV-2B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:48
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 22:26
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	285	50.0	--	537	94.2	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	128	10.0	--	304	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Tertiary butyl Alcohol	ND	5.00	--	ND	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	2.07	2.00	--	8.21	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	ND	5.00	--	ND	14.7	--		10
cis-1,2-Dichloroethene	95.6	2.00	--	379	7.93	--		10

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-04 D
Client ID: SV-2B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:48
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	606	2.00	--	3260	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	2.09	2.00	--	7.88	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	399	2.00	--	2710	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-04 D
Client ID: SV-2B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:48
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-05
Client ID: SV-3B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 23:05
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.424	0.200	--	2.10	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	261	5.00	--	492	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	22.6	1.00	--	53.7	2.38	--		1
Trichlorofluoromethane	0.200	0.200	--	1.12	1.12	--		1
Isopropanol	8.50	0.500	--	20.9	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.54	0.500	--	4.67	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	2.92	0.200	--	9.09	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.00	0.500	--	5.90	1.47	--		1
cis-1,2-Dichloroethene	6.07	0.200	--	24.1	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-05
Client ID: SV-3B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	16.1	0.200	--	78.6	0.977	--		1
Tetrahydrofuran	0.753	0.500	--	2.22	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.443	0.200	--	1.56	0.705	--		1
1,1,1-Trichloroethane	0.290	0.200	--	1.58	1.09	--		1
Benzene	0.633	0.200	--	2.02	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.681	0.200	--	2.34	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	0.293	0.200	--	1.96	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	59.8	0.200	--	321	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.205	0.200	--	0.840	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.13	0.200	--	8.03	0.754	--		1
2-Hexanone	0.504	0.200	--	2.07	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	20.4	0.200	--	138	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.47	0.200	--	6.39	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-05
Client ID: SV-3B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	2.61	0.400	--	11.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.50	0.200	--	6.52	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-06 D
Client ID: SV-3A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:10
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 23:41
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.588	--	ND	2.91	--		2.941
Chloromethane	ND	0.588	--	ND	1.21	--		2.941
Freon-114	ND	0.588	--	ND	4.11	--		2.941
Vinyl chloride	ND	0.588	--	ND	1.50	--		2.941
1,3-Butadiene	ND	0.588	--	ND	1.30	--		2.941
Bromomethane	ND	0.588	--	ND	2.28	--		2.941
Chloroethane	ND	0.588	--	ND	1.55	--		2.941
Ethanol	22.0	14.7	--	41.5	27.7	--		2.941
Vinyl bromide	ND	0.588	--	ND	2.57	--		2.941
Acetone	ND	2.94	--	ND	6.98	--		2.941
Trichlorofluoromethane	ND	0.588	--	ND	3.30	--		2.941
Isopropanol	ND	1.47	--	ND	3.61	--		2.941
1,1-Dichloroethene	ND	0.588	--	ND	2.33	--		2.941
Tertiary butyl Alcohol	2.58	1.47	--	7.82	4.46	--		2.941
Methylene chloride	ND	1.47	--	ND	5.11	--		2.941
3-Chloropropene	ND	0.588	--	ND	1.84	--		2.941
Carbon disulfide	ND	0.588	--	ND	1.83	--		2.941
Freon-113	ND	0.588	--	ND	4.51	--		2.941
trans-1,2-Dichloroethene	ND	0.588	--	ND	2.33	--		2.941
1,1-Dichloroethane	ND	0.588	--	ND	2.38	--		2.941
Methyl tert butyl ether	ND	0.588	--	ND	2.12	--		2.941
2-Butanone	ND	1.47	--	ND	4.34	--		2.941
cis-1,2-Dichloroethene	5.05	0.588	--	20.0	2.33	--		2.941

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-06 D
Client ID: SV-3A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:10
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.47	--	ND	5.30	--		2.941
Chloroform	11.2	0.588	--	54.7	2.87	--		2.941
Tetrahydrofuran	ND	1.47	--	ND	4.34	--		2.941
1,2-Dichloroethane	ND	0.588	--	ND	2.38	--		2.941
n-Hexane	ND	0.588	--	ND	2.07	--		2.941
1,1,1-Trichloroethane	0.694	0.588	--	3.79	3.21	--		2.941
Benzene	ND	0.588	--	ND	1.88	--		2.941
Carbon tetrachloride	ND	0.588	--	ND	3.70	--		2.941
Cyclohexane	ND	0.588	--	ND	2.02	--		2.941
1,2-Dichloropropane	ND	0.588	--	ND	2.72	--		2.941
Bromodichloromethane	ND	0.588	--	ND	3.94	--		2.941
1,4-Dioxane	ND	0.588	--	ND	2.12	--		2.941
Trichloroethene	180	0.588	--	967	3.16	--		2.941
2,2,4-Trimethylpentane	ND	0.588	--	ND	2.75	--		2.941
Heptane	ND	0.588	--	ND	2.41	--		2.941
cis-1,3-Dichloropropene	ND	0.588	--	ND	2.67	--		2.941
4-Methyl-2-pentanone	ND	1.47	--	ND	6.02	--		2.941
trans-1,3-Dichloropropene	ND	0.588	--	ND	2.67	--		2.941
1,1,2-Trichloroethane	ND	0.588	--	ND	3.21	--		2.941
Toluene	3.18	0.588	--	12.0	2.22	--		2.941
2-Hexanone	ND	0.588	--	ND	2.41	--		2.941
Dibromochloromethane	ND	0.588	--	ND	5.01	--		2.941
1,2-Dibromoethane	ND	0.588	--	ND	4.52	--		2.941
Tetrachloroethene	67.9	0.588	--	460	3.99	--		2.941
Chlorobenzene	ND	0.588	--	ND	2.71	--		2.941
Ethylbenzene	2.74	0.588	--	11.9	2.55	--		2.941

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-06 D
Client ID: SV-3A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:10
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.56	1.18	--	19.8	5.13	--		2.941
Bromoform	ND	0.588	--	ND	6.08	--		2.941
Styrene	ND	0.588	--	ND	2.50	--		2.941
1,1,2,2-Tetrachloroethane	ND	0.588	--	ND	4.04	--		2.941
o-Xylene	2.59	0.588	--	11.2	2.55	--		2.941
4-Ethyltoluene	ND	0.588	--	ND	2.89	--		2.941
1,3,5-Trimethylbenzene	ND	0.588	--	ND	2.89	--		2.941
1,2,4-Trimethylbenzene	ND	0.588	--	ND	2.89	--		2.941
Benzyl chloride	ND	0.588	--	ND	3.04	--		2.941
1,3-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,4-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,2-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,2,4-Trichlorobenzene	ND	0.588	--	ND	4.36	--		2.941
Hexachlorobutadiene	ND	0.588	--	ND	6.27	--		2.941

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-07
Client ID: SV-4
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:19
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 00:20
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.582	0.200	--	2.88	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	24.4	5.00	--	46.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.86	1.00	--	9.17	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	4.20	0.500	--	10.3	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.782	0.500	--	2.37	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.24	0.500	--	3.66	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-07
Client ID: SV-4
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:19
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	2.18	0.200	--	10.6	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	3.90	0.200	--	21.0	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.589	0.200	--	2.22	0.754	--		1
2-Hexanone	0.216	0.200	--	0.885	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.687	0.200	--	4.66	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.459	0.200	--	1.99	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-07
Client ID: SV-4
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:19
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.812	0.400	--	3.53	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.430	0.200	--	1.87	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-08
Client ID: SV-5A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:50
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 00:59
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.395	0.200	--	1.95	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	396	5.00	--	746	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	23.5	1.00	--	55.8	2.38	--		1
Trichlorofluoromethane	0.509	0.200	--	2.86	1.12	--		1
Isopropanol	17.2	0.500	--	42.3	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.87	0.500	--	11.7	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.986	0.500	--	2.91	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-08
Client ID: SV-5A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:50
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.437	0.200	--	2.13	0.977	--		1
Tetrahydrofuran	1.13	0.500	--	3.33	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.217	0.200	--	0.747	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	1.47	0.200	--	7.90	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	3.47	0.200	--	13.1	0.754	--		1
2-Hexanone	0.396	0.200	--	1.62	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	1.41	0.200	--	9.56	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.01	0.200	--	13.1	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-08
Client ID: SV-5A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:50
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.97	0.400	--	21.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.255	0.200	--	1.09	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.88	0.200	--	12.5	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-09
Client ID: SV-5B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:01
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 01:39
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.414	0.200	--	2.05	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	15.2	5.00	--	28.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.30	1.00	--	12.6	2.38	--		1
Trichlorofluoromethane	0.326	0.200	--	1.83	1.12	--		1
Isopropanol	1.62	0.500	--	3.98	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	5.79	0.500	--	17.6	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.640	0.500	--	1.89	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-09
Client ID: SV-5B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:01
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	7.93	0.200	--	38.7	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	0.426	0.200	--	2.68	1.26	--		1
Cyclohexane	0.240	0.200	--	0.826	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	1.06	0.200	--	5.70	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	3.96	0.200	--	14.9	0.754	--		1
2-Hexanone	1.16	0.200	--	4.75	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	8.82	0.200	--	59.8	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.63	0.200	--	15.8	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-09
Client ID: SV-5B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:01
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	6.08	0.400	--	26.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.330	0.200	--	1.41	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.43	0.200	--	14.9	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-10
Client ID: SV-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 02:18
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.403	0.200	--	1.99	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	68.2	5.00	--	129	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	120	1.00	--	285	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	6.29	0.500	--	15.5	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.508	0.500	--	1.54	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.403	0.200	--	1.25	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	0.353	0.200	--	1.43	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.39	0.500	--	4.10	1.47	--		1
cis-1,2-Dichloroethene	0.645	0.200	--	2.56	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-10
Client ID: SV-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.408	0.200	--	1.99	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	0.857	0.200	--	4.68	1.09	--		1
Benzene	0.212	0.200	--	0.677	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	16.9	0.200	--	90.8	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.527	0.200	--	1.99	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	5.60	0.200	--	38.0	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-10
Client ID: SV-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-11
Client ID: SV-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 02:57
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.373	0.200	--	0.770	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	42.0	5.00	--	79.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.98	1.00	--	14.2	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	9.86	0.500	--	24.2	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.78	0.500	--	5.40	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.74	0.500	--	5.13	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-11
Client ID: SV-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.643	0.200	--	3.14	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	3.03	0.200	--	16.3	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.02	0.200	--	3.84	0.754	--		1
2-Hexanone	0.371	0.200	--	1.52	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.835	0.200	--	5.66	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.790	0.200	--	3.43	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-11
Client ID: SV-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.43	0.400	--	6.21	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.670	0.200	--	2.91	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.347	0.200	--	1.71	0.983	--		1
1,2,4-Trimethylbenzene	0.341	0.200	--	1.68	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	87		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-12
Client ID: IA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:20
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 16:37
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.402	0.200	--	1.99	0.989	--		1
Chloromethane	0.430	0.200	--	0.888	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	15.2	5.00	--	28.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.37	0.500	--	3.37	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-12
Client ID: IA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:20
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.275	0.200	--	0.879	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.554	0.200	--	2.09	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-12
Client ID: IA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:20
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-12
Client ID: IA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:20
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 16:37
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.063	0.020	--	0.396	0.126	--		1
Trichloroethene	0.081	0.020	--	0.435	0.107	--		1
Tetrachloroethene	0.164	0.020	--	1.11	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	99		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-13
Client ID: IA-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 17:16
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.420	0.200	--	2.08	0.989	--		1
Chloromethane	0.467	0.200	--	0.964	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	237	5.00	--	447	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.8	1.00	--	47.0	2.38	--		1
Trichlorofluoromethane	0.224	0.200	--	1.26	1.12	--		1
Isopropanol	2.45	0.500	--	6.02	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-13
Client ID: IA-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.207	0.200	--	0.730	0.705	--		1
Benzene	0.324	0.200	--	1.04	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.627	0.200	--	2.36	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.284	0.200	--	1.23	0.869	--		1
p/m-Xylene	1.06	0.400	--	4.60	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.304	0.200	--	1.32	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-13
Client ID: IA-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.255	0.200	--	1.25	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-13
Client ID: IA-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:40
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 17:16
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.067	0.020	--	0.421	0.126	--		1
Trichloroethene	0.076	0.020	--	0.408	0.107	--		1
Tetrachloroethene	0.116	0.020	--	0.787	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-14
Client ID: IA-3
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:09
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 18:34
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.431	0.200	--	2.13	0.989	--		1
Chloromethane	0.479	0.200	--	0.989	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	108	5.00	--	203	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.68	1.00	--	18.2	2.38	--		1
Trichlorofluoromethane	0.229	0.200	--	1.29	1.12	--		1
Isopropanol	2.53	0.500	--	6.22	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.426	0.200	--	2.08	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-14
Client ID: IA-3
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:09
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.364	0.200	--	1.16	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.552	0.200	--	2.08	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.439	0.400	--	1.91	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-14
Client ID: IA-3
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:09
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.334	0.200	--	1.64	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-14
Client ID: IA-3
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:09
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 18:34
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.064	0.020	--	0.403	0.126	--		1
Trichloroethene	0.398	0.020	--	2.14	0.107	--		1
Tetrachloroethene	0.308	0.020	--	2.09	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	94		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-15
Client ID: IA-4A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:42
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 19:15
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.408	0.200	--	2.02	0.989	--		1
Chloromethane	0.532	0.200	--	1.10	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	472	5.00	--	889	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	15.3	1.00	--	36.3	2.38	--		1
Trichlorofluoromethane	0.226	0.200	--	1.27	1.12	--		1
Isopropanol	93.4	0.500	--	230	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.521	0.500	--	1.54	1.47	--		1
Ethyl Acetate	0.733	0.500	--	2.64	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-15
Client ID: IA-4A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:42
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.247	0.200	--	0.871	0.705	--		1
Benzene	0.341	0.200	--	1.09	0.639	--		1
Cyclohexane	0.565	0.200	--	1.94	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	8.56	0.200	--	35.1	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.41	0.200	--	5.31	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.442	0.400	--	1.92	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-15
Client ID: IA-4A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:42
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-15
Client ID: IA-4A
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:42
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 19:15
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--		1
Trichloroethene	0.064	0.020	--	0.344	0.107	--		1
Tetrachloroethene	0.153	0.020	--	1.04	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-16
Client ID: IA-4B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:02
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 19:54
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.415	0.200	--	2.05	0.989	--		1
Chloromethane	0.486	0.200	--	1.00	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	104	5.00	--	196	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.58	1.00	--	15.6	2.38	--		1
Trichlorofluoromethane	0.226	0.200	--	1.27	1.12	--		1
Isopropanol	14.3	0.500	--	35.2	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-16
Client ID: IA-4B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:02
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.337	0.200	--	1.08	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.427	0.200	--	1.75	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.685	0.200	--	2.58	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.261	0.200	--	1.13	0.869	--		1
p/m-Xylene	1.02	0.400	--	4.43	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.300	0.200	--	1.30	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-16
Client ID: IA-4B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:02
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-16
Client ID: IA-4B
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:02
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 19:54
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.067	0.020	--	0.421	0.126	--		1
Trichloroethene	0.169	0.020	--	0.908	0.107	--		1
Tetrachloroethene	0.150	0.020	--	1.02	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-17
Client ID: IA-4C
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:15
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 17:51
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.505	0.200	--	2.50	0.989	--		1
Chloromethane	0.646	0.200	--	1.33	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	822	5.00	--	1550	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	28.4	1.00	--	67.5	2.38	--		1
Trichlorofluoromethane	0.405	0.200	--	2.28	1.12	--		1
Isopropanol	37.2	0.500	--	91.4	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.720	0.500	--	2.12	1.47	--		1
Ethyl Acetate	3.84	0.500	--	13.8	1.80	--		1
Chloroform	0.958	0.200	--	4.68	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-17
Client ID: IA-4C
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:15
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	0.256	0.200	--	1.04	0.809	--		1
n-Hexane	0.217	0.200	--	0.765	0.705	--		1
Benzene	0.366	0.200	--	1.17	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.667	0.200	--	2.73	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.797	0.200	--	3.00	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.426	0.400	--	1.85	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-17
Client ID: IA-4C
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:15
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-17
Client ID: IA-4C
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:15
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 17:51
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.094	0.020	--	0.591	0.126	--		1
Trichloroethene	0.229	0.020	--	1.23	0.107	--		1
Tetrachloroethene	0.376	0.020	--	2.55	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	91		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-17 D
Client ID: IA-4C
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:15
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 08:50
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	958	25.0	--	1810	47.1	--		5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	90		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-18
Client ID: IA-4D
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:17
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 18:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.458	0.200	--	2.26	0.989	--		1
Chloromethane	0.807	0.200	--	1.67	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.345	0.200	--	0.763	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	230	5.00	--	433	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.2	1.00	--	31.4	2.38	--		1
Trichlorofluoromethane	0.261	0.200	--	1.47	1.12	--		1
Isopropanol	25.2	0.500	--	61.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.678	0.500	--	2.00	1.47	--		1
Ethyl Acetate	0.991	0.500	--	3.57	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-18
Client ID: IA-4D
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:17
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.251	0.200	--	0.885	0.705	--		1
Benzene	0.490	0.200	--	1.57	0.639	--		1
Cyclohexane	0.210	0.200	--	0.723	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	2.09	0.200	--	8.57	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.989	0.200	--	3.73	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.493	0.400	--	2.14	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-18
Client ID: IA-4D
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:17
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	100		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-18
Client ID: IA-4D
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:17
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 18:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.057	0.020	--	0.387	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	103		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-19
Client ID: IA-4E
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:12
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 19:49
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.472	0.200	--	0.975	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	55.8	5.00	--	105	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.85	1.00	--	11.5	2.38	--		1
Trichlorofluoromethane	0.325	0.200	--	1.83	1.12	--		1
Isopropanol	9.74	0.500	--	23.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-19
Client ID: IA-4E
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:12
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.265	0.200	--	0.847	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.429	0.200	--	1.62	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-19
Client ID: IA-4E
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:12
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-19
Client ID: IA-4E
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:12
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 19:49
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.076	0.020	--	0.478	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.043	0.020	--	0.292	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	88		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-20
Client ID: IA-4F
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:11
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 20:29
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.504	0.200	--	2.49	0.989	--		1
Chloromethane	0.501	0.200	--	1.03	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	109	5.00	--	205	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	18.6	1.00	--	44.2	2.38	--		1
Trichlorofluoromethane	0.430	0.200	--	2.42	1.12	--		1
Isopropanol	18.4	0.500	--	45.2	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.755	0.500	--	2.23	1.47	--		1
Ethyl Acetate	1.02	0.500	--	3.68	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-20
Client ID: IA-4F
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:11
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.209	0.200	--	0.737	0.705	--		1
Benzene	0.290	0.200	--	0.926	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.355	0.200	--	1.45	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.02	0.200	--	3.84	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.354	0.200	--	1.54	0.869	--		1
p/m-Xylene	1.38	0.400	--	5.99	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.238	0.200	--	1.01	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.401	0.200	--	1.74	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-20
Client ID: IA-4F
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:11
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.242	0.200	--	1.19	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-20
Client ID: IA-4F
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:11
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 20:29
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.087	0.020	--	0.547	0.126	--		1
Trichloroethene	0.096	0.020	--	0.516	0.107	--		1
Tetrachloroethene	0.066	0.020	--	0.448	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	88		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-21
Client ID: IA-4G
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:14
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 21:08
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.502	0.200	--	2.48	0.989	--		1
Chloromethane	0.594	0.200	--	1.23	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	514	5.00	--	969	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	26.4	1.00	--	62.7	2.38	--		1
Trichlorofluoromethane	0.872	0.200	--	4.90	1.12	--		1
Isopropanol	38.2	0.500	--	93.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.19	0.500	--	3.51	1.47	--		1
Ethyl Acetate	2.39	0.500	--	8.61	1.80	--		1
Chloroform	0.623	0.200	--	3.04	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-21
Client ID: IA-4G
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:14
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	0.396	0.200	--	1.60	0.809	--		1
n-Hexane	0.202	0.200	--	0.712	0.705	--		1
Benzene	0.423	0.200	--	1.35	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.263	0.200	--	1.08	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.808	0.200	--	3.04	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.583	0.400	--	2.53	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.215	0.200	--	0.934	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-21
Client ID: IA-4G
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:14
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.216	0.200	--	1.06	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-21
Client ID: IA-4G
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:14
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 21:08
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.094	0.020	--	0.591	0.126	--		1
Trichloroethene	0.062	0.020	--	0.333	0.107	--		1
Tetrachloroethene	0.084	0.020	--	0.570	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	87		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-21 D
Client ID: IA-4G
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:14
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 09:28
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	416	12.5	--	784	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	81		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	80		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-22
Client ID: IA-4H
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 21:48
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.497	0.200	--	2.46	0.989	--		1
Chloromethane	0.522	0.200	--	1.08	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	153	5.00	--	288	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.4	1.00	--	24.7	2.38	--		1
Trichlorofluoromethane	0.444	0.200	--	2.50	1.12	--		1
Isopropanol	21.2	0.500	--	52.1	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.575	0.500	--	1.70	1.47	--		1
Ethyl Acetate	0.699	0.500	--	2.52	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-22
Client ID: IA-4H
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.320	0.200	--	1.02	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.458	0.200	--	1.88	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.657	0.200	--	2.48	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.475	0.400	--	2.06	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-22
Client ID: IA-4H
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.203	0.200	--	0.998	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-22
Client ID: IA-4H
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 09:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 21:48
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.085	0.020	--	0.535	0.126	--		1
Trichloroethene	0.047	0.020	--	0.253	0.107	--		1
Tetrachloroethene	0.074	0.020	--	0.502	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-23
Client ID: IA-5
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:07
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 22:27
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	0.989	--		1
Chloromethane	0.476	0.200	--	0.983	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	479	5.00	--	903	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.2	1.00	--	24.2	2.38	--		1
Trichlorofluoromethane	1.11	0.200	--	6.24	1.12	--		1
Isopropanol	47.4	0.500	--	117	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.797	0.500	--	2.35	1.47	--		1
Ethyl Acetate	2.47	0.500	--	8.90	1.80	--		1
Chloroform	0.271	0.200	--	1.32	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-23
Client ID: IA-5
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:07
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.329	0.200	--	1.05	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.202	0.200	--	0.828	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.742	0.200	--	2.80	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.456	0.400	--	1.98	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-23
Client ID: IA-5
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:07
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.283	0.200	--	1.39	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	96		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-23
Client ID: IA-5
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 10:07
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 22:27
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.093	0.020	--	0.585	0.126	--		1
Trichloroethene	0.055	0.020	--	0.296	0.107	--		1
Tetrachloroethene	0.078	0.020	--	0.529	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	99		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-24
Client ID: IA-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 23:07
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.497	0.200	--	2.46	0.989	--		1
Chloromethane	0.524	0.200	--	1.08	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	438	5.00	--	825	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.4	1.00	--	39.0	2.38	--		1
Trichlorofluoromethane	0.336	0.200	--	1.89	1.12	--		1
Isopropanol	104	0.500	--	256	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.519	0.500	--	1.53	1.47	--		1
Ethyl Acetate	0.955	0.500	--	3.44	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-24
Client ID: IA-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.242	0.200	--	0.853	0.705	--		1
Benzene	0.336	0.200	--	1.07	0.639	--		1
Cyclohexane	0.533	0.200	--	1.83	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	8.44	0.200	--	34.6	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.37	0.200	--	5.16	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.481	0.400	--	2.09	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-24
Client ID: IA-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-24
Client ID: IA-DUP-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 23:07
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	0.069	0.020	--	0.371	0.107	--		1
Tetrachloroethene	0.153	0.020	--	1.04	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	101		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-25
Client ID: IA-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/19/21 23:46
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.491	0.200	--	2.43	0.989	--		1
Chloromethane	0.473	0.200	--	0.977	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	467	5.00	--	880	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.1	1.00	--	24.0	2.38	--		1
Trichlorofluoromethane	1.06	0.200	--	5.96	1.12	--		1
Isopropanol	46.4	0.500	--	114	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.838	0.500	--	2.47	1.47	--		1
Ethyl Acetate	2.38	0.500	--	8.58	1.80	--		1
Chloroform	0.257	0.200	--	1.26	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-25
Client ID: IA-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.212	0.200	--	0.747	0.705	--		1
Benzene	0.331	0.200	--	1.06	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.204	0.200	--	0.836	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.739	0.200	--	2.78	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.431	0.400	--	1.87	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-25
Client ID: IA-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.246	0.200	--	1.21	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	97		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-25
Client ID: IA-DUP-2
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 00:00
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 23:46
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.083	0.020	--	0.522	0.126	--		1
Trichloroethene	0.054	0.020	--	0.290	0.107	--		1
Tetrachloroethene	0.077	0.020	--	0.522	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	100		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-26
Client ID: OA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:59
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/20/21 00:25
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.487	0.200	--	2.41	0.989	--		1
Chloromethane	0.432	0.200	--	0.892	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	10.3	5.00	--	19.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.69	1.00	--	6.39	2.38	--		1
Trichlorofluoromethane	0.301	0.200	--	1.69	1.12	--		1
Isopropanol	2.09	0.500	--	5.14	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-26
Client ID: OA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:59
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.234	0.200	--	0.748	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.387	0.200	--	1.46	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-26
Client ID: OA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:59
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

SAMPLE RESULTS

Lab ID: L2112425-26
Client ID: OA-1
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 03/12/21 08:59
Date Received: 03/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/20/21 00:25
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.048	0.020	--	0.325	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 13:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1476560-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 13:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1476560-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 13:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1476560-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 13:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 12-16 Batch: WG1476562-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: 100 SOUTH 4TH ST. **Lab Number:** L2112425

Project Number: 13817 **Report Date:** 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 14:49

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 17-26 Batch: WG1476567-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 14:49

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 17-26 Batch: WG1476567-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/19/21 14:49

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 17-26 Batch: WG1476567-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/19/21 15:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 17-26 Batch: WG1476568-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 100 SOUTH 4TH ST.

Project Number: 13817

Lab Number: L2112425

Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1476560-3								
Dichlorodifluoromethane	99		-		70-130	-		
Chloromethane	91		-		70-130	-		
Freon-114	97		-		70-130	-		
Vinyl chloride	97		-		70-130	-		
1,3-Butadiene	101		-		70-130	-		
Bromomethane	96		-		70-130	-		
Chloroethane	93		-		70-130	-		
Ethanol	90		-		40-160	-		
Vinyl bromide	92		-		70-130	-		
Acetone	77		-		40-160	-		
Trichlorofluoromethane	94		-		70-130	-		
Isopropanol	77		-		40-160	-		
1,1-Dichloroethene	98		-		70-130	-		
Tertiary butyl Alcohol	98		-		70-130	-		
Methylene chloride	99		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	92		-		70-130	-		
Freon-113	95		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	94		-		70-130	-		
Methyl tert butyl ether	101		-		70-130	-		
2-Butanone	93		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1476560-3								
Ethyl Acetate	86		-		70-130	-		
Chloroform	101		-		70-130	-		
Tetrahydrofuran	95		-		70-130	-		
1,2-Dichloroethane	96		-		70-130	-		
n-Hexane	101		-		70-130	-		
1,1,1-Trichloroethane	97		-		70-130	-		
Benzene	96		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	103		-		70-130	-		
1,4-Dioxane	104		-		70-130	-		
Trichloroethene	99		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Heptane	96		-		70-130	-		
cis-1,3-Dichloropropene	110		-		70-130	-		
4-Methyl-2-pentanone	101		-		70-130	-		
trans-1,3-Dichloropropene	96		-		70-130	-		
1,1,2-Trichloroethane	100		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	108		-		70-130	-		
Dibromochloromethane	103		-		70-130	-		
1,2-Dibromoethane	101		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1476560-3								
Tetrachloroethene	98		-		70-130	-		
Chlorobenzene	100		-		70-130	-		
Ethylbenzene	102		-		70-130	-		
p/m-Xylene	101		-		70-130	-		
Bromoform	104		-		70-130	-		
Styrene	107		-		70-130	-		
1,1,2,2-Tetrachloroethane	105		-		70-130	-		
o-Xylene	103		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	108		-		70-130	-		
Benzyl chloride	98		-		70-130	-		
1,3-Dichlorobenzene	104		-		70-130	-		
1,4-Dichlorobenzene	103		-		70-130	-		
1,2-Dichlorobenzene	104		-		70-130	-		
1,2,4-Trichlorobenzene	108		-		70-130	-		
Hexachlorobutadiene	112		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 12-16 Batch: WG1476562-3								
Vinyl chloride	92		-		70-130	-		25
1,1-Dichloroethene	97		-		70-130	-		25
cis-1,2-Dichloroethene	99		-		70-130	-		25
1,1,1-Trichloroethane	93		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Trichloroethene	93		-		70-130	-		25
Tetrachloroethene	96		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 Batch: WG1476567-3								
Dichlorodifluoromethane	100		-		70-130	-		
Chloromethane	78		-		70-130	-		
Freon-114	90		-		70-130	-		
Vinyl chloride	84		-		70-130	-		
1,3-Butadiene	80		-		70-130	-		
Bromomethane	96		-		70-130	-		
Chloroethane	86		-		70-130	-		
Ethanol	64		-		40-160	-		
Vinyl bromide	95		-		70-130	-		
Acetone	82		-		40-160	-		
Trichlorofluoromethane	120		-		70-130	-		
Isopropanol	74		-		40-160	-		
1,1-Dichloroethene	102		-		70-130	-		
Tertiary butyl Alcohol	76		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	94		-		70-130	-		
Carbon disulfide	88		-		70-130	-		
Freon-113	106		-		70-130	-		
trans-1,2-Dichloroethene	97		-		70-130	-		
1,1-Dichloroethane	100		-		70-130	-		
Methyl tert butyl ether	90		-		70-130	-		
2-Butanone	90		-		70-130	-		
cis-1,2-Dichloroethene	103		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 Batch: WG1476567-3								
Ethyl Acetate	96		-		70-130	-		
Chloroform	104		-		70-130	-		
Tetrahydrofuran	86		-		70-130	-		
1,2-Dichloroethane	107		-		70-130	-		
n-Hexane	88		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Benzene	85		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	88		-		70-130	-		
1,2-Dichloropropane	90		-		70-130	-		
Bromodichloromethane	98		-		70-130	-		
1,4-Dioxane	88		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	91		-		70-130	-		
Heptane	86		-		70-130	-		
cis-1,3-Dichloropropene	92		-		70-130	-		
4-Methyl-2-pentanone	84		-		70-130	-		
trans-1,3-Dichloropropene	82		-		70-130	-		
1,1,2-Trichloroethane	99		-		70-130	-		
Toluene	89		-		70-130	-		
2-Hexanone	80		-		70-130	-		
Dibromochloromethane	109		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 Batch: WG1476567-3								
Tetrachloroethene	97		-		70-130	-		
Chlorobenzene	95		-		70-130	-		
Ethylbenzene	99		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	118		-		70-130	-		
Styrene	98		-		70-130	-		
1,1,2,2-Tetrachloroethane	102		-		70-130	-		
o-Xylene	105		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Benzyl chloride	101		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	113		-		70-130	-		
1,2-Dichlorobenzene	110		-		70-130	-		
1,2,4-Trichlorobenzene	120		-		70-130	-		
Hexachlorobutadiene	119		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2112425
Report Date: 03/22/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 17-26 Batch: WG1476568-3								
Vinyl chloride	84		-		70-130	-		25
1,1-Dichloroethene	99		-		70-130	-		25
cis-1,2-Dichloroethene	99		-		70-130	-		25
1,1,1-Trichloroethane	97		-		70-130	-		25
Carbon tetrachloride	102		-		70-130	-		25
Trichloroethene	91		-		70-130	-		25
Tetrachloroethene	92		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1476560-5 QC Sample: L2112425-13 Client ID: IA-2						
Dichlorodifluoromethane	0.420	0.419	ppbV	0		25
Chloromethane	0.467	0.459	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	237	209	ppbV	13		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	19.8	19.7	ppbV	1		25
Trichlorofluoromethane	0.224	0.226	ppbV	1		25
Isopropanol	2.45	2.50	ppbV	2		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1476560-5 QC Sample: L2112425-13 Client ID: IA-2						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.207	0.203	ppbV	2		25
Benzene	0.324	0.325	ppbV	0		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.627	0.623	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.284	0.289	ppbV	2		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1476560-5 QC Sample: L2112425-13 Client ID: IA-2						
p/m-Xylene	1.06	1.07	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.304	0.310	ppbV	2		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.255	0.253	ppbV	1		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 12-16 QC Batch ID: WG1476562-5 QC Sample: L2112425-13 Client ID: IA-2						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.067	0.067	ppbV	0		25
Trichloroethene	0.076	0.075	ppbV	1		25
Tetrachloroethene	0.116	0.116	ppbV	0		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 QC Batch ID: WG1476567-5 QC Sample: L2112425-18 Client ID: IA-4D						
Dichlorodifluoromethane	0.458	0.471	ppbV	3		25
Chloromethane	0.807	0.829	ppbV	3		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	0.345	0.346	ppbV	0		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	230	232	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	13.2	13.3	ppbV	1		25
Trichlorofluoromethane	0.261	0.266	ppbV	2		25
Isopropanol	25.2	25.3	ppbV	0		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	0.678	0.668	ppbV	1		25
Ethyl Acetate	0.991	1.03	ppbV	4		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 QC Batch ID: WG1476567-5 QC Sample: L2112425-18 Client ID: IA-4D						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.251	0.254	ppbV	1		25
Benzene	0.490	0.484	ppbV	1		25
Cyclohexane	0.210	0.208	ppbV	1		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	2.09	2.07	ppbV	1		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.989	0.977	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 17-26 QC Batch ID: WG1476567-5 QC Sample: L2112425-18 Client ID: IA-4D						
p/m-Xylene	0.493	0.501	ppbV	2		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 17-26 QC Batch ID: WG1476568-5 QC Sample: L2112425-18 Client ID: IA-4D						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.073	0.078	ppbV	7		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.057	0.062	ppbV	8		25

Project Name: 100 SOUTH 4TH ST.

Lab Number: L2112425

Project Number: 13817

Report Date: 03/22/21

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2112425-01	SV-1A	0928	Flow 4	03/10/21	344971		-	-	-	Pass	3.0	3.2	6
L2112425-01	SV-1A	3378	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.4	-7.6	-	-	-	-
L2112425-02	SV-1B	01383	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	2.9	3
L2112425-02	SV-1B	1889	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.6	-2.7	-	-	-	-
L2112425-03	SV-2A	01452	Flow 4	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-03	SV-2A	1556	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.5	-8.1	-	-	-	-
L2112425-04	SV-2B	0284	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	2.8	7
L2112425-04	SV-2B	3078	6.0L Can	03/10/21	344971	L2110586-07	Pass	-29.3	-7.2	-	-	-	-
L2112425-05	SV-3B	01612	Flow 4	03/10/21	344971		-	-	-	Pass	3.0	3.2	6
L2112425-05	SV-3B	2914	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.0	0.0	-	-	-	-
L2112425-06	SV-3A	01178	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-06	SV-3A	2668	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.4	-6.6	-	-	-	-
L2112425-07	SV-4	01815	Flow 4	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-07	SV-4	950	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.6	-2.8	-	-	-	-
L2112425-08	SV-5A	0397	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.0	0

Project Name: 100 SOUTH 4TH ST.

Lab Number: L2112425

Project Number: 13817

Report Date: 03/22/21

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2112425-08	SV-5A	2485	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.6	-7.5	-	-	-	-
L2112425-09	SV-5B	0072	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.1	3
L2112425-09	SV-5B	2881	6.0L Can	03/10/21	344971	L2110928-04	Pass	-29.5	-10.2	-	-	-	-
L2112425-10	SV-DUP-1	01782	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.2	6
L2112425-10	SV-DUP-1	3333	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.7	-5.9	-	-	-	-
L2112425-11	SV-DUP-2	0550	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.2	6
L2112425-11	SV-DUP-2	3299	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.6	-6.2	-	-	-	-
L2112425-12	IA-1	0919	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	2.7	11
L2112425-12	IA-1	2905	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.6	-8.7	-	-	-	-
L2112425-13	IA-2	01398	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	4.6	42
L2112425-13	IA-2	1623	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.7	-5.6	-	-	-	-
L2112425-14	IA-3	01395	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-14	IA-3	3015	6.0L Can	03/10/21	344971	L2110320-06	Pass	-28.7	-7.1	-	-	-	-
L2112425-15	IA-4A	01405	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.5	15
L2112425-15	IA-4A	2651	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.4	-10.9	-	-	-	-

Project Name: 100 SOUTH 4TH ST.

Lab Number: L2112425

Project Number: 13817

Report Date: 03/22/21

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2112425-16	IA-4B	0846	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.8	24
L2112425-16	IA-4B	2098	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.6	-4.7	-	-	-	-
L2112425-17	IA-4C	0679	Flow 4	03/10/21	344971		-	-	-	Pass	3.0	3.1	3
L2112425-17	IA-4C	3261	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.7	-7.5	-	-	-	-
L2112425-18	IA-4D	01488	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	5.4	57
L2112425-18	IA-4D	2958	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.5	0.0	-	-	-	-
L2112425-19	IA-4E	0158	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.6	18
L2112425-19	IA-4E	2694	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.6	-6.2	-	-	-	-
L2112425-20	IA-4F	0027	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-20	IA-4F	3289	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.7	-8.3	-	-	-	-
L2112425-21	IA-4G	01301	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.1	3
L2112425-21	IA-4G	762	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.5	-11.6	-	-	-	-
L2112425-22	IA-4H	02061	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	2.7	11
L2112425-22	IA-4H	774	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.5	-8.4	-	-	-	-
L2112425-23	IA-5	01460	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.3	10

Project Name: 100 SOUTH 4TH ST.

Lab Number: L2112425

Project Number: 13817

Report Date: 03/22/21

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2112425-23	IA-5	1866	6.0L Can	03/10/21	344971	L2110059-03	Pass	-29.6	-4.5	-	-	-	-
L2112425-24	IA-DUP-1	0124	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.1	3
L2112425-24	IA-DUP-1	3346	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.5	-9.0	-	-	-	-
L2112425-25	IA-DUP-2	0482	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.0	0
L2112425-25	IA-DUP-2	1812	6.0L Can	03/10/21	344971	L2110059-04	Pass	-29.5	-8.8	-	-	-	-
L2112425-26	OA-1	01038	Flow 5	03/10/21	344971		-	-	-	Pass	3.0	3.2	6
L2112425-26	OA-1	2568	6.0L Can	03/10/21	344971	L2110320-06	Pass	-29.4	-6.2	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 18:43
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	86		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/02/21 18:43
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2110059

Project Number: CANISTER QC BAT **Report Date:** 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-03
Client ID: CAN 3292 SHELF 45
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 19:24
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/02/21 19:24
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110059
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110059-04
Client ID: CAN 772 SHELF 46
Sample Location:

Date Collected: 03/01/21 16:00
Date Received: 03/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	85		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/04/21 08:22
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	83		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/04/21 08:22
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110320
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110320-06
Client ID: CAN 1969 SHELF 51
Sample Location:

Date Collected: 03/03/21 09:00
Date Received: 03/03/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	84		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/06/21 21:17
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/06/21 21:17
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2110586
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2110586

Project Number: CANISTER QC BAT **Report Date:** 03/22/21

Air Canister Certification Results

Lab ID: L2110586-07
Client ID: CAN 790 SHELF 30
Sample Location:

Date Collected: 03/04/21 11:00
Date Received: 03/04/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/07/21 01:09
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/07/21 01:09
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2110928

Project Number: CANISTER QC BAT **Report Date:** 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2110928
Report Date: 03/22/21

Air Canister Certification Results

Lab ID: L2110928-04
Client ID: CAN 1648 SHELF 57
Sample Location:

Date Collected: 03/04/21 16:00
Date Received: 03/05/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2112425-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-08A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-09A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-10A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-11A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2112425-12A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-13A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-14A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-15A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-16A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-17A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-18A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-19A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-20A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-21A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2112425-22A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-23A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2112425
Report Date: 03/22/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2112425-24A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-25A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2112425-26A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2112425
Project Number:	13817	**Report Date:**	03/22/21

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 3

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/13/21

ALPHA Job #: L2112425

Client Information

Client: Impact Environmental
Address: 170 Keyland Court
Phone: 631-265-8200
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 100 South 4th St.
Project Location: 100 South 4th St, Brooklyn
Project #: 13817
Project Manager: Chris C.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Subject Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
12425-01	SV-1A	3/12	9:15	8:29	-30.87	-9.27	SV	LR	6	3378	0728	Y					
02	SV-1B	3/12	9:17	8:25	-30.69	-6.91	SV	LR	6	1885	01383	Y					
03	SV-2A	3/12	9:12	8:40 ~~8:48~~	~~-30.68~~ -30.68	~~-9.48~~ -9.48	SV	LR	6	1556	01452	Y					
04	SV-2B	3/12	9:19	8:48	-30.64	-5.60	SV	LR	6	3078	0284	Y					
05	SV-3AB	3/12	9:11	9:00	-29.69	-6.87	SV	LR	6	2914	01612	Y					
06	SV-3BA	3/12	9:07	9:10	-30.54	-7.84	SV	LR	6	2668	01178	X					
07	SV-4	3/12	9:39	9:19	-29.61	-4.71	SV	LR	6	550	01815	Y					
08	SV-5A	3/12	9:25	9:50	-30.72	-8.62	SV	LR	6	2485	0357	X					
09	SV-5B	3/12	9:35	10:01	-30.62	-11.33	SV	LR	6	2881	0072	X					
10	SV-Dup-1	3/12	"		-30.88	-7.33	SV	LR	6	3333	01782	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
	3/12/21 1245	AAL	3/12/21 1245
AAL	3/12/21 1925		3/12/21 2300
AAL	3/13/21 0500		3/13/21 0500

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

AIR ANALYSIS

PAGE 2 OF 3

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/13/21

ALPHA Job #: L2112425

Client Information

Client: Impact
Address: 170 keyland ct.
Phone: 631-269-8806
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 100 South 4th St.
Project Location: 100 South 4th St.
Project #: 13817
Project Manager: Chris C.
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	☐ Subject Non-petroleum HCs	Sample Comments (i.e. PID)
11	SV-DUP-2	3/12	-	-	31.90	-7.10	~~IA~~ SV	LR	6	3299	0550	X						
12	IA-1	3/12	9:17	8:20	-31.07	-4.07	IA	LR	6	2905	0519	X						
13	IA-2	3/12	9:18	8:40	-30.60	-6.07	IA	LR	6	1623	01589	X						
14	IA-3	3/12	9:08	9:09	-25.50	-6.60	IA	LR	6	3015	01395	X						
15	IA-4A	3/12	9:36	9:42	-30.32	-7.82	IA	LR	6	2651	01405	X						
16	IA-4B	3/12	8:6	8:02	-31.05	-5.09	IA	LR	6	2078	0846	X						
17	IA-4C	3/12	8:12	8:15	-30.99	4.37	IA	LR	6	3261	0679	X						
18	IA-4D	3/12	8:14	8:17	-30.76	-0.09	IA	LR	6	2958	01488	X						
19	IA-4E	3/12	8:48	9:12	-30.55	-7.94	IA	LR	6	2694	0158	X						
20	IA-4F	3/12	8:50	9:11	-31.17	-0.09	IA	LR	6	3289	0027	X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
AAL	3/12/21 1245	AAL	3/12/21 1245
	3/12/21 1925		3/12/21 2360
	3/13/21 0530		3/13/21 0800

Form No: 101-02 Rev: (25-Sep-15)

AIR ANALYSIS

PAGE 3 OF 3

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/13/21

ALPHA Job #: L2112423

Client Information

Client: 170 Iceyland Ct.
Address: Impact
Phone: 631-269-8800
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 100 South 4th
Project Location: 100 South 4th St.
Project #: 13817
Project Manager: Chris C.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH (Subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
21	IA-46	3/12	9:09	9:14	-30.74	9.17	IA	LR	6	762	01301	X					
22	IA-4H	3/12	8:56	9:00	-30.82	9.54	IA	LR	6	774	02061	X					
23	IA-5	3/12	9:30	10:07	-30.68	-5.40	IA	LR	6	1866	01460	X					
24	IA-DUP-1	3/12	[redacted]	[redacted]	-30.80	-9.76	IA	LR	6	3346	0129	X					
25	IA-DUP-2	3/12			-30.92	-9.64	IA	LR	6	1812	0482	X					
26	OA-1	3/12	9:10	8:59	-30.91	-7.22	OA	LR	6	2568	01038	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature] AAL	3/12/21 1245	[signature] AAL	3/12/21 1245
[signature] AAL	3/12/21 1925	[signature] AAL	3/12/21 2300
[signature] AAL	3/13/21 0530	[signature]	3/13/21 0800

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

IRM CCR

Appendix D

Status Reports

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

August 30, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#1 - Interim Remedial Measures Progress Report (8/29/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on August 29, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

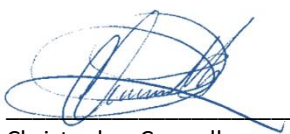
August 29, 2022

- IEC mobilized to the Site along with their sub-contracted SSDS installation company, Clean Globe Environmental ("CG"). IEC and CG staged materials and equipment in the westernmost vacant commercial unit (98c South 4th Street).
- No ground intrusive work was performed on this day. No Community Air Monitoring was required.
- IEC and CG inspected units 98c and 98b South 4th Street to determine the most effective piping runs and wall penetrations.

Planned work for the following day includes core drilling three (3) suction points located in Unit 98c South 4th Street and removing and containerizing soil to approximately 24-inches below grade.

Should you have any further questions or requests, please feel free to contact me.

Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
Ryan Howard – 100 S 4th St LLC
Wendi Zheng, Cris-Sandra Maycock, and Jane O'Connell – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

August 31, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#2 - Interim Remedial Measures Progress Report (8/30/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on August 30, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

August 30, 2022

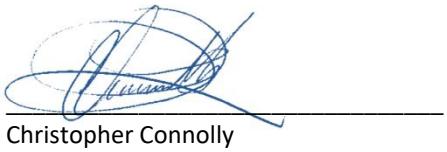
- Clean Globe Environmental (CG) began core drilling two (2) 6-inch diameter holes (SP-2 and SP-3) in the concrete slab within 98c South 4th Street.
- IEC conducted Community Air Monitoring in the work zone for all ground intrusive activities.
- Once the concrete slab was fully penetrated and core drilled, CG utilized a shop vac and decontaminated stainless-steel hand auger to remove soils from below the slab to a terminal depth of approximately 24-inches below grade surface.
- Removed soils were placed in a steel 55-gallon drum, which will be stored onsite pending waste characterization sampling, and subsequent disposal facility approval.
- Suction Points SP-2 and SP-3 were cored and excavated.
- Initial pilot testing of SP-3 was conducted to determine transmission of depressurization beneath the building slab.
- In addition, IEC installed a permanent vapor monitoring point VMP-1 in the center of 98c South 4th Street, in order to determine coverage of the SSDS during pilot testing of each suction point.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.

Sincerely,

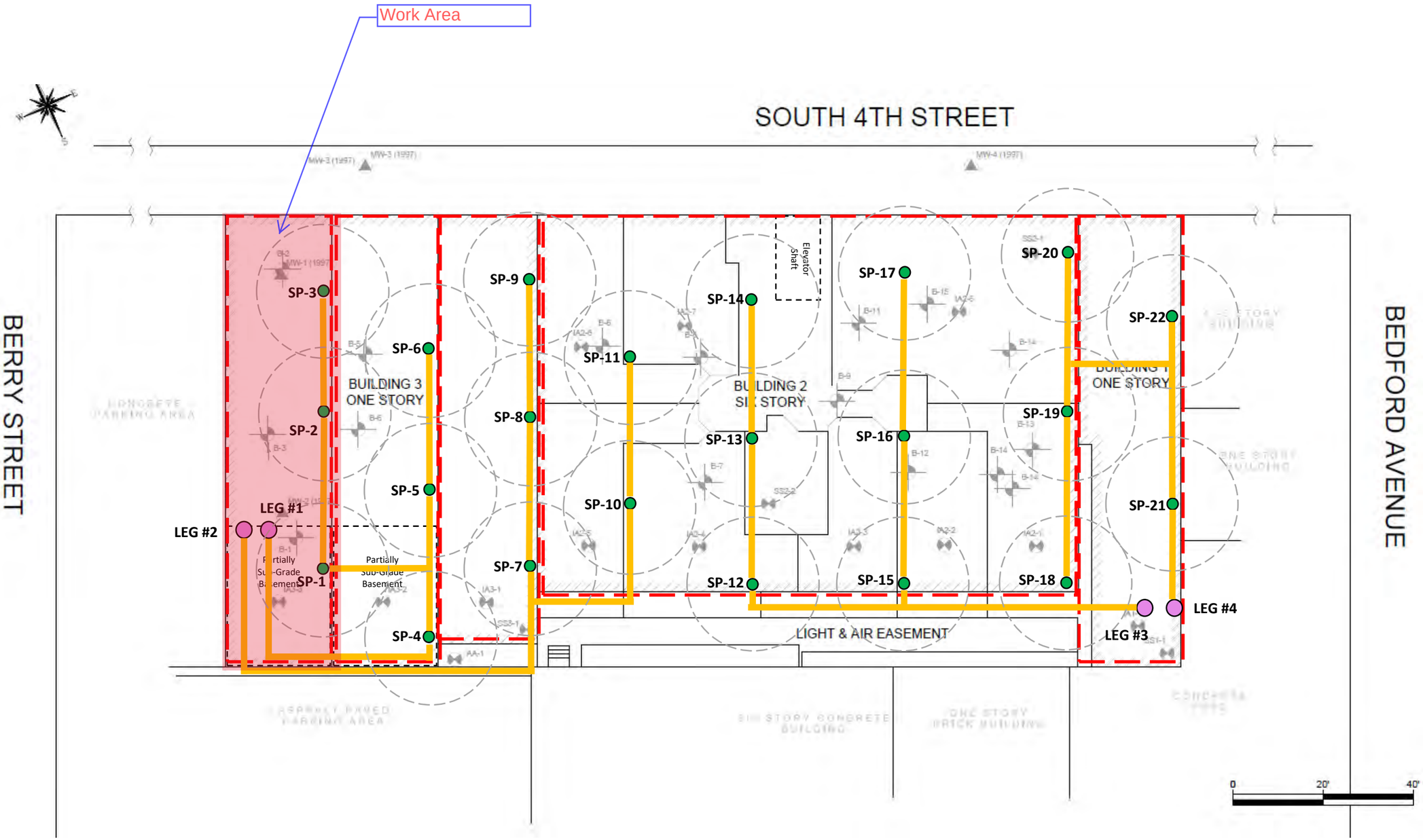
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Suction Point Location Maps
Attachment 2 – Vapor Monitoring Point Location Map
Attachment 3 - CAMP Data



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

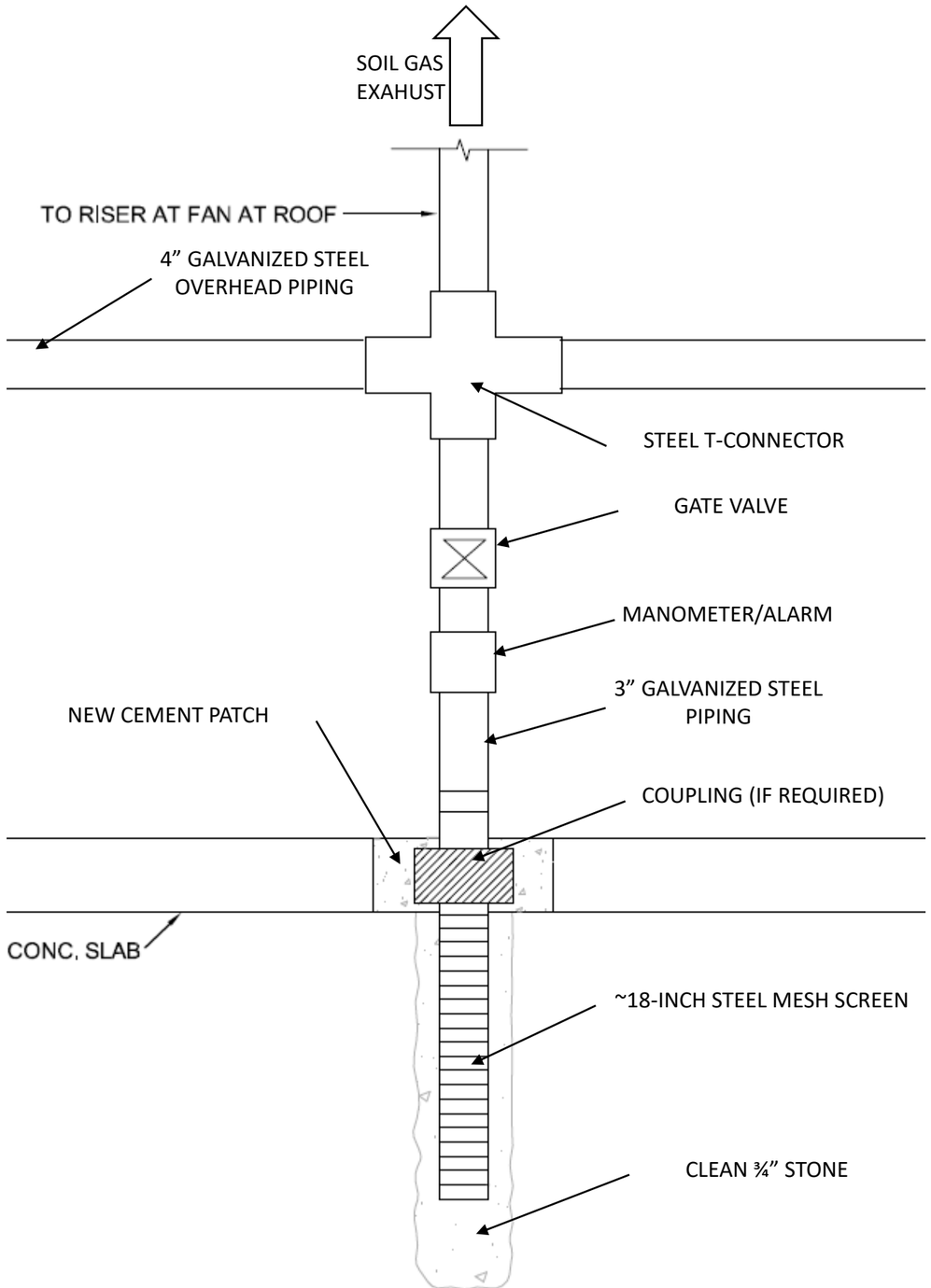
Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

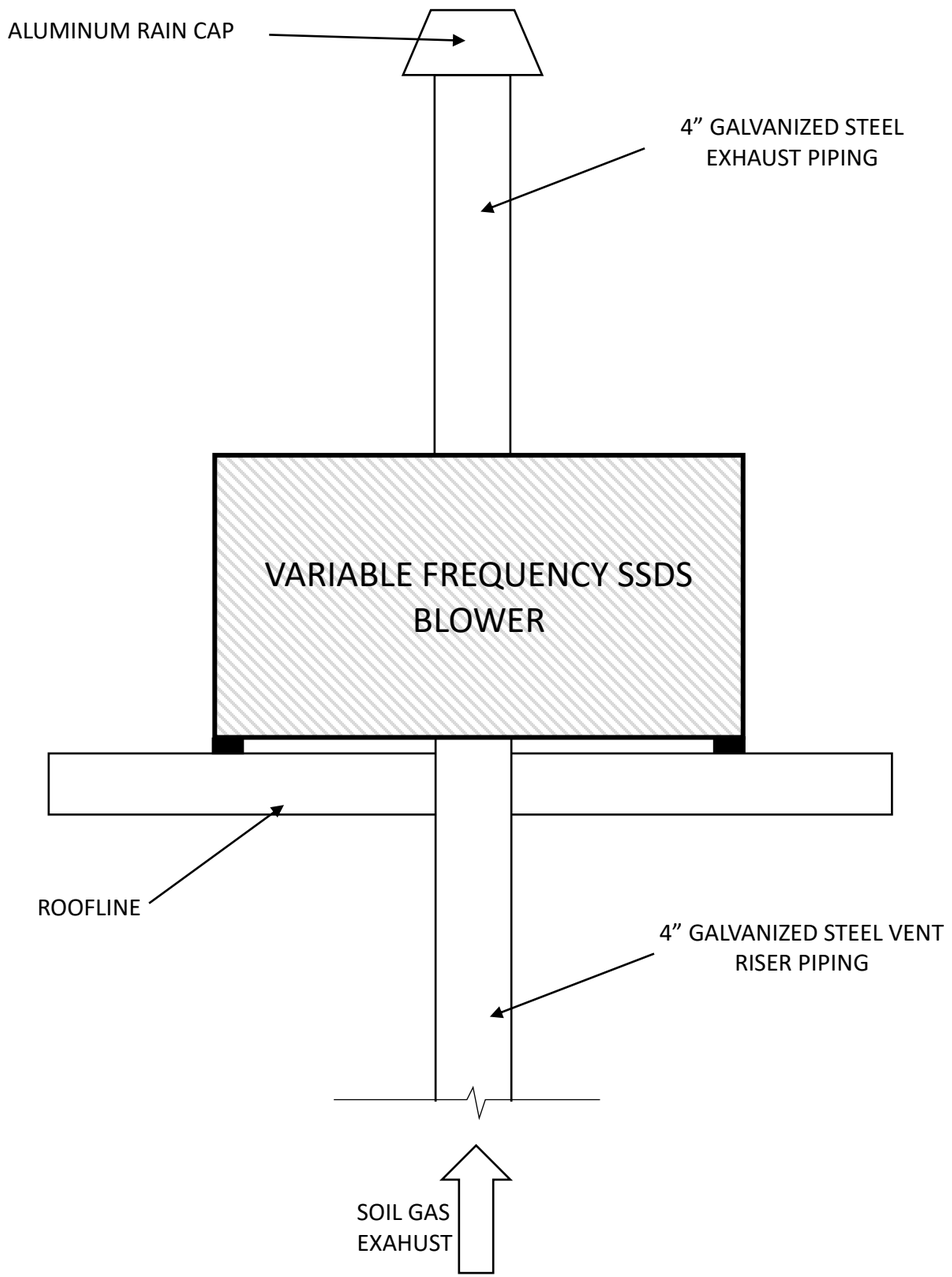
Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

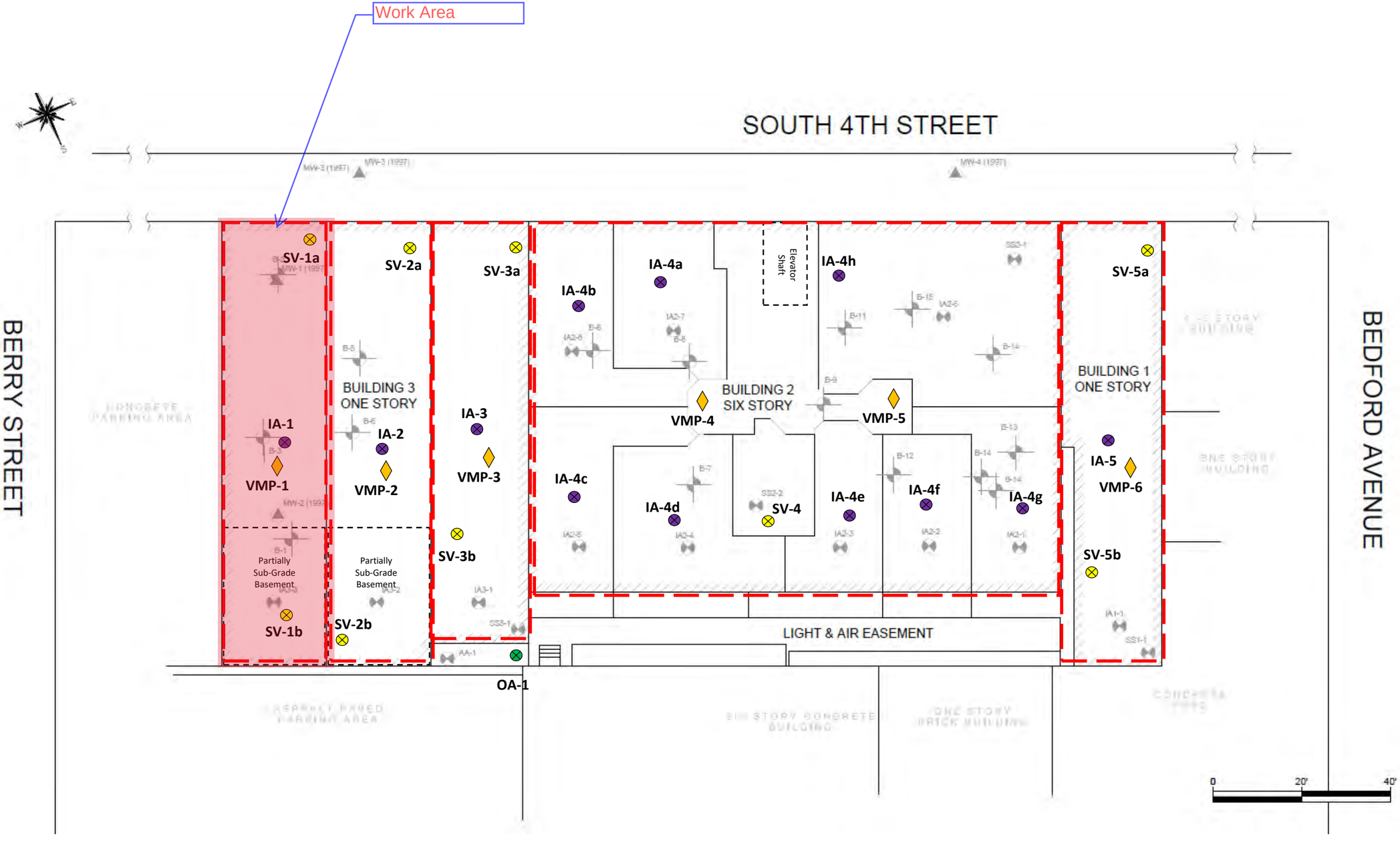
Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530153015
Firmware Version		3.1
Calibration Date		2/17/2022
Test Name	MANUAL_001	
Test Start Time	09:23:53AM	
Test Start Date		8/30/2022
Test Length [D:H:M]		0:05:46
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.053
Mass Minimum [mg/m3]		-0.056
Mass Maximum [mg/m3]		1.11
Mass TWA [mg/m3]		0.038
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		346

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	-0.032		
120	-0.028		
180	-0.028		
240	-0.027		
300	-0.019		
360	-0.021		
420	-0.025		
480	-0.03		
540	-0.032		
600	-0.032		
660	-0.032		
720	-0.031		
780	-0.033		
840	-0.031		
900	-0.033		
960	-0.029		
1020	-0.028		
1080	-0.021		
1140	-0.018		
1200	-0.025		
1260	-0.027		
1320	-0.034		
1380	-0.031		
1440	-0.029		
1500	-0.029		
1560	-0.024		
1620	-0.024		
1680	-0.031		
1740	-0.028		
1800	-0.038		
1860	-0.031		
1920	-0.013		
1980	0.014		
2040	0.018		

2100	0.073
2160	0.118
2220	0.061
2280	0.131
2340	0.141
2400	0.147
2460	0.174
2520	0.122
2580	0.174
2640	0.197
2700	0.222
2760	0.246
2820	0.138
2880	0.247
2940	0.213
3000	0.22
3060	0.168
3120	0.132
3180	0.13
3240	0.1
3300	0.116
3360	0.102
3420	0.121
3480	0.127
3540	0.108
3600	0.062
3660	0.076
3720	0.066
3780	0.046
3840	0.072
3900	0.078
3960	0.096
4020	0.089
4080	0.073
4140	0.099
4200	0.079
4260	0.106
4320	0.089
4380	0.079
4440	0.112
4500	0.063
4560	0.073
4620	0.101
4680	0.093
4740	0.04
4800	0.04
4860	0.049
4920	0.042
4980	0.095
5040	0.036
5100	0.037
5160	0.024
5220	0.027
5280	0.046

5340	0.052
5400	0.082
5460	0.085
5520	0.038
5580	0.029
5640	0.029
5700	0.021
5760	0.009
5820	0.004
5880	0.003
5940	0.009
6000	0.007
6060	0.004
6120	0
6180	-0.009
6240	-0.015
6300	-0.007
6360	0.003
6420	0.01
6480	0.016
6540	0.026
6600	0.026
6660	0
6720	0.007
6780	0
6840	-0.01
6900	-0.004
6960	0.017
7020	0.027
7080	0.014
7140	-0.004
7200	0.229
7260	1.01
7320	0.94
7380	1.04
7440	1.11
7500	0.907
7560	0.443
7620	0.459
7680	0.503
7740	0.429
7800	0.424
7860	0.384
7920	0.357
7980	0.166
8040	0.279
8100	0.198
8160	0.152
8220	0.092
8280	0.12
8340	0.089
8400	0.092
8460	0.13
8520	0.142

8580	0.112
8640	0.149
8700	0.061
8760	0.055
8820	0.058
8880	0.07
8940	0.054
9000	0.036
9060	0.051
9120	0.063
9180	0.014
9240	0
9300	-0.009
9360	0.007
9420	0.012
9480	-0.003
9540	0.019
9600	0.019
9660	0.002
9720	0.01
9780	0.003
9840	0.001
9900	0
9960	0.011
10020	-0.005
10080	-0.003
10140	-0.004
10200	-0.005
10260	-0.032
10320	-0.025
10380	-0.002
10440	-0.002
10500	-0.029
10560	-0.033
10620	-0.032
10680	-0.039
10740	-0.038
10800	-0.025
10860	-0.023
10920	-0.016
10980	-0.023
11040	-0.014
11100	-0.03
11160	-0.041
11220	-0.041
11280	-0.031
11340	-0.033
11400	-0.029
11460	-0.047
11520	-0.033
11580	-0.033
11640	-0.033
11700	-0.019
11760	-0.022

11820	-0.032
11880	-0.035
11940	-0.033
12000	-0.028
12060	-0.036
12120	-0.038
12180	-0.037
12240	-0.034
12300	-0.029
12360	-0.035
12420	-0.039
12480	-0.031
12540	-0.037
12600	-0.036
12660	-0.047
12720	-0.04
12780	-0.044
12840	-0.055
12900	-0.052
12960	-0.053
13020	-0.056
13080	-0.049
13140	-0.047
13200	-0.041
13260	-0.035
13320	-0.038
13380	-0.029
13440	-0.044
13500	-0.046
13560	-0.047
13620	-0.052
13680	-0.055
13740	-0.054
13800	-0.051
13860	-0.046
13920	-0.046
13980	-0.04
14040	-0.021
14100	-0.008
14160	0.035
14220	0.049
14280	0.041
14340	0.067
14400	0.127
14460	0.148
14520	0.023
14580	0.045
14640	0.057
14700	0.052
14760	0.14
14820	0.095
14880	0.049
14940	0.097
15000	0.057

15060	0.131
15120	0.048
15180	0.042
15240	0.036
15300	0.044
15360	0.032
15420	0.032
15480	0.042
15540	0.053
15600	0.065
15660	0.075
15720	0.028
15780	0.072
15840	0.063
15900	0.059
15960	0.004
16020	0.033
16080	0.025
16140	0.02
16200	0.031
16260	0.006
16320	-0.001
16380	-0.005
16440	-0.009
16500	-0.008
16560	-0.025
16620	-0.019
16680	-0.014
16740	-0.023
16800	-0.024
16860	-0.004
16920	0.007
16980	0.003
17040	-0.013
17100	-0.001
17160	0.002
17220	-0.01
17280	-0.011
17340	-0.026
17400	-0.025
17460	-0.021
17520	-0.005
17580	0.213
17640	0.104
17700	0.108
17760	0.108
17820	0.153
17880	0.234
17940	0.252
18000	0.123
18060	0.21
18120	0.126
18180	0.161
18240	0.134

18300	0.125
18360	0.056
18420	0.102
18480	0.094
18540	0.072
18600	0.076
18660	0.065
18720	0.081
18780	0.102
18840	0.093
18900	0.071
18960	0.056
19020	0.042
19080	0.019
19140	0.036
19200	0.008
19260	0.016
19320	-0.003
19380	0.009
19440	0.004
19500	-0.004
19560	0.003
19620	-0.013
19680	0
19740	-0.022
19800	-0.016
19860	0.004
19920	0.011
19980	0.037
20040	0.045
20100	0.04
20160	0.018
20220	0.008
20280	0.006
20340	-0.012
20400	-0.017
20460	-0.02
20520	-0.029
20580	-0.039
20640	-0.037
20700	-0.046
20760	-0.047

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-915111	8/30/2022 1:40:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:39:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:38:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:37:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:36:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:35:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:34:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:33:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:32:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:31:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:30:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:29:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:28:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:27:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:26:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:25:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:24:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:23:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:22:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:21:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:20:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:19:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:18:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:17:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:16:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:15:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:14:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:13:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:12:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:11:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:10:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:09:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:08:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:07:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:06:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:05:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:04:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:03:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:02:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:01:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 1:00:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:59:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:58:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:57:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:56:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:55:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:54:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:53:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:52:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:51:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:50:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:49:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:48:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:47:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:46:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:45:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:44:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:43:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:42:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:41:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:40:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:39:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:38:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:37:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:36:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:35:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:34:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:33:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:32:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:31:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:30:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:29:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:28:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:27:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:26:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:25:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:24:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:23:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:22:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:21:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:20:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:19:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:18:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:17:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:16:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:15:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:14:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:13:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:12:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:11:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
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592-915111	8/30/2022 12:09:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:08:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:07:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:06:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:05:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:04:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:03:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:02:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/30/2022 12:01:44 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
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592-915111	8/30/2022 11:57:44 AM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
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592-915111	8/30/2022 11:52:44 AM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				

| | | |

| | | |

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 1, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#3 - Interim Remedial Measures Progress Report (8/31/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

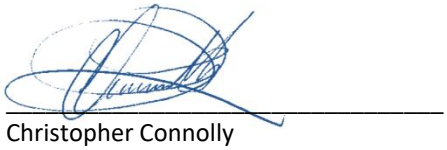
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on August 31, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

August 31, 2022

- Clean Globe Environmental (CG) began installing horizontal and vertical cast iron piping within 98c South 4th Street. No ground intrusive work was performed; thus, CAMP was not required.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

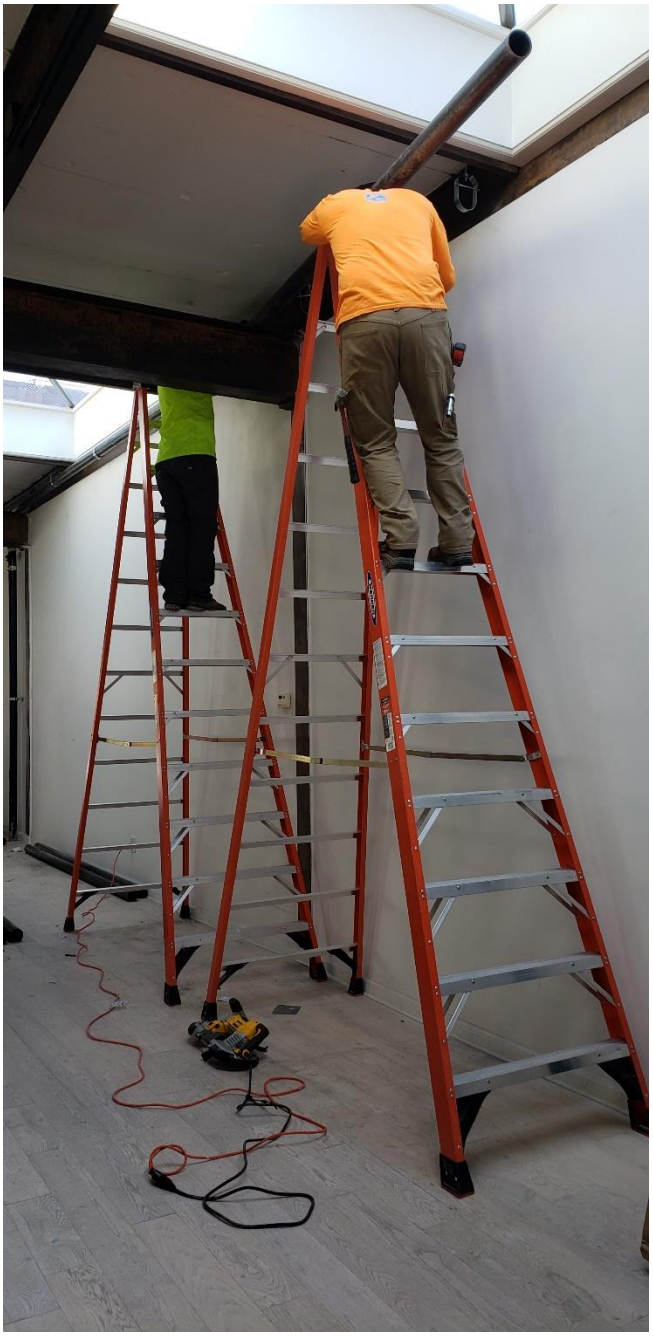


Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

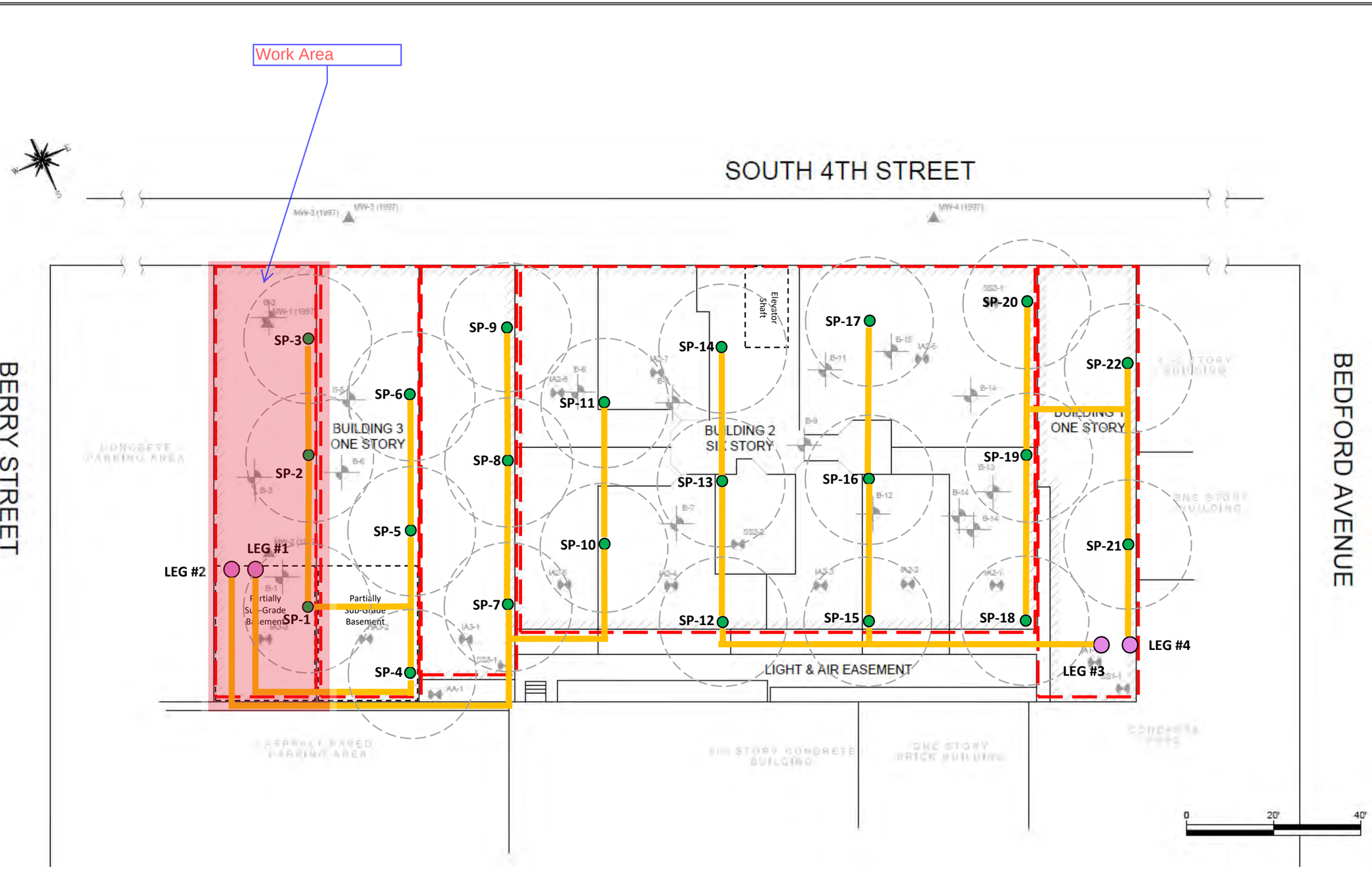
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map
Attachment 4 - CAMP Data

Photograph No. 1: View of typical cast iron riser piping



Photograph No. 2: View of installation of horizontal SSDS piping.

Photograph No. 3: View of installation of “L” and gate valve.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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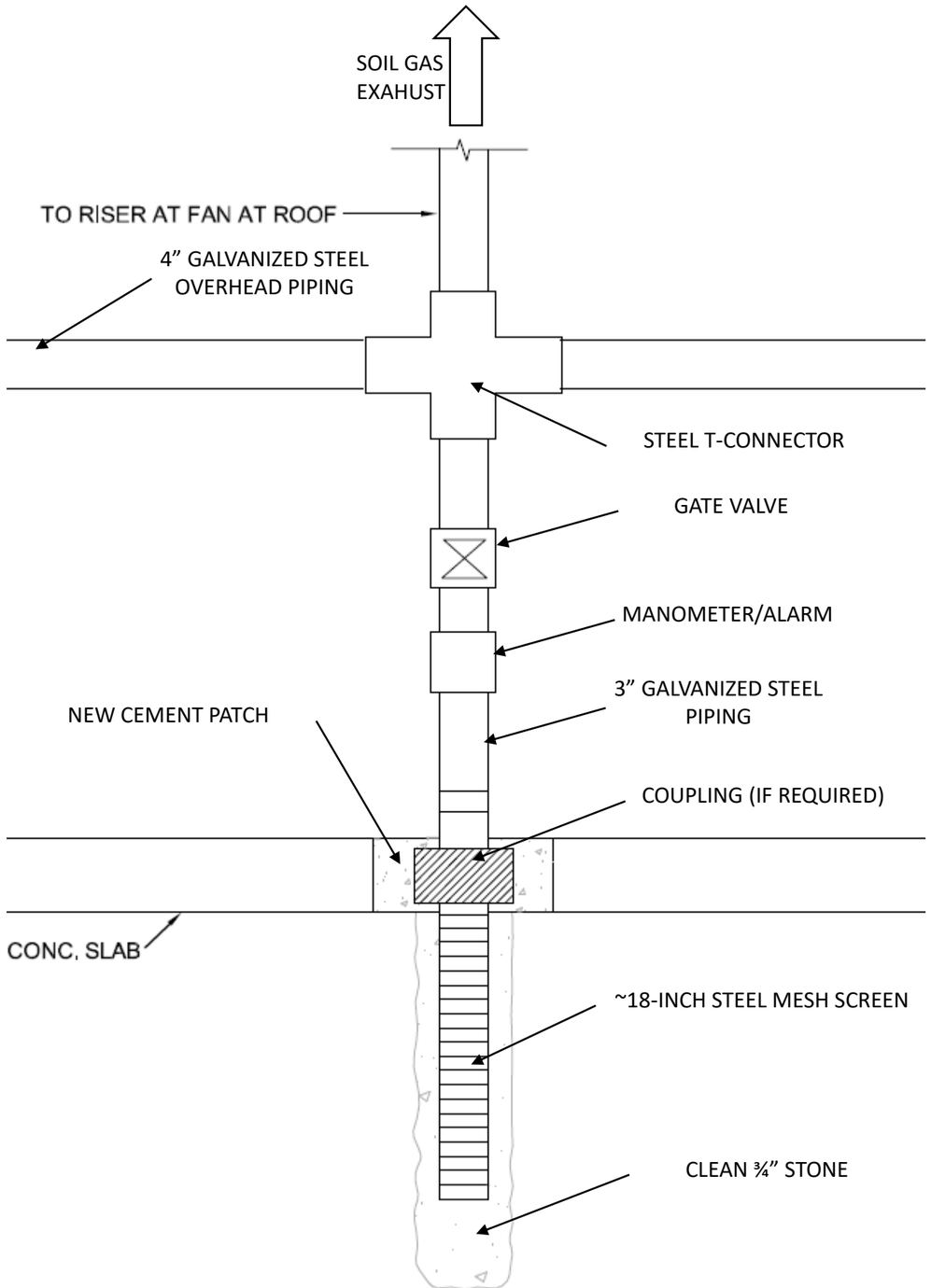
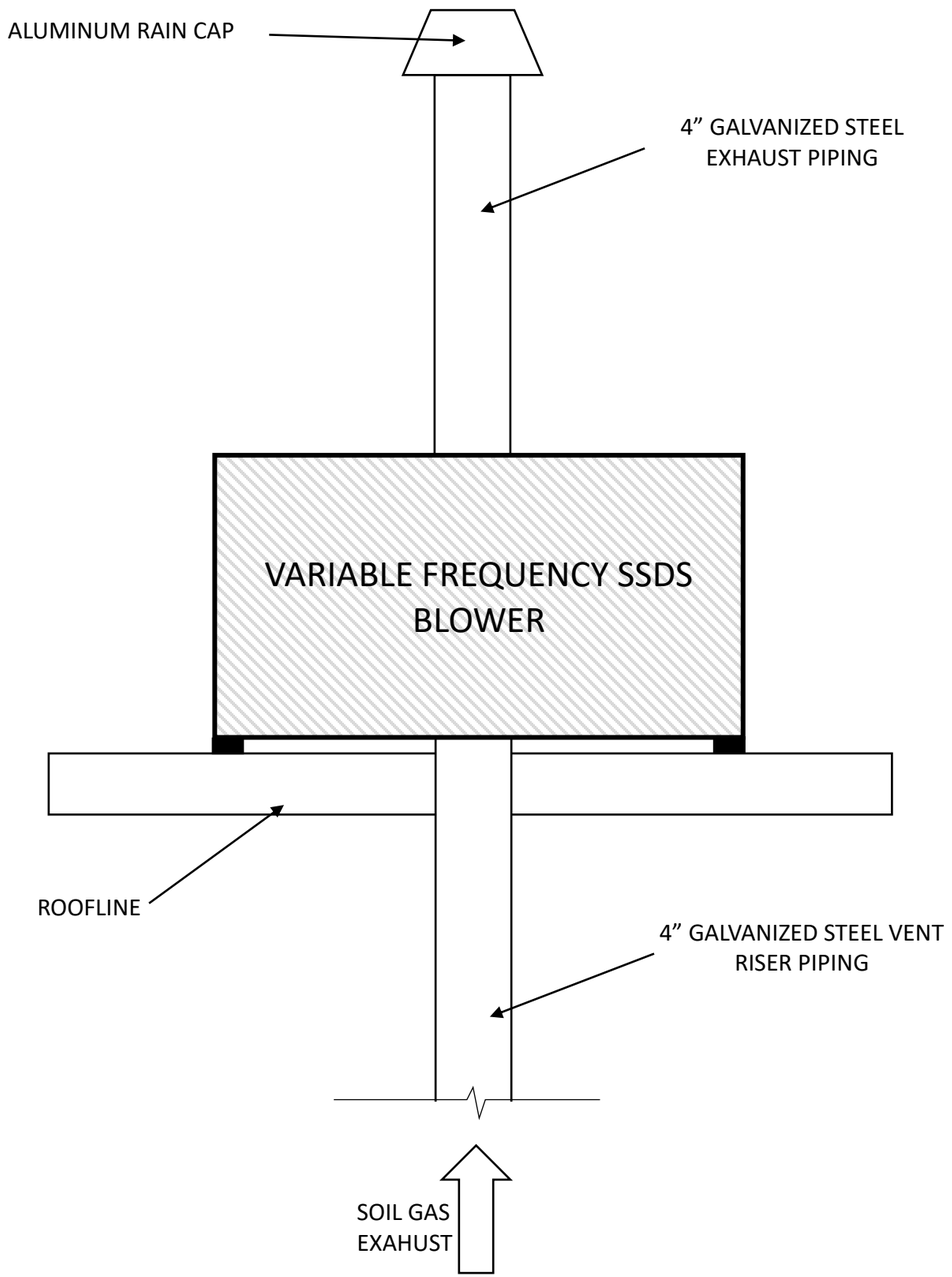
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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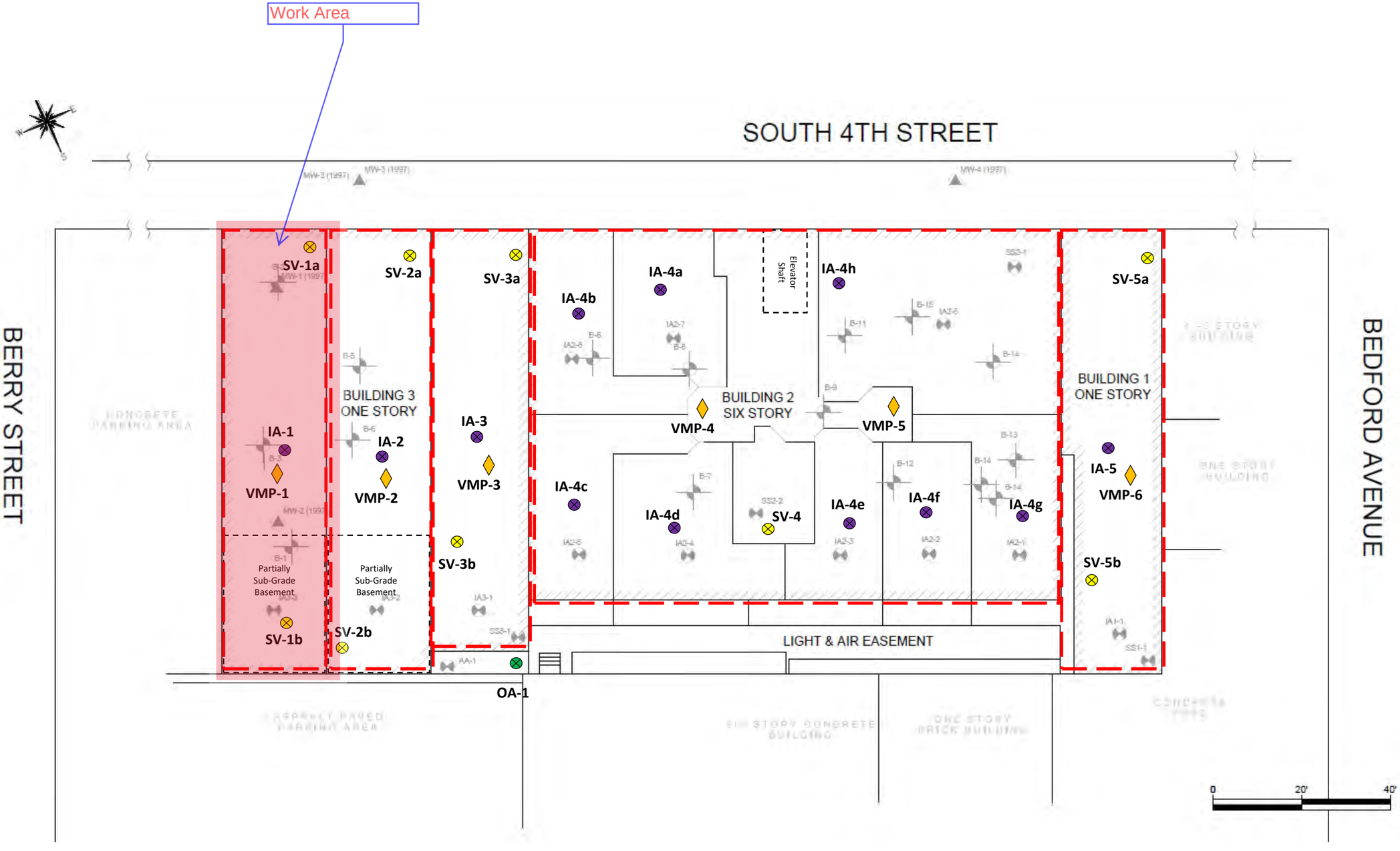
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

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TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530153015
Firmware Version	3.1
Calibration Date	8/25/2022
Test Name	MANUAL_001
Test Start Time	8:45:25 AM
Test Start Date	8/31/2022
Test Length [D:H:M]	0:05:46
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.053
Mass Minimum [mg/m3]	-0.056
Mass Maximum [mg/m3]	1.11
Mass TWA [mg/m3]	0.038
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	346

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	-0.032		
120	-0.028		
180	-0.028		
240	-0.027		
300	-0.019		
360	-0.021		
420	-0.025		
480	-0.03		
540	-0.032		
600	-0.032		
660	-0.032		
720	-0.031		
780	-0.033		
840	-0.031		
900	-0.033		
960	-0.029		
1020	-0.028		
1080	-0.021		
1140	-0.018		
1200	-0.025		
1260	-0.027		
1320	-0.034		
1380	-0.031		
1440	-0.029		
1500	-0.029		
1560	-0.024		
1620	-0.024		
1680	-0.031		
1740	-0.028		
1800	-0.038		
1860	-0.031		
1920	-0.013		
1980	0.014		
2040	0.018		
2100	0.073		
2160	0.118		
2220	0.061		
2280	0.131		
2340	0.141		
2400	0.147		
2460	0.174		
2520	0.122		
2580	0.174		
2640	0.197		
2700	0.222		
2760	0.246		
2820	0.138		
2880	0.247		
2940	0.213		
3000	0.22		
3060	0.168		
3120	0.132		
3180	0.13		
3240	0.1		
3300	0.116		
3360	0.102		
3420	0.121		

3480	0.127
3540	0.108
3600	0.062
3660	0.076
3720	0.066
3780	0.046
3840	0.072
3900	0.078
3960	0.096
4020	0.089
4080	0.073
4140	0.099
4200	0.079
4260	0.106
4320	0.089
4380	0.079
4440	0.112
4500	0.063
4560	0.073
4620	0.101
4680	0.093
4740	0.04
4800	0.04
4860	0.049
4920	0.042
4980	0.095
5040	0.036
5100	0.037
5160	0.024
5220	0.027
5280	0.046
5340	0.052
5400	0.082
5460	0.085
5520	0.038
5580	0.029
5640	0.029
5700	0.021
5760	0.009
5820	0.004
5880	0.003
5940	0.009
6000	0.007
6060	0.004
6120	0
6180	-0.009
6240	-0.015
6300	-0.007
6360	0.003
6420	0.01
6480	0.016
6540	0.026
6600	0.026
6660	0
6720	0.007
6780	0
6840	-0.01
6900	-0.004
6960	0.017
7020	0.027
7080	0.014
7140	-0.004
7200	0.229
7260	1.01
7320	0.94
7380	1.04
7440	1.11
7500	0.907
7560	0.443
7620	0.459
7680	0.503
7740	0.429
7800	0.424
7860	0.384
7920	0.357
7980	0.166
8040	0.279

8100	0.198
8160	0.152
8220	0.092
8280	0.12
8340	0.089
8400	0.092
8460	0.13
8520	0.142
8580	0.112
8640	0.149
8700	0.061
8760	0.055
8820	0.058
8880	0.07
8940	0.054
9000	0.036
9060	0.051
9120	0.063
9180	0.014
9240	0
9300	-0.009
9360	0.007
9420	0.012
9480	-0.003
9540	0.019
9600	0.019
9660	0.002
9720	0.01
9780	0.003
9840	0.001
9900	0
9960	0.011
10020	-0.005
10080	-0.003
10140	-0.004
10200	-0.005
10260	-0.032
10320	-0.025
10380	-0.002
10440	-0.002
10500	-0.029
10560	-0.033
10620	-0.032
10680	-0.039
10740	-0.038
10800	-0.025
10860	-0.023
10920	-0.016
10980	-0.023
11040	-0.014
11100	-0.03
11160	-0.041
11220	-0.041
11280	-0.031
11340	-0.033
11400	-0.029
11460	-0.047
11520	-0.033
11580	-0.033
11640	-0.033
11700	-0.019
11760	-0.022
11820	-0.032
11880	-0.035
11940	-0.033
12000	-0.028
12060	-0.036
12120	-0.038
12180	-0.037
12240	-0.034
12300	-0.029
12360	-0.035
12420	-0.039
12480	-0.031
12540	-0.037
12600	-0.036
12660	-0.047

12720	-0.04
12780	-0.044
12840	-0.055
12900	-0.052
12960	-0.053
13020	-0.056
13080	-0.049
13140	-0.047
13200	-0.041
13260	-0.035
13320	-0.038
13380	-0.029
13440	-0.044
13500	-0.046
13560	-0.047
13620	-0.052
13680	-0.055
13740	-0.054
13800	-0.051
13860	-0.046
13920	-0.046
13980	-0.04
14040	-0.021
14100	-0.008
14160	0.035
14220	0.049
14280	0.041
14340	0.067
14400	0.127
14460	0.148
14520	0.023
14580	0.045
14640	0.057
14700	0.052
14760	0.14
14820	0.095
14880	0.049
14940	0.097
15000	0.057
15060	0.131
15120	0.048
15180	0.042
15240	0.036
15300	0.044
15360	0.032
15420	0.032
15480	0.042
15540	0.053
15600	0.065
15660	0.075
15720	0.028
15780	0.072
15840	0.063
15900	0.059
15960	0.004
16020	0.033
16080	0.025
16140	0.02
16200	0.031
16260	0.006
16320	-0.001
16380	-0.005
16440	-0.009
16500	-0.008
16560	-0.025
16620	-0.019
16680	-0.014
16740	-0.023
16800	-0.024
16860	-0.004
16920	0.007
16980	0.003
17040	-0.013
17100	-0.001
17160	0.002
17220	-0.01
17280	-0.011

17340	-0.026
17400	-0.025
17460	-0.021
17520	-0.005
17580	0.213
17640	0.104
17700	0.108
17760	0.108
17820	0.153
17880	0.234
17940	0.252
18000	0.123
18060	0.21
18120	0.126
18180	0.161
18240	0.134
18300	0.125
18360	0.056
18420	0.102
18480	0.094
18540	0.072
18600	0.076
18660	0.065
18720	0.081
18780	0.102
18840	0.093
18900	0.071
18960	0.056
19020	0.042
19080	0.019
19140	0.036
19200	0.008
19260	0.016
19320	-0.003
19380	0.009
19440	0.004
19500	-0.004
19560	0.003
19620	-0.013
19680	0
19740	-0.022
19800	-0.016
19860	0.004
19920	0.011
19980	0.037
20040	0.045
20100	0.04
20160	0.018
20220	0.008
20280	0.006
20340	-0.012
20400	-0.017
20460	-0.02
20520	-0.029
20580	-0.039
20640	-0.037
20700	-0.046
20760	-0.047

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
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592-915111	8/31/2022 1:14:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:13:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:12:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:11:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:10:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:09:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:08:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:07:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:06:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:05:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:04:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:03:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:02:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:01:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
592-915111	8/31/2022 1:00:43 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
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September 2, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#4 - Interim Remedial Measures Progress Report (9/01/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

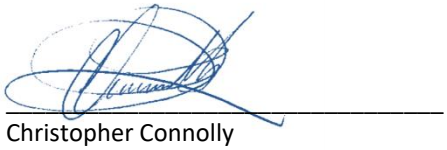
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 1, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 1, 2022

- Clean Globe Environmental (CG) began installing horizontal and vertical cast iron piping within 98c South 4th Street. No ground intrusive work was performed; thus, CAMP was not required.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



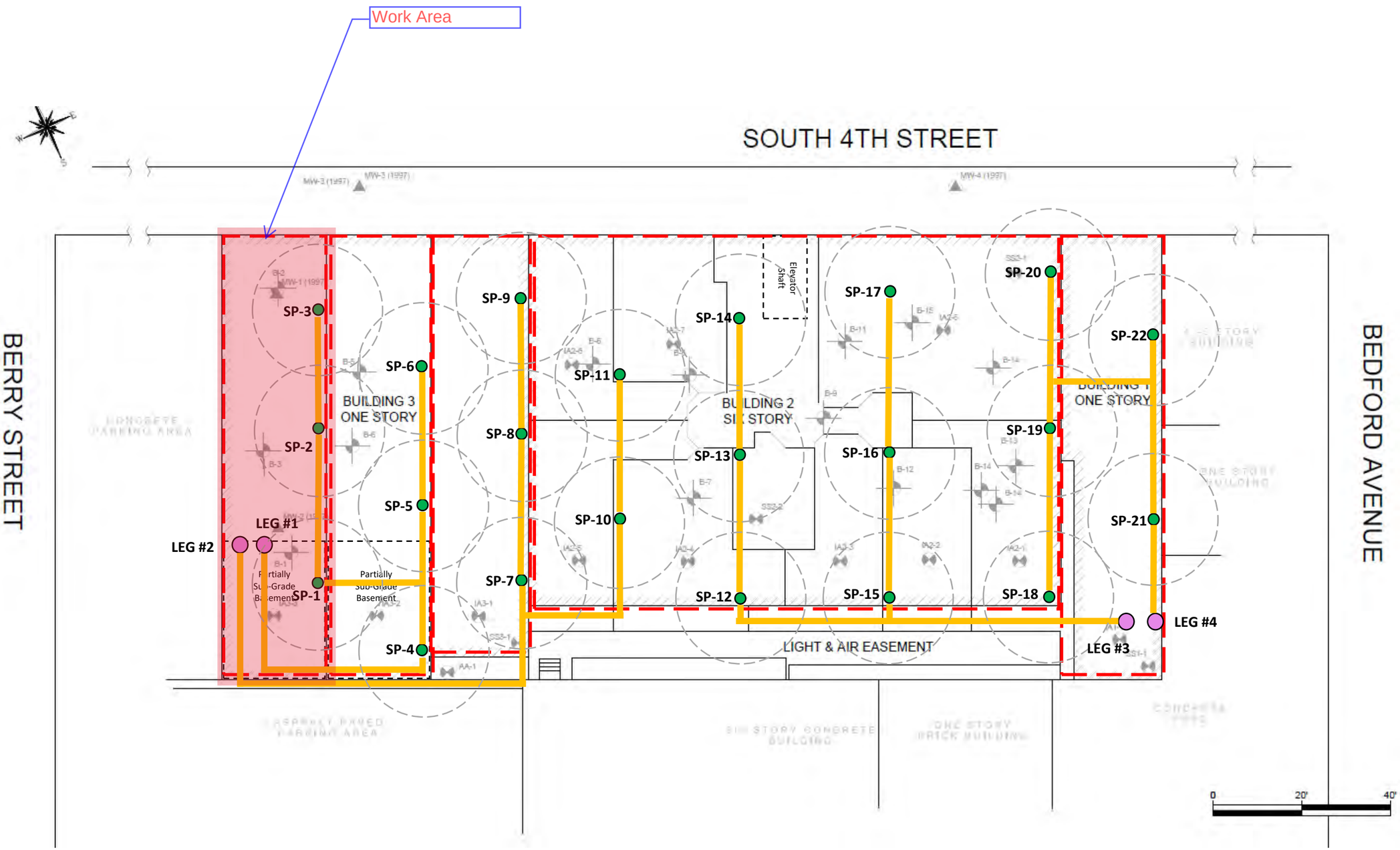
Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of typical cast iron riser and horizontal piping

Photograph No. 2: View of installation of horizontal SSDS piping and valve.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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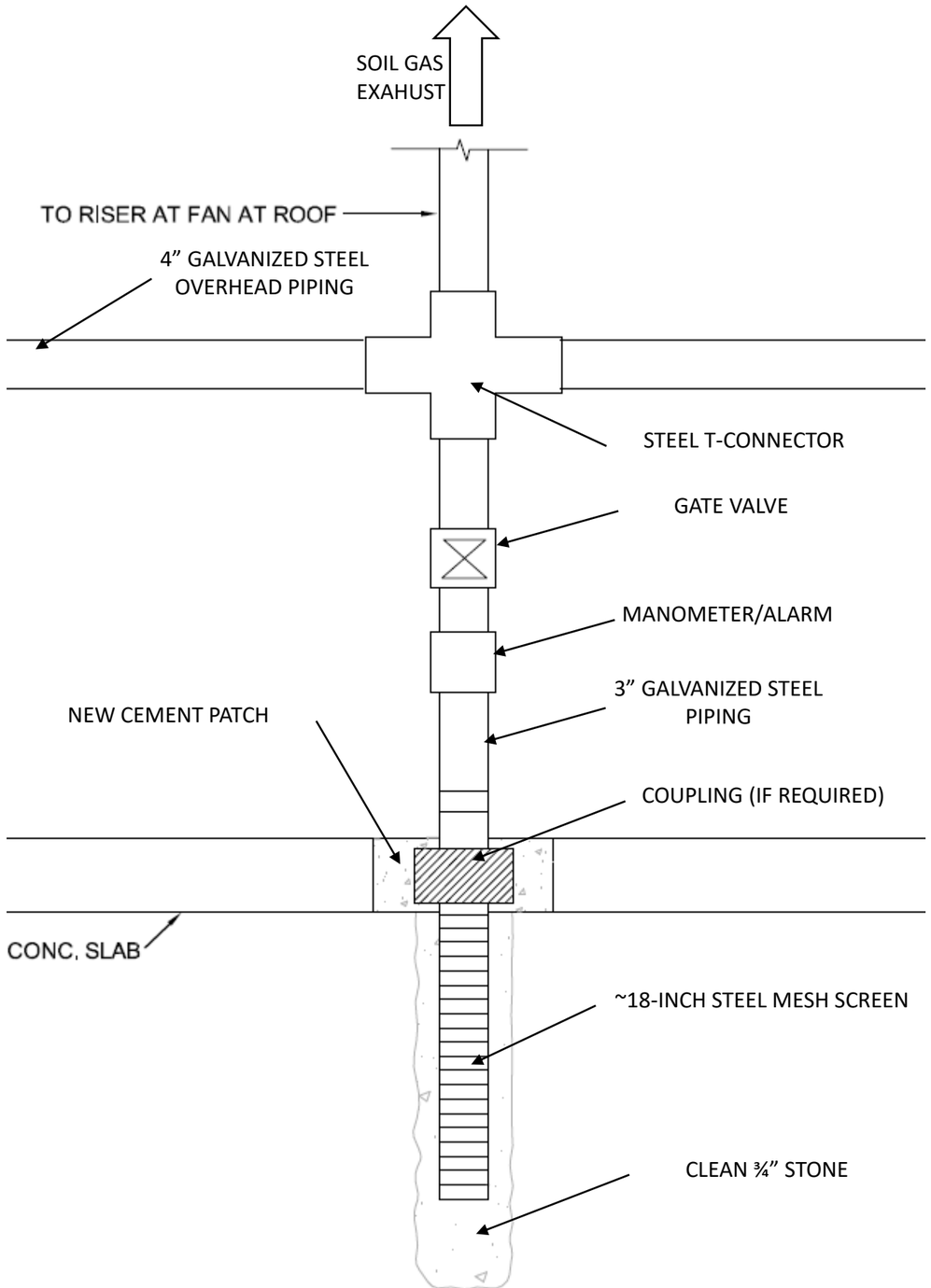
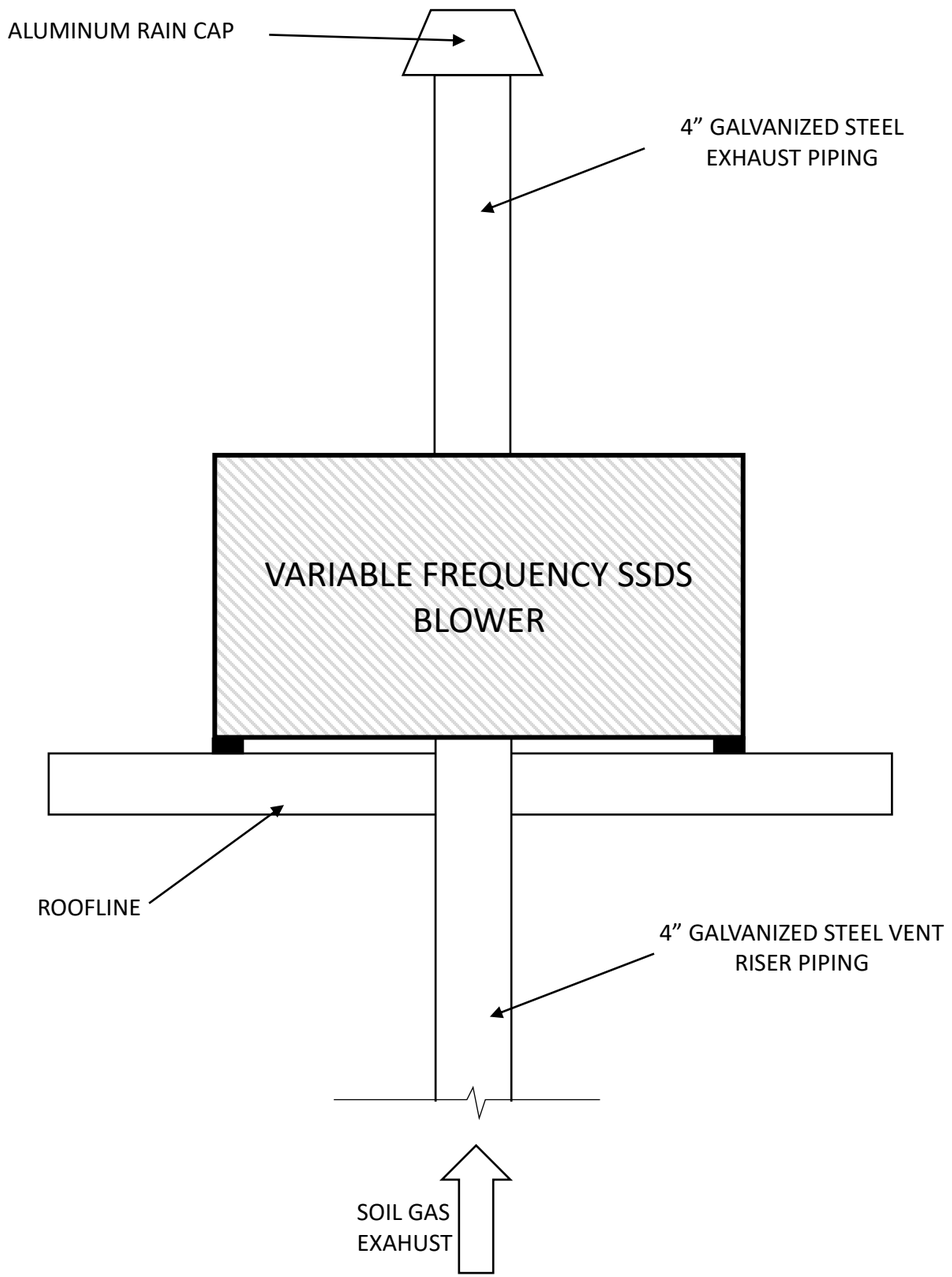


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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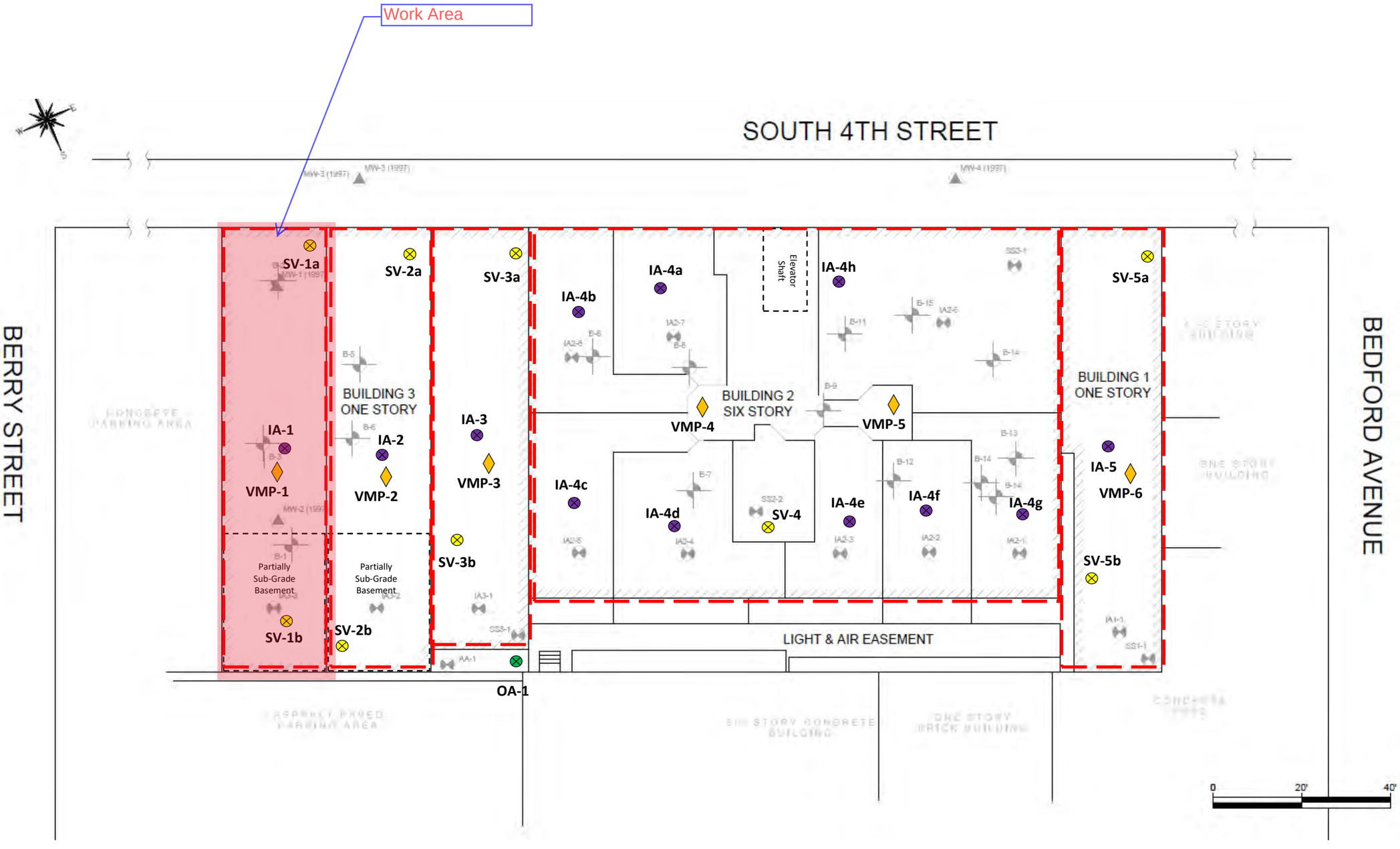

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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DATE	3/25/21
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September 3, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#5 - Interim Remedial Measures Progress Report (9/02/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

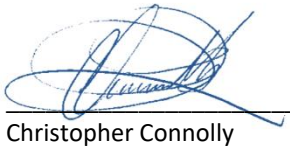
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 2, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 2, 2022

- IEC performed pilot testing on suction points SP-1 and SP-2 within 98c South 4th Street. Adequate negative pressure was detected in the three (3) monitoring points within the unit (SV-1a, SV-1b, and VMP-1).
- Clean Globe Environmental (CG) moved all equipment and materials out of 98c South 4th Street and into the building maintenance unit within 100 South 4th Street. CG began coring suction point SP-14 in hallway of residential building. The suction point could not be completed before the end of the day. The hole was filled with Portland cement and will be completed on 9/5/22.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



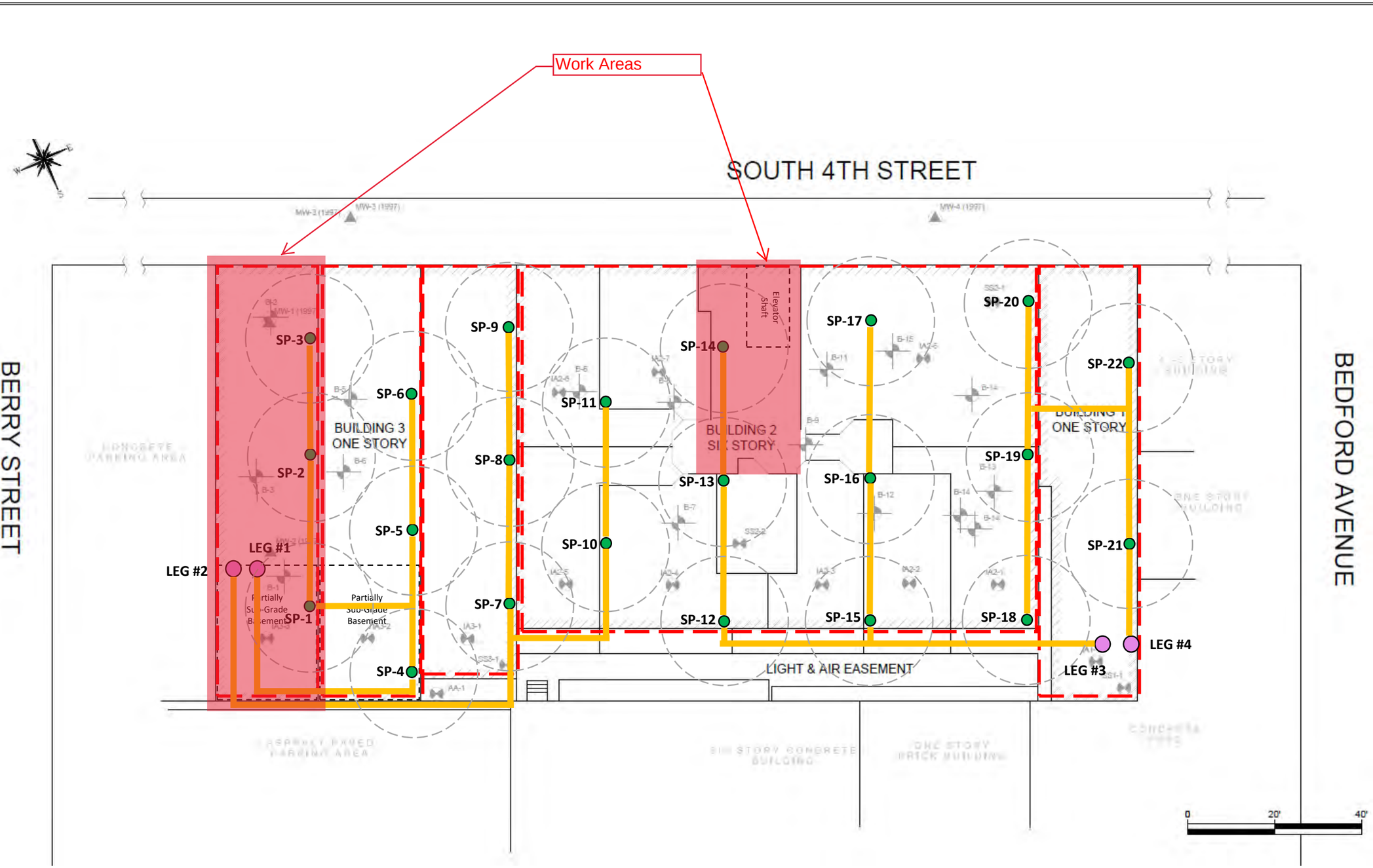
Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of typical coring of suction point location

Photograph No. 2: View of installation suction point using core drill.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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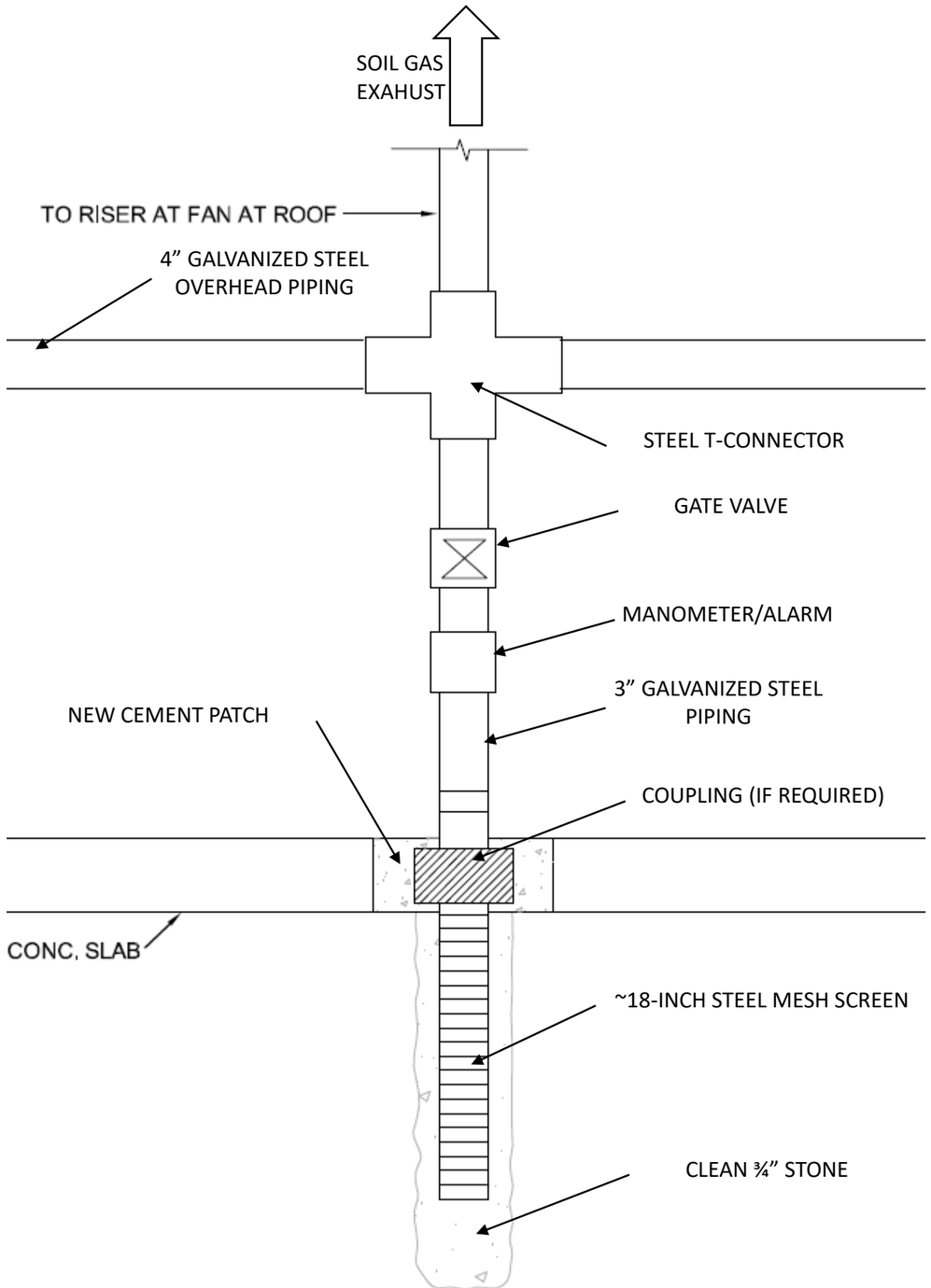
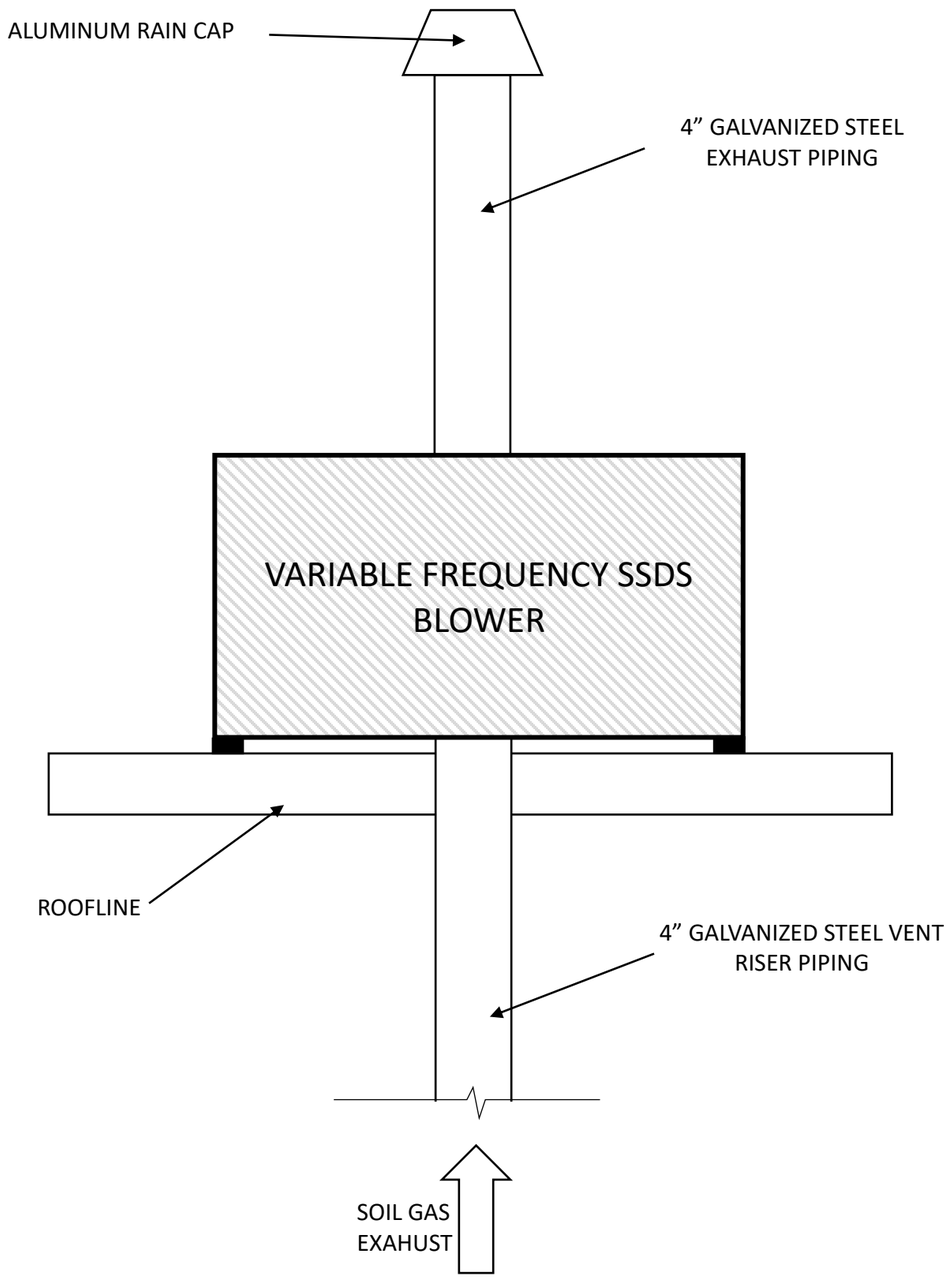


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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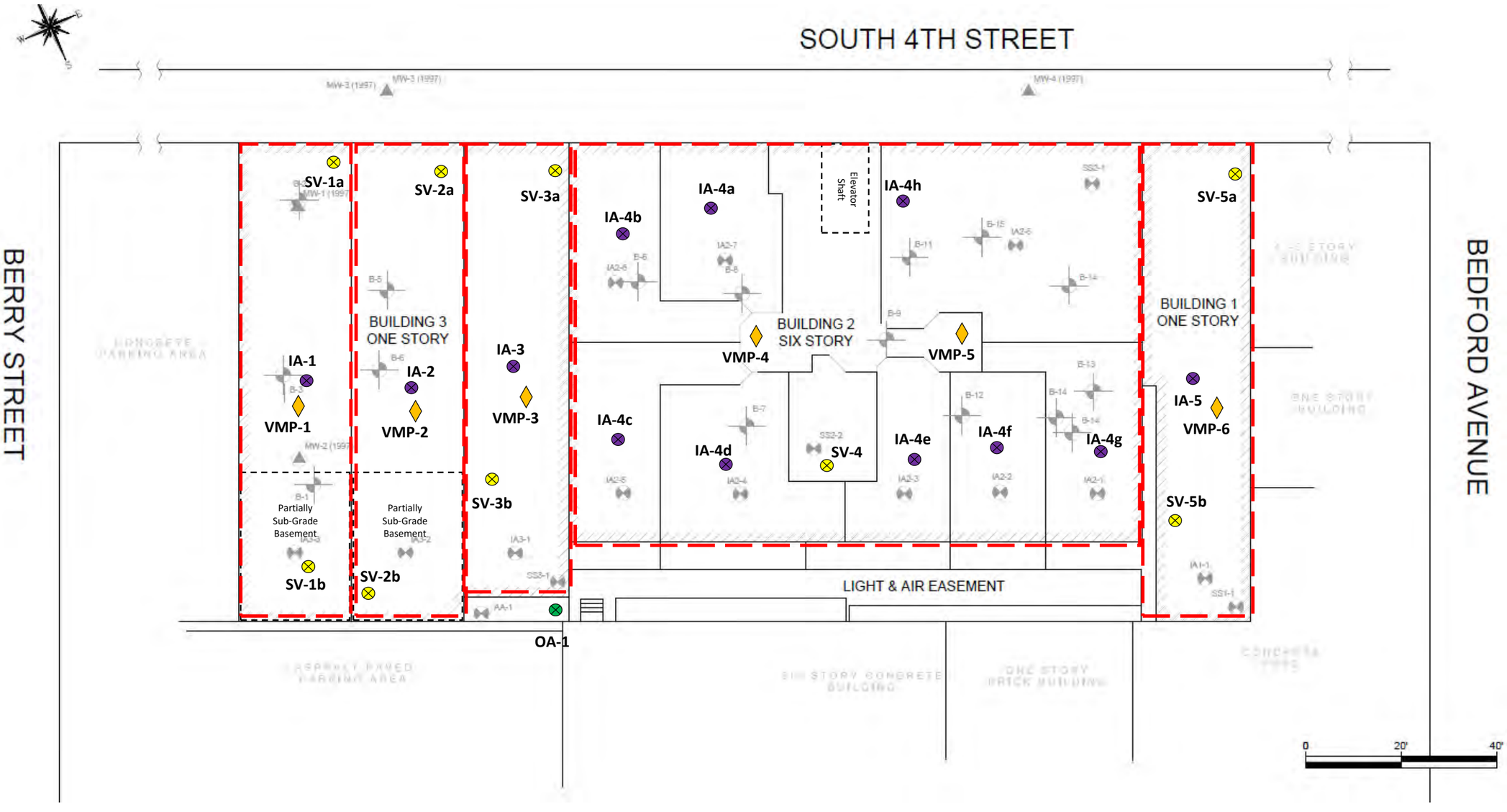

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530162407
Firmware Version		3.1
Calibration Date		2/4/2022
Test Name	MANUAL_016	
Test Start Time		7:05:19 AM
Test Start Date		9/2/2022
Test Length [D:H:M]		0:01:11
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.024
Mass Minimum [mg/m3]		0.012
Mass Maximum [mg/m3]		0.063
Mass TWA [mg/m3]		0.003
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		71

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.026		
120	0.025		
180	0.031		
240	0.028		
300	0.024		
360	0.027		
420	0.026		
480	0.019		
540	0.02		
600	0.018		
660	0.028		
720	0.024		
780	0.016		
840	0.016		
900	0.017		
960	0.025		
1020	0.018		
1080	0.034		
1140	0.023		
1200	0.018		
1260	0.024		
1320	0.016		
1380	0.024		
1440	0.044		
1500	0.024		
1560	0.035		
1620	0.026		

1680	0.023
1740	0.023
1800	0.018
1860	0.045
1920	0.041
1980	0.032
2040	0.029
2100	0.041
2160	0.02
2220	0.017
2280	0.016
2340	0.014
2400	0.015
2460	0.015
2520	0.024
2580	0.025
2640	0.029
2700	0.03
2760	0.021
2820	0.038
2880	0.02
2940	0.063
3000	0.029
3060	0.022
3120	0.022
3180	0.019
3240	0.019
3300	0.013
3360	0.022
3420	0.018
3480	0.015
3540	0.016
3600	0.014
3660	0.028
3720	0.021
3780	0.013
3840	0.012
3900	0.029
3960	0.03
4020	0.016
4080	0.017
4140	0.013
4200	0.012
4260	0.017

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www.impactenvironmental.com

Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th Street
Job No.: 13817
Location: 100 South 4th Street, Brooklyn, NY
On-site Personnel: C Evertz
Day & Date:
Weather:

	AM	PM
Wind Direction	NA	NA
Temperature Range:		°F
Calibration Dates:		

Sample Interval: 15 minutes
Background Reading (particulates) mg/m³
Background Reading (organic vapors) 0.0 ppm
Particulate Meters: Photoionization Detector:
Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings
Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				No ground intrusive work
0715				↓
0730				
0745				
0800				
0815			0.0	Coring.
0830			0.0	↓
0845			0.0	
0900			0.0	
0915			0.1	
0930			0.0	
0945			0.0	
1000			0.0	
1015				No ground intrusive work
1030				↓
1045				
1100				
1115				

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September 6, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#6 - Interim Remedial Measures Progress Report (9/05/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

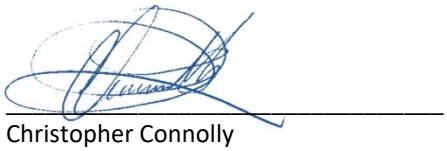
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 5, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 5, 2022

- No work was performed due to Labor Day National holiday.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 7, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#7 - Interim Remedial Measures Progress Report (9/06/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 6, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 6, 2022

- Clean Globe Environmental (CG) continued coring suction point SP-14 in hallway of residential building. SP-14 was completed, and CG began running vertical and horizontal piping for SP-14.
- CG begin coring suction point SP-17 in utility room. Hit refusal, and moved point slightly south.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 98c South 4th Street and 100 South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

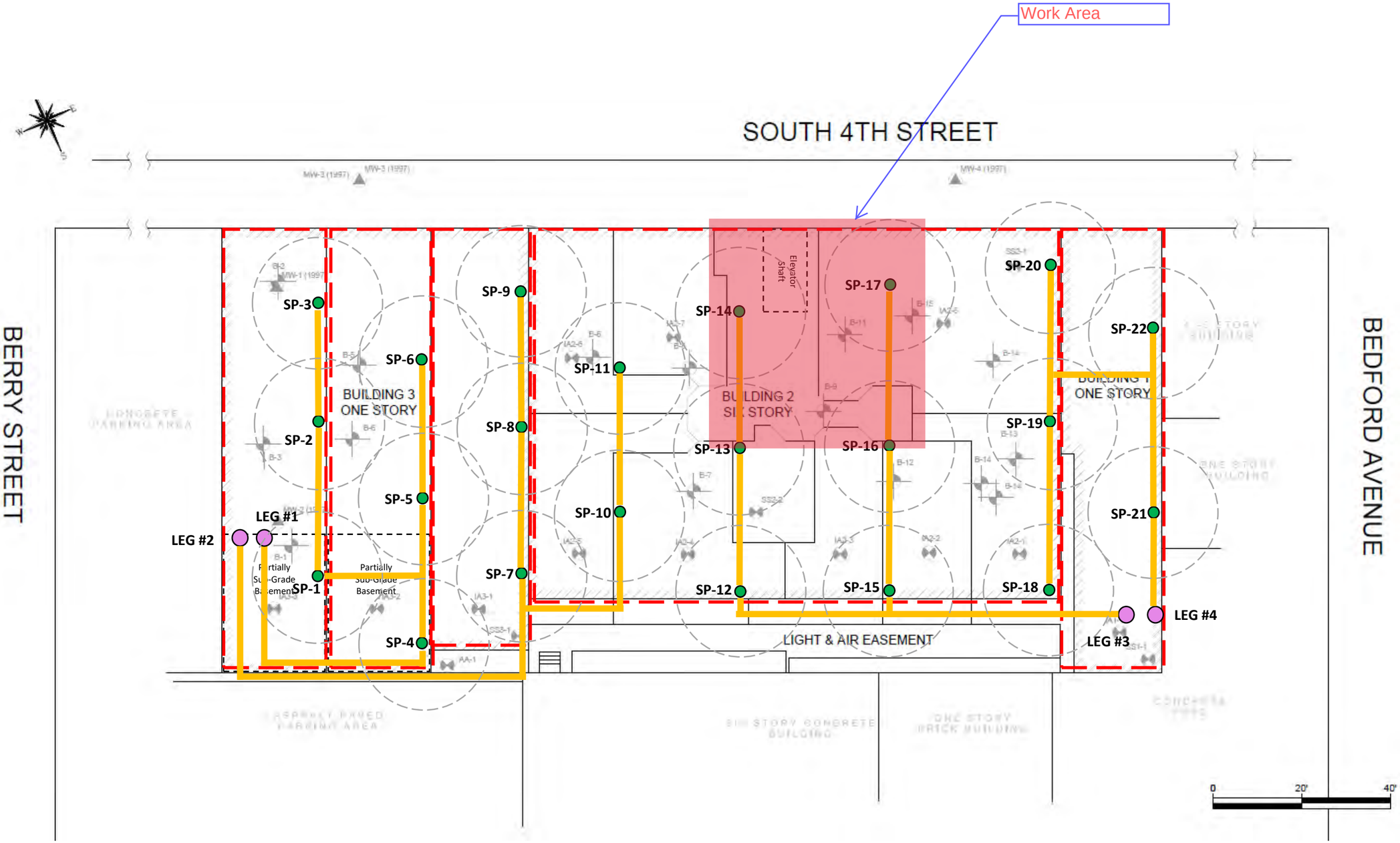
Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC

S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of piping through ceiling of 100 South 4th Street from SP-14

Photograph No. 2: View of vertical and horizontal piping from SP-14



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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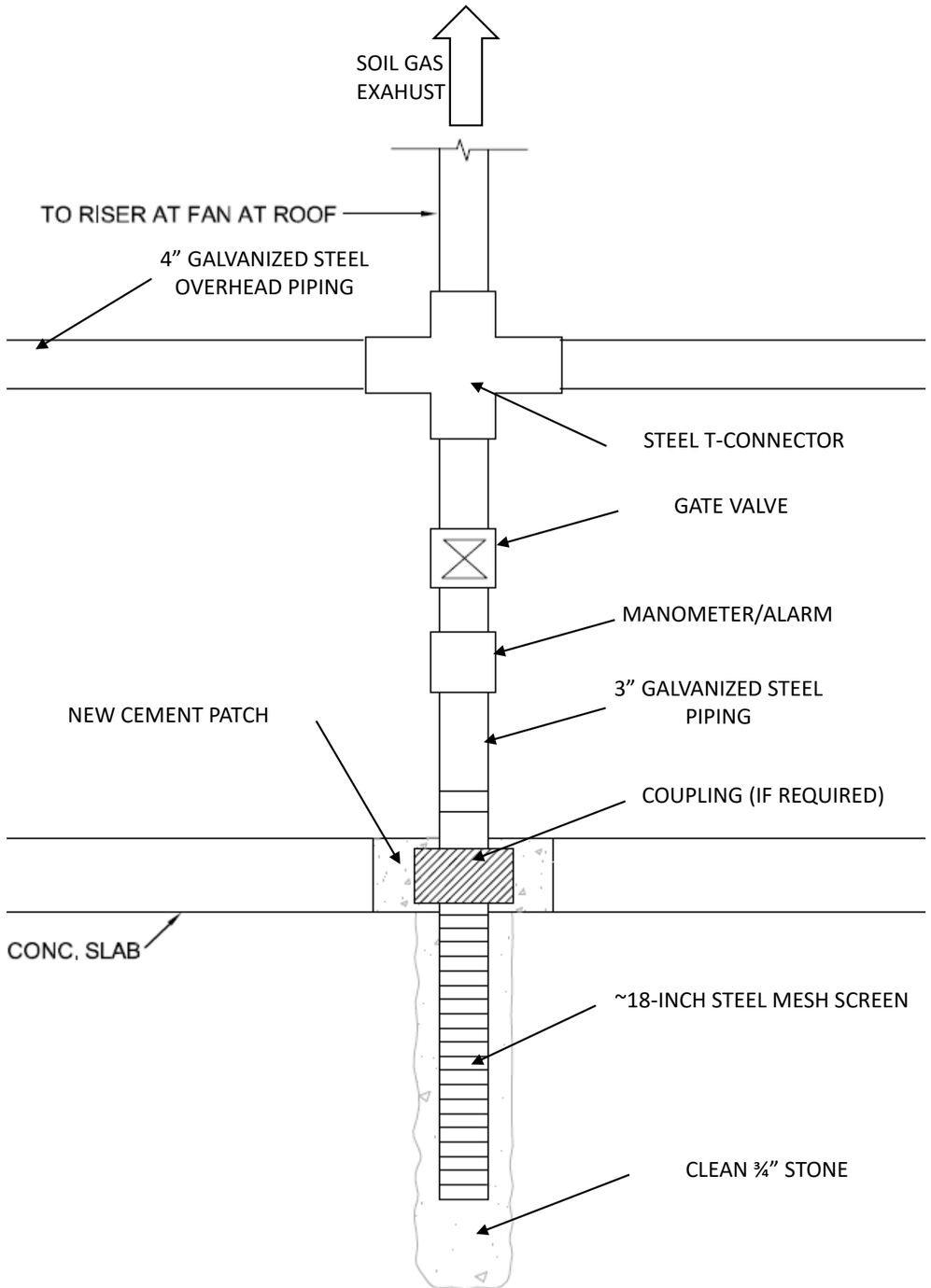
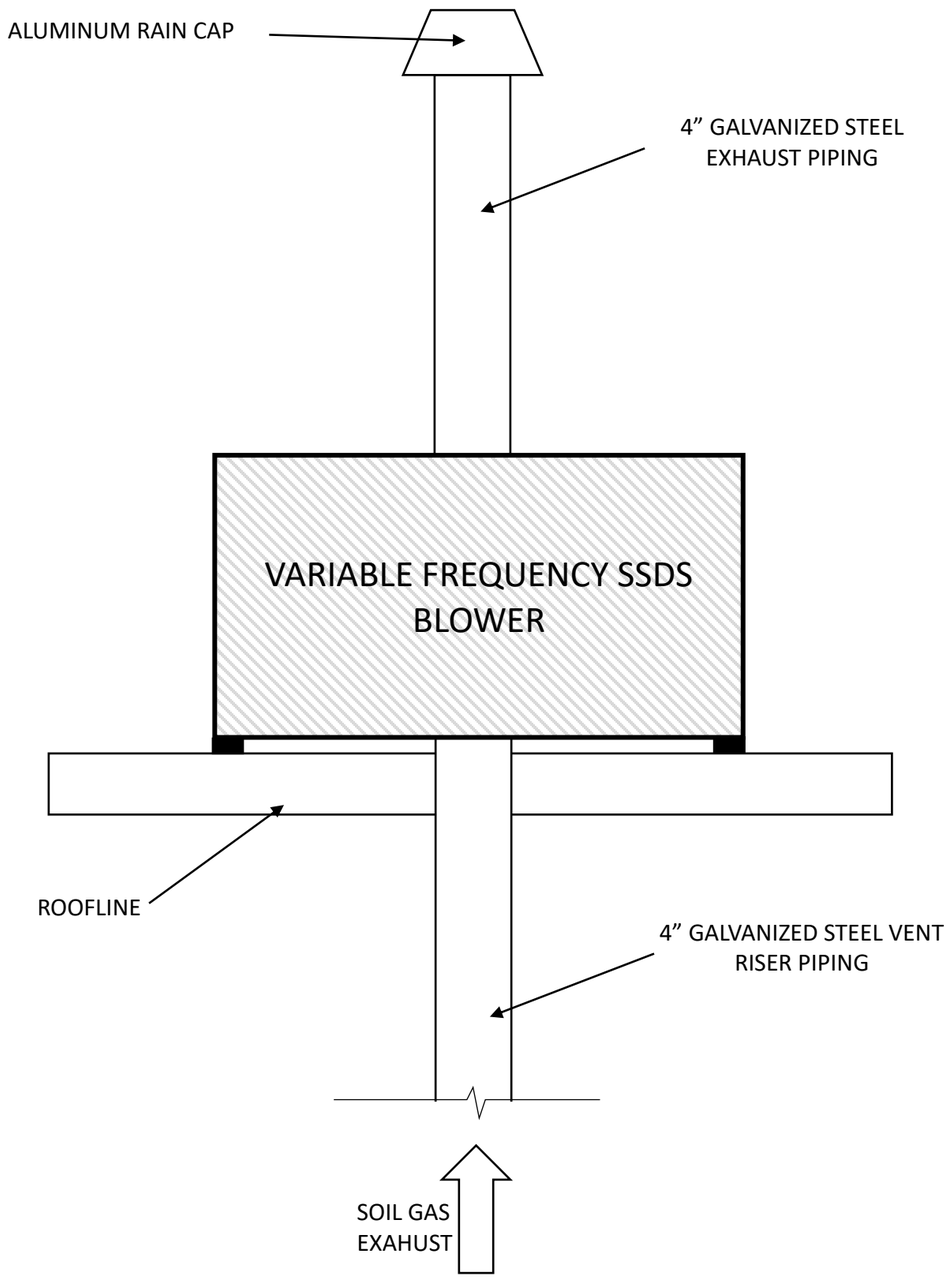


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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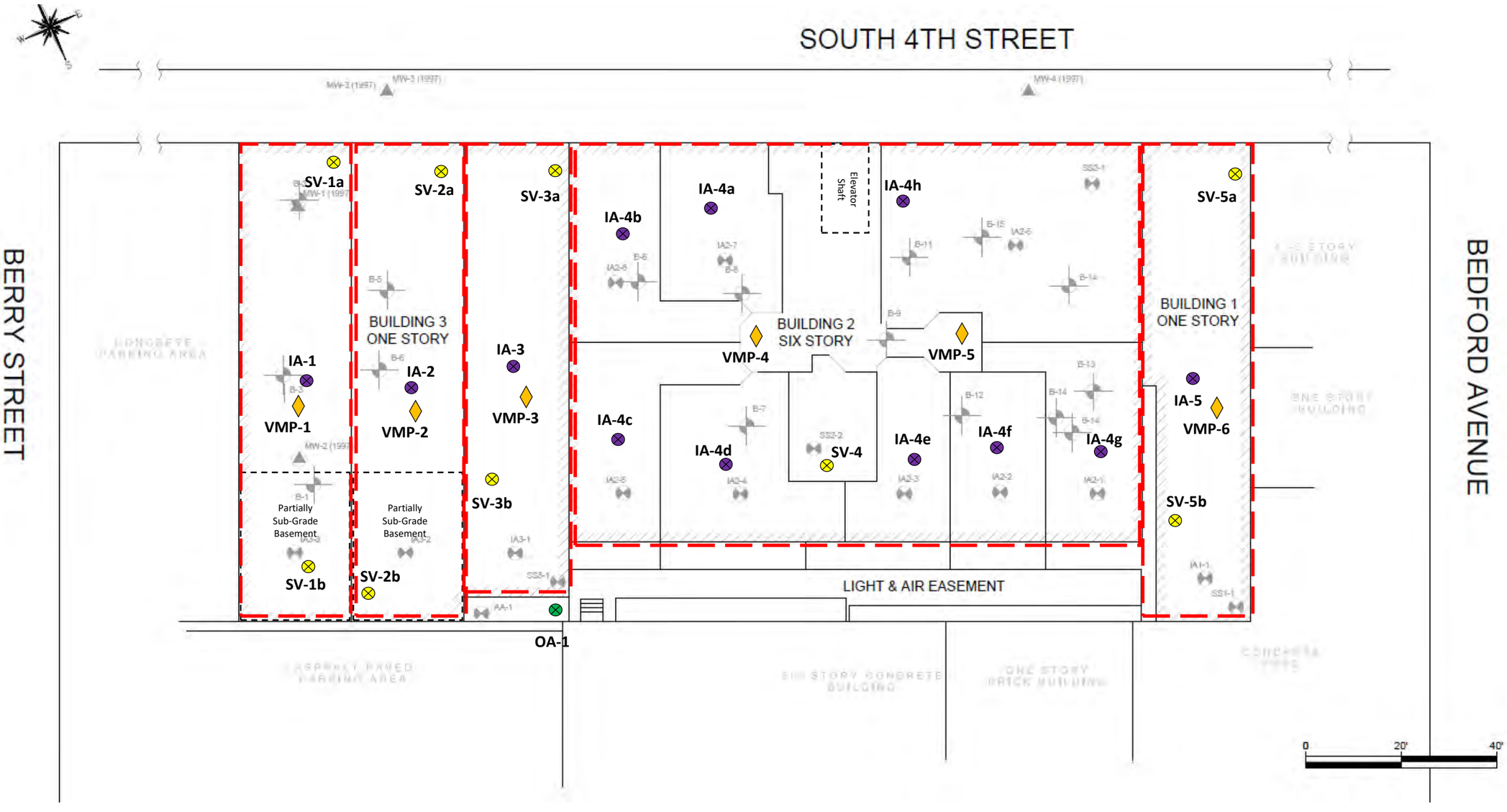

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

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BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530162407
Firmware Version		3.1
Calibration Date		2/4/2022
Test Name	MANUAL_017	
Test Start Time		7:51:56 AM
Test Start Date		9/6/2022
Test Length [D:H:M]		0:06:23
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.015
Mass Minimum [mg/m3]		-0.003
Mass Maximum [mg/m3]		0.181
Mass TWA [mg/m3]		0.012
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		383

Elapsed Time [s]	Mass [mg/m3]
60	0.044
120	0.009
180	0.008
240	0.007
300	0.006
360	0.007
420	0.006
480	0.006
540	0.014
600	0.012
660	0.015
720	0.012
780	0.013
840	0.022
900	0.018
960	0.012
1020	0.015
1080	0.016
1140	0.012
1200	0.014
1260	0.011
1320	0.008
1380	0.006
1440	0.008
1500	0.014
1560	0.011
1620	0.01

1680	0.012
1740	0.042
1800	0.087
1860	0.022
1920	0.027
1980	0.027
2040	0.031
2100	0.019
2160	0.023
2220	0.056
2280	0.062
2340	0.053
2400	0.043
2460	0.027
2520	0.03
2580	0.029
2640	0.025
2700	0.023
2760	0.025
2820	0.017
2880	0.02
2940	0.023
3000	0.018
3060	0.015
3120	0.012
3180	0.014
3240	0.013
3300	0.016
3360	0.015
3420	0.016
3480	0.014
3540	0.013
3600	0.013
3660	0.013
3720	0.01
3780	0.009
3840	0.01
3900	0.006
3960	0.006
4020	0.004
4080	0.005
4140	0.005
4200	0.004
4260	0.004
4320	0.003
4380	0.002
4440	0.002

4500	0.003
4560	0.003
4620	0.001
4680	0.001
4740	0.002
4800	0.001
4860	0.013
4920	0.014
4980	0.007
5040	0.009
5100	0.007
5160	0.005
5220	0.005
5280	0.005
5340	0.008
5400	0.005
5460	0.005
5520	0.005
5580	0.003
5640	0.003
5700	0.001
5760	0.002
5820	0.002
5880	0.003
5940	0.008
6000	0.01
6060	0.006
6120	0.003
6180	0.019
6240	0.02
6300	0.016
6360	0.019
6420	0.021
6480	0.017
6540	0.022
6600	0.024
6660	0.028
6720	0.028
6780	0.029
6840	0.033
6900	0.057
6960	0.038
7020	0.054
7080	0.044
7140	0.035
7200	0.036
7260	0.041

7320	0.041
7380	0.049
7440	0.047
7500	0.045
7560	0.04
7620	0.04
7680	0.038
7740	0.036
7800	0.031
7860	0.033
7920	0.031
7980	0.031
8040	0.03
8100	0.032
8160	0.04
8220	0.03
8280	0.034
8340	0.033
8400	0.03
8460	0.028
8520	0.033
8580	0.026
8640	0.021
8700	0.034
8760	0.033
8820	0.038
8880	0.033
8940	0.037
9000	0.045
9060	0.047
9120	0.042
9180	0.039
9240	0.034
9300	0.028
9360	0.033
9420	0.037
9480	0.029
9540	0.041
9600	0.129
9660	0.103
9720	0.181
9780	0.164
9840	0.102
9900	0.108
9960	0.097
10020	0.092
10080	0.077

10140	0.083
10200	0.074
10260	0.076
10320	0.072
10380	0.067
10440	0.058
10500	0.07
10560	0.07
10620	0.106
10680	0.119
10740	0.139
10800	0.003
10860	0
10920	0
10980	-0.001
11040	-0.002
11100	-0.002
11160	0
11220	0
11280	0
11340	0
11400	0
11460	0
11520	0
11580	0
11640	0.001
11700	0.001
11760	0
11820	0
11880	0
11940	0
12000	0
12060	0
12120	0
12180	0
12240	0.001
12300	0
12360	0
12420	0
12480	-0.001
12540	0
12600	-0.001
12660	-0.001
12720	-0.001
12780	-0.001
12840	-0.002
12900	-0.002

12960	-0.002
13020	0
13080	0.001
13140	0
13200	0
13260	-0.001
13320	-0.001
13380	-0.001
13440	-0.002
13500	-0.001
13560	-0.002
13620	-0.002
13680	-0.001
13740	-0.002
13800	-0.001
13860	-0.001
13920	-0.001
13980	-0.001
14040	-0.001
14100	-0.001
14160	-0.001
14220	-0.002
14280	-0.002
14340	-0.002
14400	-0.002
14460	-0.002
14520	-0.002
14580	-0.002
14640	-0.001
14700	-0.003
14760	-0.003
14820	-0.003
14880	-0.003
14940	-0.003
15000	-0.001
15060	0
15120	0
15180	-0.001
15240	-0.001
15300	-0.001
15360	-0.001
15420	-0.001
15480	-0.001
15540	-0.001
15600	-0.001
15660	-0.002
15720	-0.002

15780	-0.002
15840	-0.002
15900	-0.002
15960	-0.002
16020	-0.002
16080	-0.002
16140	-0.002
16200	-0.002
16260	-0.002
16320	-0.002
16380	-0.002
16440	-0.002
16500	-0.002
16560	-0.001
16620	-0.001
16680	-0.001
16740	0
16800	0
16860	0
16920	0.001
16980	0
17040	0
17100	0
17160	0
17220	0
17280	0
17340	0
17400	-0.001
17460	-0.001
17520	-0.001
17580	-0.001
17640	-0.001
17700	-0.001
17760	-0.001
17820	-0.001
17880	-0.001
17940	-0.001
18000	-0.001
18060	-0.001
18120	-0.001
18180	-0.001
18240	-0.001
18300	-0.001
18360	-0.001
18420	-0.001
18480	0
18540	0

18600	0
18660	0
18720	-0.001
18780	-0.001
18840	0
18900	0
18960	0
19020	0
19080	0
19140	0
19200	0
19260	0
19320	0
19380	0
19440	0
19500	-0.001
19560	-0.001
19620	-0.001
19680	-0.001
19740	-0.001
19800	-0.001
19860	-0.001
19920	-0.001
19980	-0.002
20040	-0.001
20100	-0.001
20160	0.001
20220	0.001
20280	0.002
20340	0.003
20400	0.003
20460	0.002
20520	0.002
20580	0.001
20640	0.002
20700	0.007
20760	0.003
20820	0.002
20880	0.003
20940	0.003
21000	0.003
21060	0.003
21120	0.001
21180	0.001
21240	0.001
21300	0
21360	0.002

21420	0.058
21480	0.059
21540	0.038
21600	0.036
21660	0.029
21720	0.016
21780	0.013
21840	0.008
21900	0.006
21960	0.004
22020	0.003
22080	0.003
22140	0.001
22200	0.003
22260	0.004
22320	0.004
22380	0.004
22440	0.003
22500	0.003
22560	0.002
22620	0.003
22680	0.006
22740	0.008
22800	0.006
22860	0.006
22920	0.006
22980	0.006

Alarms Errors

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street
Job No.: 13817
Location: 100 South 4th street Brooklyn NY
On-site Personnel: C Evertz
Day & Date: 9-6-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes
Background Reading (particulates) mg/m³
Background Reading (organic vapors) 0.0 ppm
Calibration Dates: Particulate Meters: Photoionization Detector:
Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings
Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700			0.0	
0715			0.0	
0730			0.0	
0745			0.0	
0800			0.0	
0815			0.0	
0830			0.0	
0845			0.0	
0900			0.1	
0915			0.0	
0930			0.0	
0945			0.0	
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	
1145			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215			0.0	
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430			0.0	
1445				
1500				
1515				
1530				
1545				
1600				
1615				
1630				
1645				
1700				

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welcome to solid ground… *www.impactenvironmental.com*

September 8, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#8 - Interim Remedial Measures Progress Report (9/07/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

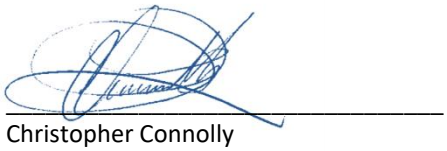
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 7, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 7, 2022

- Volunteer had CG and IEC stop work due to Insurance issue. Work resumed approx. 10am.
- Clean Globe Environmental (CG) finished coring SP-17 in utility room. Began running vertical and horizontal piping.
- CG completed coring suction point SP-13 in stairwell of 100 South 4th Street.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

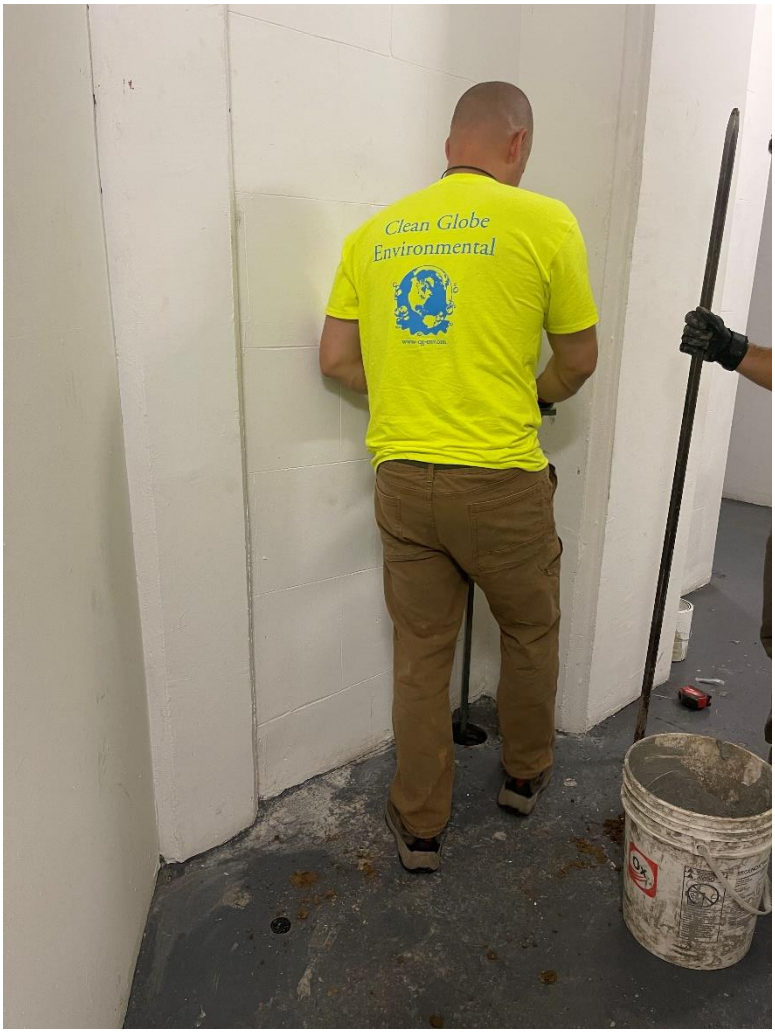


Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC

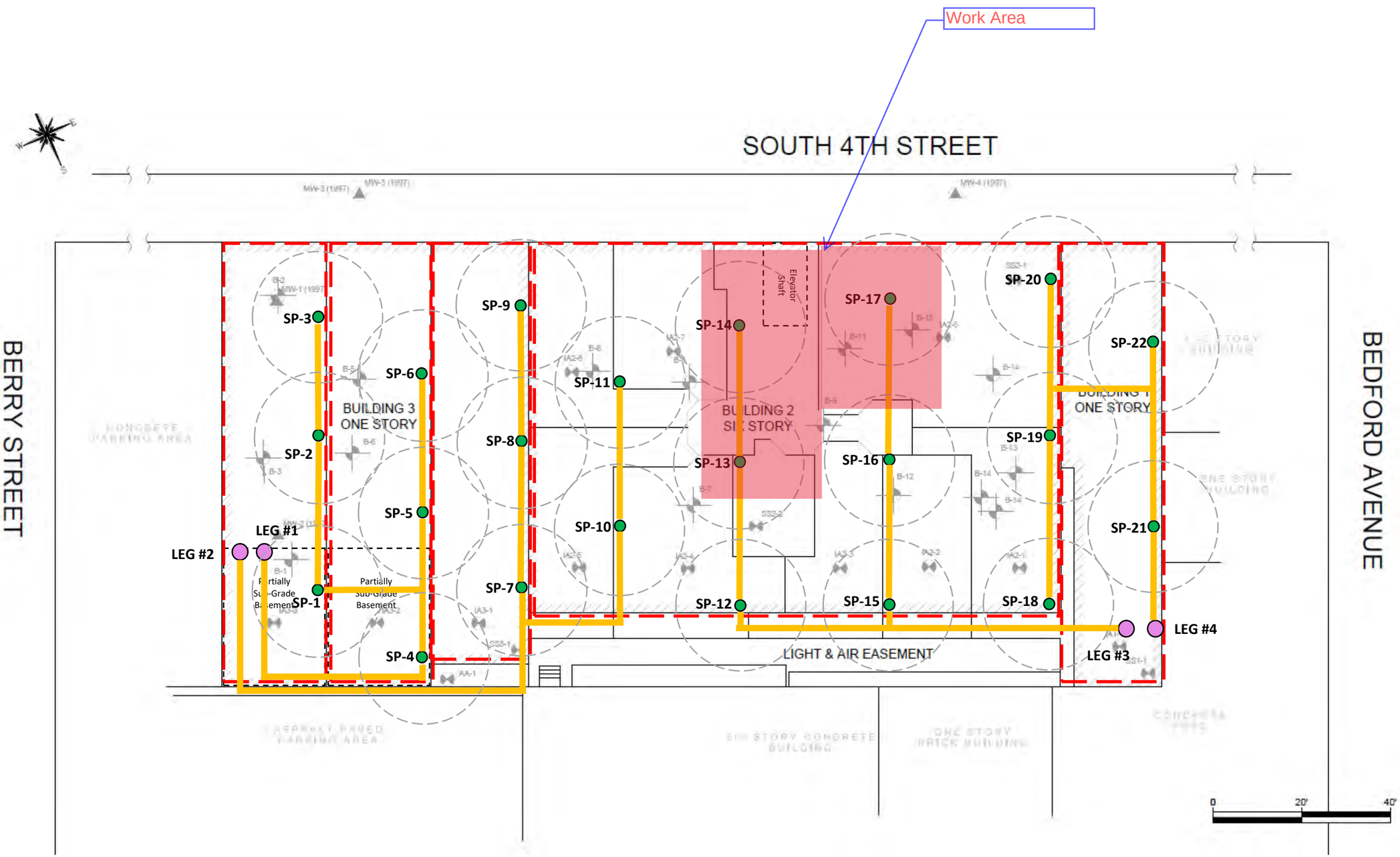
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map



Photograph No. 1: View of installation of SP-13

Photograph No. 2: View of cored SP-13



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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BOHEMIA, NEW YORK 11716
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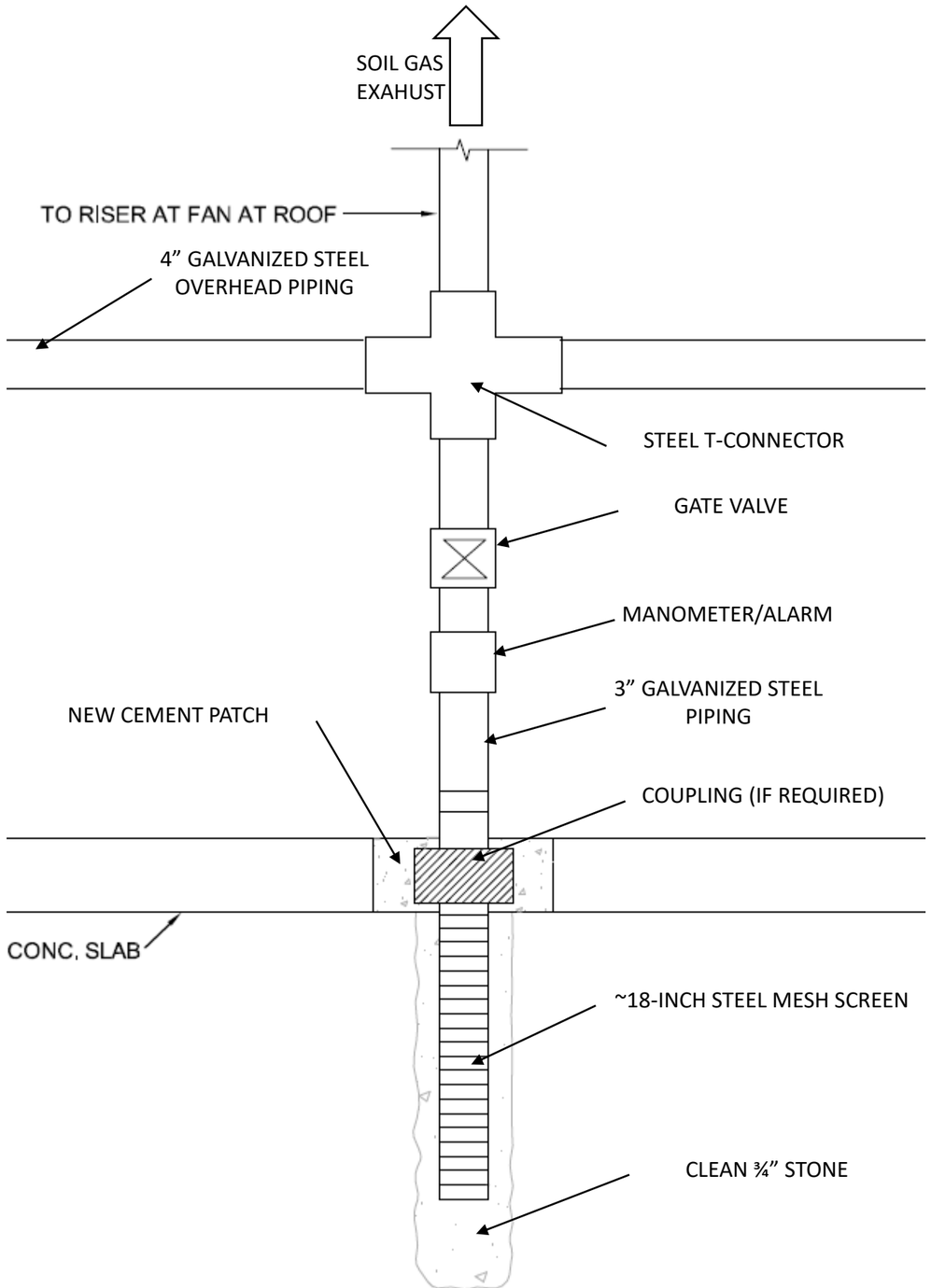
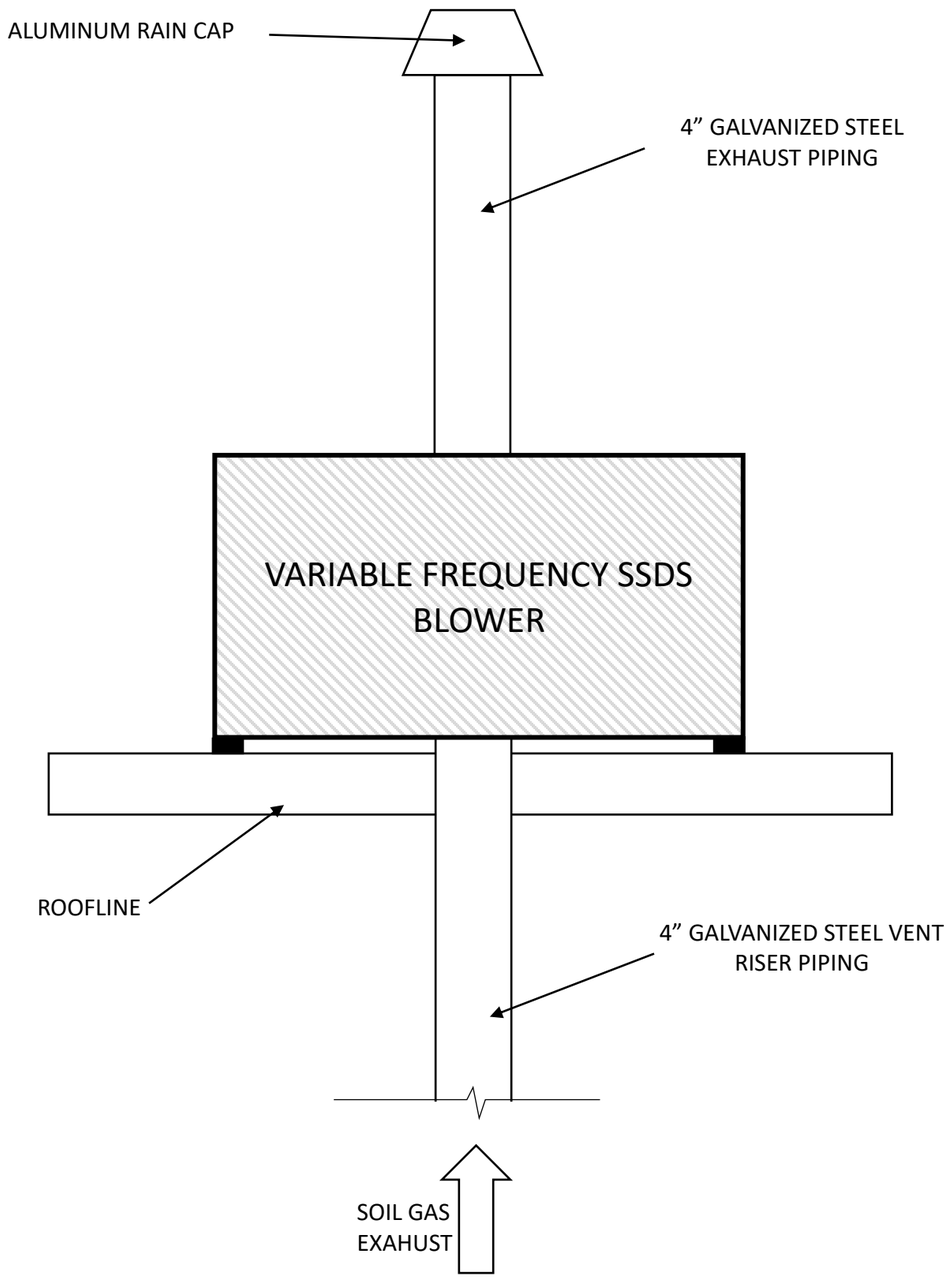
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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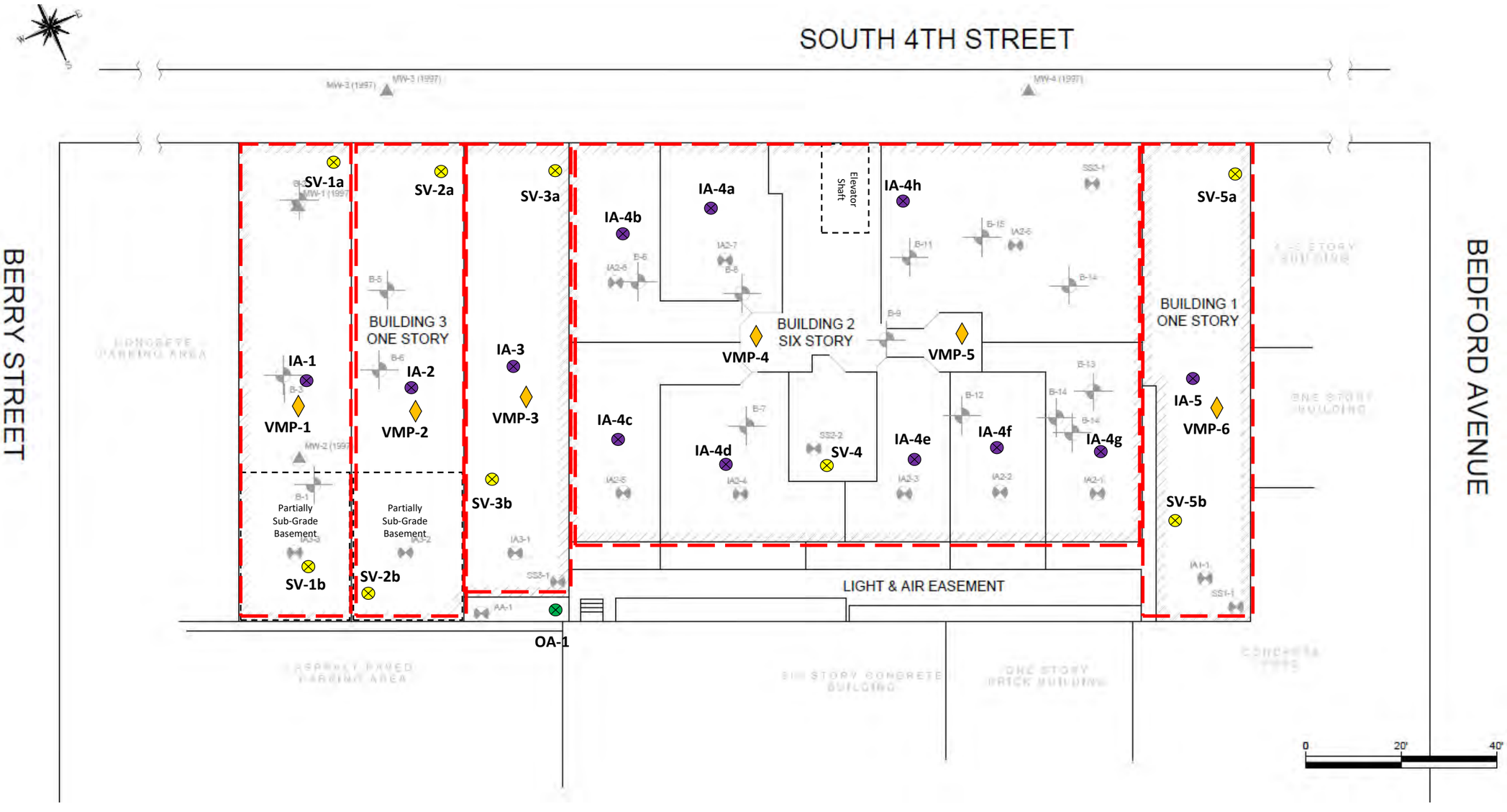

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530143204
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_005	
Test Start Time		10:32:38 AM
Test Start Date		9/7/2022
Test Length [D:H:M]		0:03:04
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.005
Mass Minimum [mg/m3]		0.001
Mass Maximum [mg/m3]		0.017
Mass TWA [mg/m3]		0.002
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		184

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.008		
120	0.009		
180	0.008		
240	0.007		
300	0.007		
360	0.009		
420	0.007		
480	0.007		
540	0.007		
600	0.007		
660	0.007		
720	0.007		
780	0.007		
840	0.007		
900	0.009		
960	0.008		
1020	0.007		
1080	0.008		
1140	0.008		
1200	0.007		
1260	0.006		
1320	0.006		
1380	0.007		
1440	0.007		
1500	0.006		
1560	0.007		
1620	0.008		

1680	0.017
1740	0.014
1800	0.011
1860	0.011
1920	0.009
1980	0.007
2040	0.007
2100	0.007
2160	0.007
2220	0.007
2280	0.006
2340	0.006
2400	0.006
2460	0.006
2520	0.006
2580	0.006
2640	0.006
2700	0.006
2760	0.006
2820	0.006
2880	0.006
2940	0.006
3000	0.006
3060	0.006
3120	0.006
3180	0.006
3240	0.006
3300	0.006
3360	0.006
3420	0.006
3480	0.006
3540	0.006
3600	0.007
3660	0.006
3720	0.007
3780	0.007
3840	0.007
3900	0.006
3960	0.006
4020	0.006
4080	0.006
4140	0.007
4200	0.006
4260	0.006
4320	0.006
4380	0.006
4440	0.007

4500	0.007
4560	0.007
4620	0.007
4680	0.006
4740	0.006
4800	0.006
4860	0.006
4920	0.006
4980	0.006
5040	0.006
5100	0.006
5160	0.006
5220	0.006
5280	0.006
5340	0.006
5400	0.006
5460	0.006
5520	0.006
5580	0.006
5640	0.006
5700	0.006
5760	0.005
5820	0.005
5880	0.005
5940	0.005
6000	0.005
6060	0.005
6120	0.005
6180	0.004
6240	0.004
6300	0.004
6360	0.004
6420	0.004
6480	0.004
6540	0.004
6600	0.004
6660	0.004
6720	0.004
6780	0.003
6840	0.004
6900	0.005
6960	0.004
7020	0.003
7080	0.003
7140	0.003
7200	0.003
7260	0.003

7320	0.003
7380	0.004
7440	0.006
7500	0.005
7560	0.004
7620	0.003
7680	0.003
7740	0.003
7800	0.003
7860	0.004
7920	0.002
7980	0.003
8040	0.003
8100	0.003
8160	0.003
8220	0.002
8280	0.002
8340	0.002
8400	0.002
8460	0.002
8520	0.002
8580	0.002
8640	0.002
8700	0.002
8760	0.002
8820	0.002
8880	0.002
8940	0.002
9000	0.002
9060	0.002
9120	0.002
9180	0.003
9240	0.002
9300	0.002
9360	0.003
9420	0.002
9480	0.002
9540	0.002
9600	0.002
9660	0.002
9720	0.002
9780	0.002
9840	0.002
9900	0.002
9960	0.002
10020	0.002
10080	0.002

10140	0.001
10200	0.001
10260	0.001
10320	0.001
10380	0.001
10440	0.001
10500	0.001
10560	0.001
10620	0.001
10680	0.001
10740	0.001
10800	0.001
10860	0.001
10920	0.001
10980	0.002
11040	0.001

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street
Job No.: 13817
Location: 100 South 4th street Brooklyn NY
On-site Personnel: C Evertz
Day & Date: 9-7-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes
Background Reading (particulates) mg/m³
Background Reading (organic vapors) 0.0 ppm
Calibration Dates: Particulate Meters: Photoionization Detector:
Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings
Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				WJC Amp Step Check
0715				in Service approved
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930				
0945				
1000				
1015				
1030				
1045				
1100				
1115				
1130				
1145			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215			0.0	
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430				
1445				
1500				
1515				
1530				
1545				
1600				
1615				
1630				
1645				
1700				

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September 9, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#9 - Interim Remedial Measures Progress Report (9/08/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

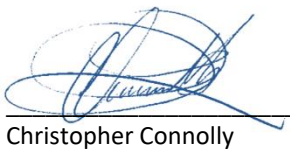
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 8, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 8, 2022

- IEC met with the tenants of 104 South 4th Street and discussed and selected locations for suction points SP-20, SP-21, and SP-22.
- Clean Globe Environmental (CG) continued running piping in ceiling between SP-14 and SP-13.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

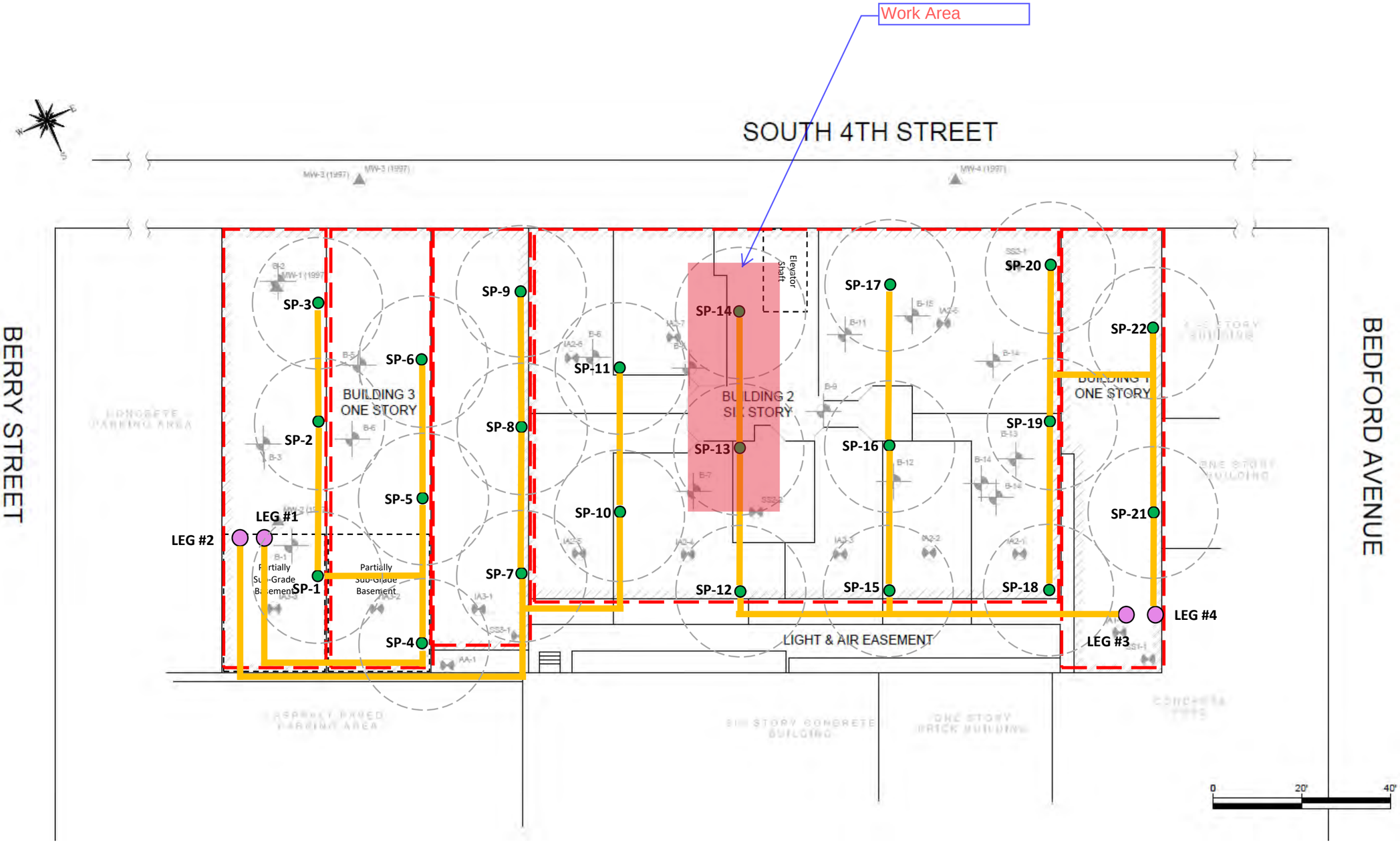
Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC

S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of piping between SP-14 and SP-13

Photograph No. 2: View of above ceiling piping



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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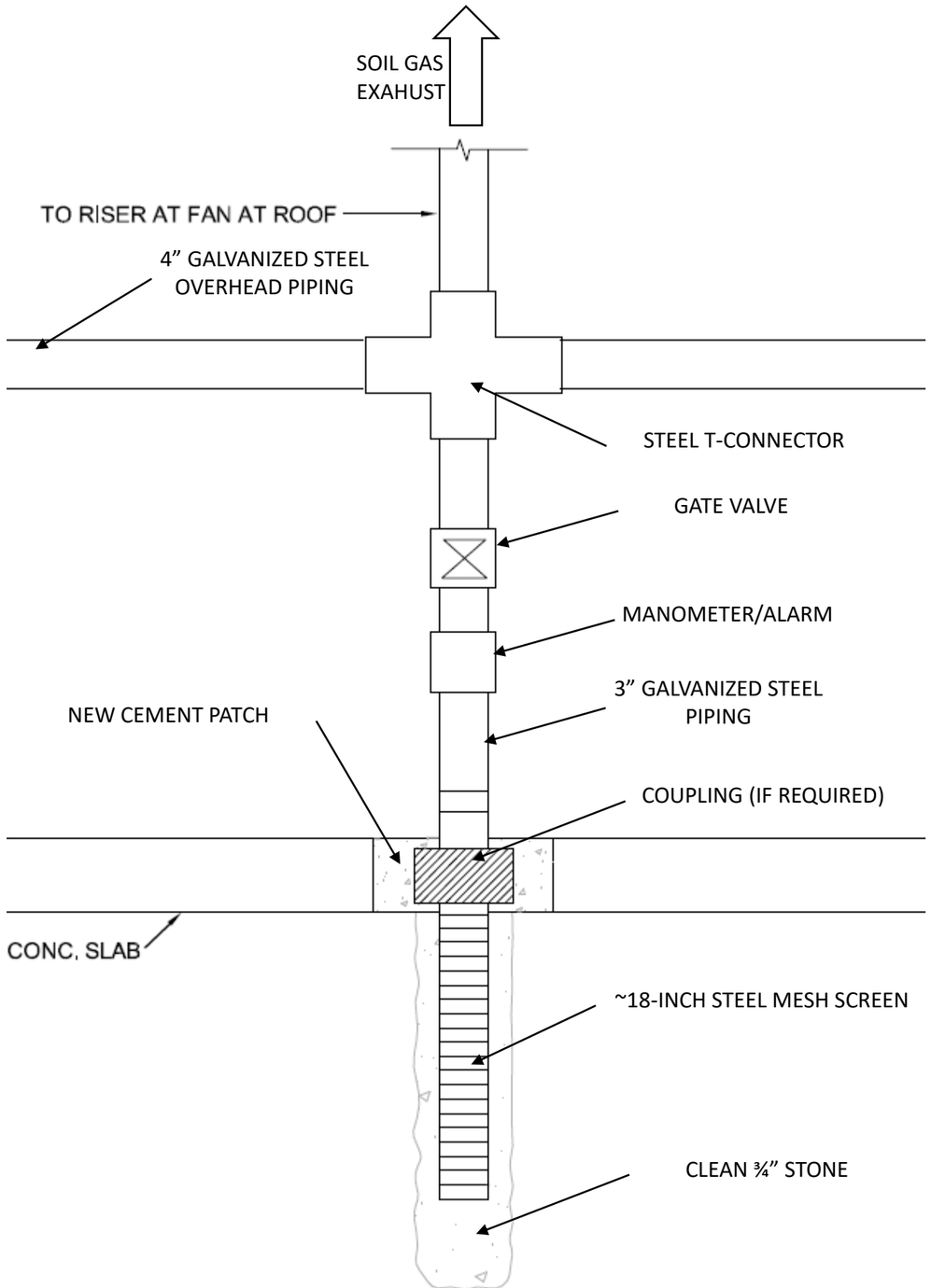
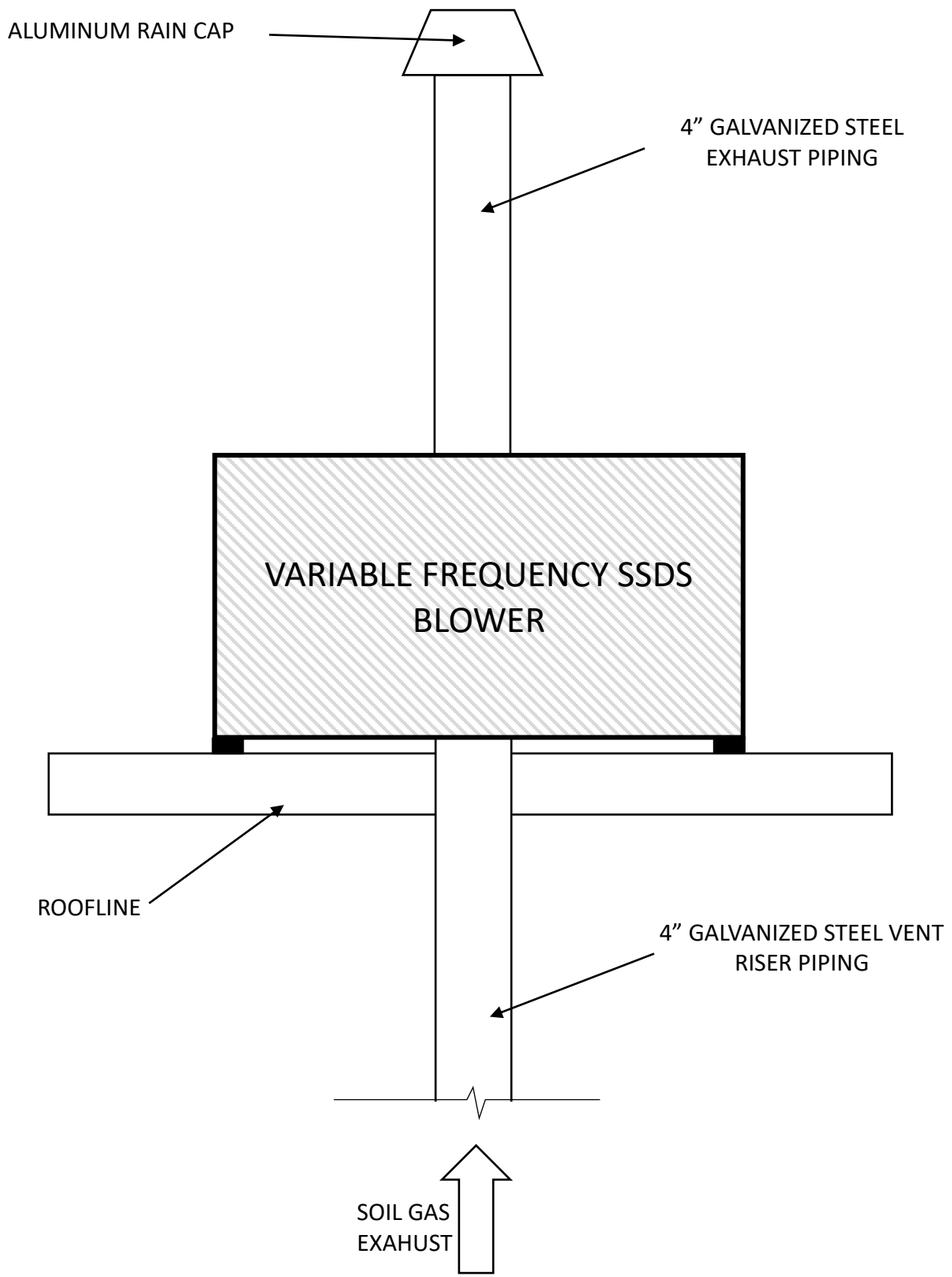


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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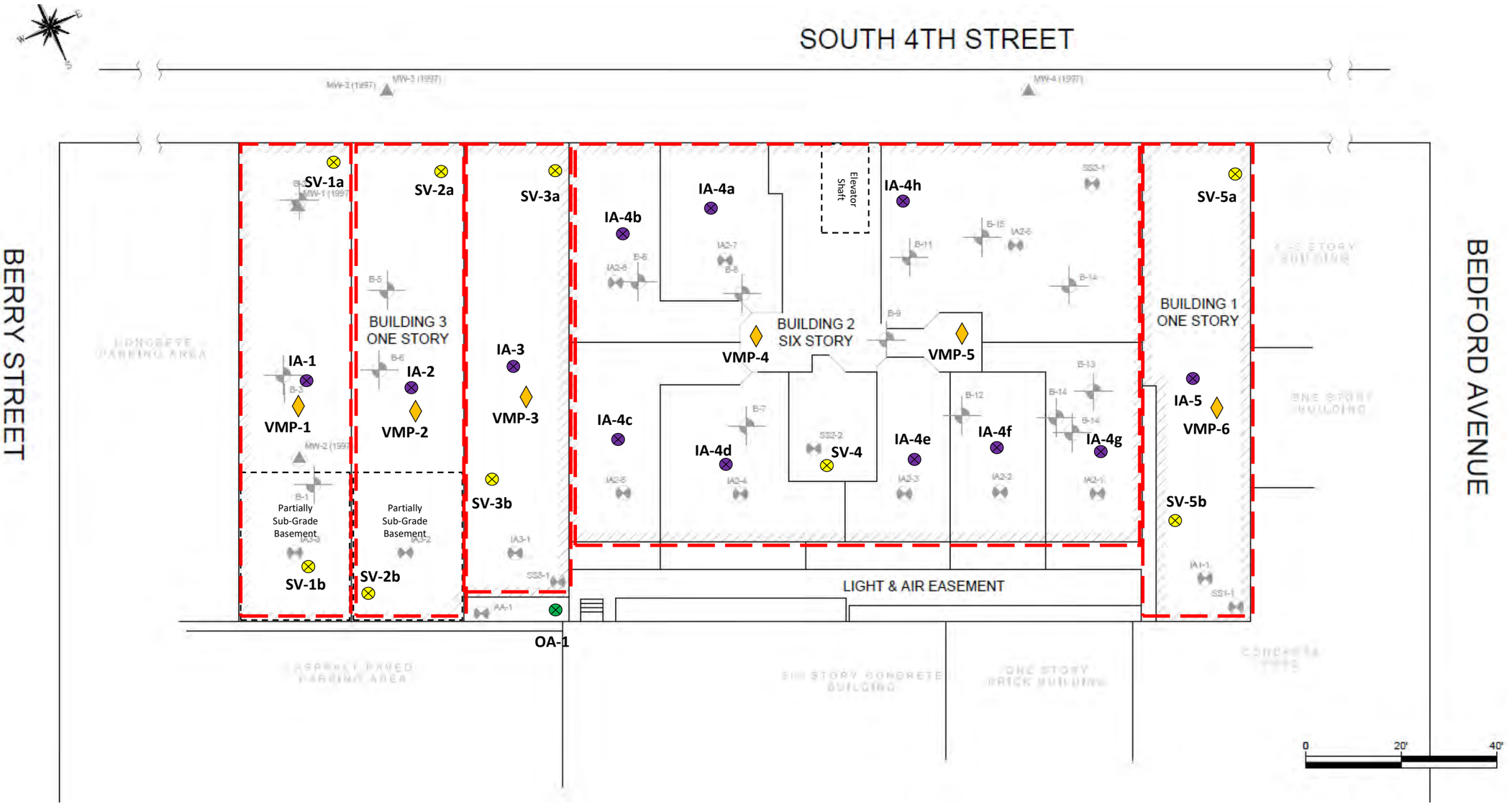
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

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BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530143204
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_006	
Test Start Time		7:08:11 AM
Test Start Date		9/8/2022
Test Length [D:H:M]		0:06:19
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.014
Mass Minimum [mg/m3]		0.009
Mass Maximum [mg/m3]		0.025
Mass TWA [mg/m3]		0.011
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		379

Elapsed Time [s]	Mass [mg/m3]	Alarms
60	0.016	
120	0.015	
180	0.016	
240	0.015	
300	0.015	
360	0.015	
420	0.015	
480	0.015	
540	0.015	
600	0.015	
660	0.015	
720	0.015	
780	0.014	
840	0.015	
900	0.015	
960	0.021	
1020	0.023	
1080	0.015	
1140	0.014	
1200	0.014	
1260	0.014	
1320	0.014	
1380	0.014	
1440	0.014	
1500	0.014	
1560	0.014	
1620	0.014	

1680	0.014
1740	0.016
1800	0.013
1860	0.013
1920	0.013
1980	0.014
2040	0.014
2100	0.014
2160	0.013
2220	0.013
2280	0.015
2340	0.013
2400	0.013
2460	0.013
2520	0.013
2580	0.016
2640	0.014
2700	0.015
2760	0.023
2820	0.017
2880	0.016
2940	0.015
3000	0.014
3060	0.013
3120	0.013
3180	0.013
3240	0.013
3300	0.013
3360	0.015
3420	0.015
3480	0.013
3540	0.013
3600	0.013
3660	0.014
3720	0.016
3780	0.014
3840	0.013
3900	0.014
3960	0.013
4020	0.015
4080	0.014
4140	0.013
4200	0.015
4260	0.015
4320	0.015
4380	0.016
4440	0.016

4500	0.015
4560	0.016
4620	0.017
4680	0.017
4740	0.013
4800	0.016
4860	0.016
4920	0.02
4980	0.021
5040	0.018
5100	0.016
5160	0.015
5220	0.014
5280	0.013
5340	0.014
5400	0.014
5460	0.013
5520	0.014
5580	0.014
5640	0.014
5700	0.017
5760	0.018
5820	0.016
5880	0.015
5940	0.016
6000	0.016
6060	0.016
6120	0.017
6180	0.017
6240	0.016
6300	0.015
6360	0.014
6420	0.015
6480	0.015
6540	0.015
6600	0.014
6660	0.014
6720	0.014
6780	0.014
6840	0.016
6900	0.019
6960	0.019
7020	0.018
7080	0.018
7140	0.017
7200	0.017
7260	0.016

7320	0.018
7380	0.018
7440	0.02
7500	0.021
7560	0.019
7620	0.017
7680	0.016
7740	0.016
7800	0.015
7860	0.017
7920	0.017
7980	0.017
8040	0.018
8100	0.019
8160	0.019
8220	0.018
8280	0.018
8340	0.018
8400	0.019
8460	0.021
8520	0.02
8580	0.019
8640	0.018
8700	0.021
8760	0.019
8820	0.018
8880	0.017
8940	0.017
9000	0.017
9060	0.016
9120	0.018
9180	0.02
9240	0.019
9300	0.018
9360	0.016
9420	0.016
9480	0.016
9540	0.016
9600	0.017
9660	0.016
9720	0.017
9780	0.014
9840	0.014
9900	0.016
9960	0.014
10020	0.014
10080	0.013

10140	0.013
10200	0.013
10260	0.014
10320	0.014
10380	0.022
10440	0.025
10500	0.018
10560	0.017
10620	0.015
10680	0.016
10740	0.018
10800	0.015
10860	0.016
10920	0.017
10980	0.016
11040	0.016
11100	0.015
11160	0.015
11220	0.015
11280	0.014
11340	0.014
11400	0.013
11460	0.014
11520	0.014
11580	0.013
11640	0.013
11700	0.013
11760	0.012
11820	0.012
11880	0.013
11940	0.012
12000	0.012
12060	0.012
12120	0.012
12180	0.012
12240	0.013
12300	0.015
12360	0.016
12420	0.015
12480	0.014
12540	0.014
12600	0.015
12660	0.014
12720	0.013
12780	0.013
12840	0.014
12900	0.014

12960	0.013
13020	0.013
13080	0.013
13140	0.012
13200	0.012
13260	0.012
13320	0.011
13380	0.012
13440	0.012
13500	0.01
13560	0.01
13620	0.011
13680	0.011
13740	0.01
13800	0.009
13860	0.009
13920	0.009
13980	0.009
14040	0.009
14100	0.009
14160	0.01
14220	0.01
14280	0.011
14340	0.011
14400	0.011
14460	0.011
14520	0.012
14580	0.011
14640	0.01
14700	0.011
14760	0.01
14820	0.01
14880	0.011
14940	0.011
15000	0.011
15060	0.011
15120	0.011
15180	0.011
15240	0.011
15300	0.011
15360	0.011
15420	0.012
15480	0.011
15540	0.012
15600	0.011
15660	0.012
15720	0.012

15780	0.012
15840	0.012
15900	0.012
15960	0.012
16020	0.012
16080	0.012
16140	0.012
16200	0.012
16260	0.012
16320	0.012
16380	0.012
16440	0.016
16500	0.014
16560	0.014
16620	0.013
16680	0.012
16740	0.012
16800	0.012
16860	0.013
16920	0.014
16980	0.013
17040	0.013
17100	0.012
17160	0.012
17220	0.013
17280	0.013
17340	0.013
17400	0.013
17460	0.012
17520	0.014
17580	0.023
17640	0.013
17700	0.014
17760	0.013
17820	0.013
17880	0.013
17940	0.014
18000	0.013
18060	0.013
18120	0.013
18180	0.014
18240	0.014
18300	0.014
18360	0.014
18420	0.013
18480	0.014
18540	0.014

18600	0.013
18660	0.013
18720	0.013
18780	0.013
18840	0.013
18900	0.013
18960	0.012
19020	0.017
19080	0.013
19140	0.015
19200	0.017
19260	0.016
19320	0.016
19380	0.015
19440	0.014
19500	0.014
19560	0.013
19620	0.014
19680	0.014
19740	0.013
19800	0.016
19860	0.016
19920	0.015
19980	0.014
20040	0.014
20100	0.015
20160	0.017
20220	0.013
20280	0.013
20340	0.013
20400	0.013
20460	0.013
20520	0.013
20580	0.013
20640	0.015
20700	0.013
20760	0.02
20820	0.015
20880	0.016
20940	0.015
21000	0.015
21060	0.015
21120	0.016
21180	0.015
21240	0.015
21300	0.014
21360	0.014

21420	0.015
21480	0.016
21540	0.014
21600	0.015
21660	0.014
21720	0.014
21780	0.014
21840	0.014
21900	0.014
21960	0.014
22020	0.014
22080	0.015
22140	0.015
22200	0.014
22260	0.014
22320	0.015
22380	0.015
22440	0.015
22500	0.015
22560	0.015
22620	0.015
22680	0.014
22740	0.014

Errors

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street
Job No.: 13817
Location: 100 South 4th street Brooklyn NY
On-site Personnel: C Evertz
Day & Date: 9-8-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes
Background Reading (particulates) mg/m³
Background Reading (organic vapors) 0.0 ppm
Calibration Dates: Particulate Meters: Photoionization Detector:
Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings
Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700			~~0.0~~ CE	Piping Day
0715			~~0.0~~ CE	
0730			~~0.0~~ CE	
0745			~~0.0~~ CE	
0800			0.0	
0815			0.0	
0830			0.0	
0845			0.0	
0900			0.0	
0915			0.0	
0930			0.0	
0945			0.0	
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	Luis on site take over activities
1145			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215			0.0	
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430			0.0	
1445			0.0	
1500			0.0	
1515			0.0	
1530				
1545				
1600				
1615				
1630				
1645				
1700				

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September 12, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#10 - Interim Remedial Measures Progress Report (9/09/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

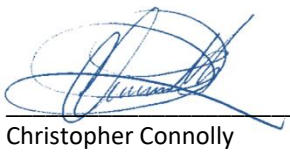
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 9, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 9, 2022

- IEC met with the tenants of 98b South 4th Street (caterers) and discussed and selected locations for suction points SP-4, SP-5, and SP-6. Work to begin in beginning of October.
- Clean Globe Environmental (CG) continued running piping in ceiling between SP-14 and SP-13.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.
- IEC is actively seeking the facility permit for the #2 Filpro Well Gravel, which is proposed for the SSDS suction points. It will be forwarded to NYSDEC once obtained.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street. Suction points will be backfilled and sealed once Filpro gravel is approved by NYSDEC.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

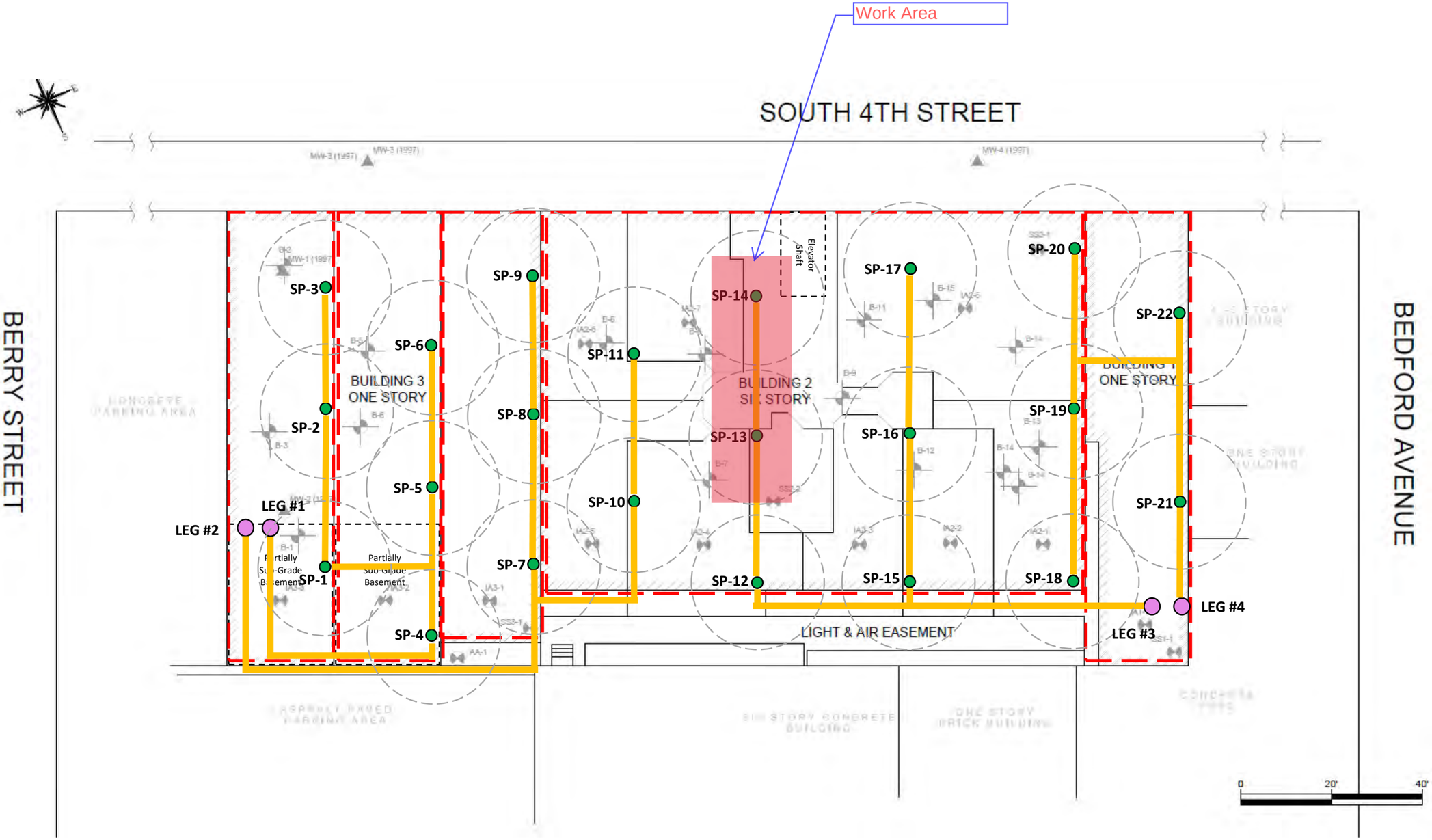
Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC

S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of piping between SP-14 and SP-13

Photograph No. 2: View of ceiling cuts for running pipe between SP-13 and SP-14



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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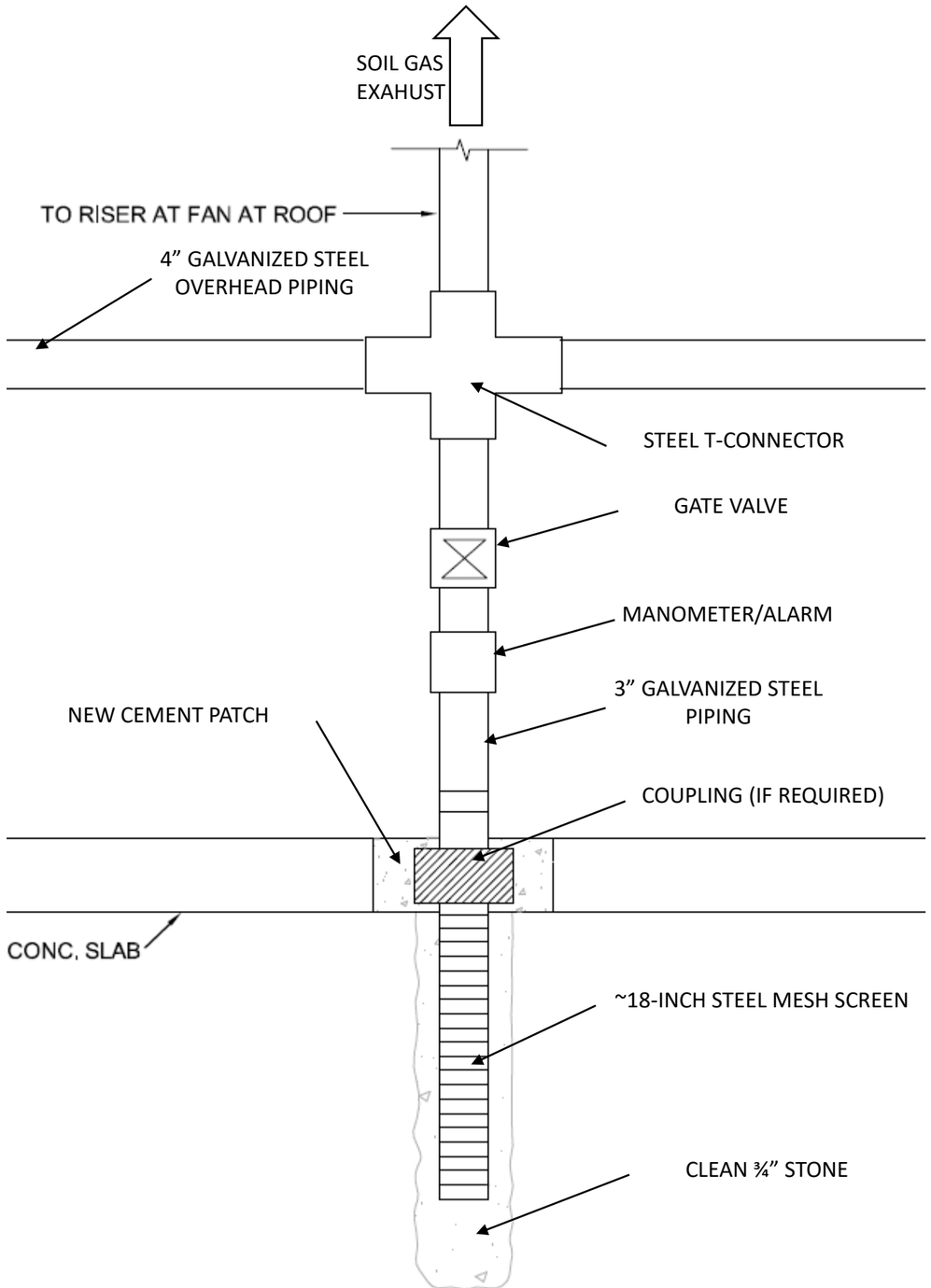
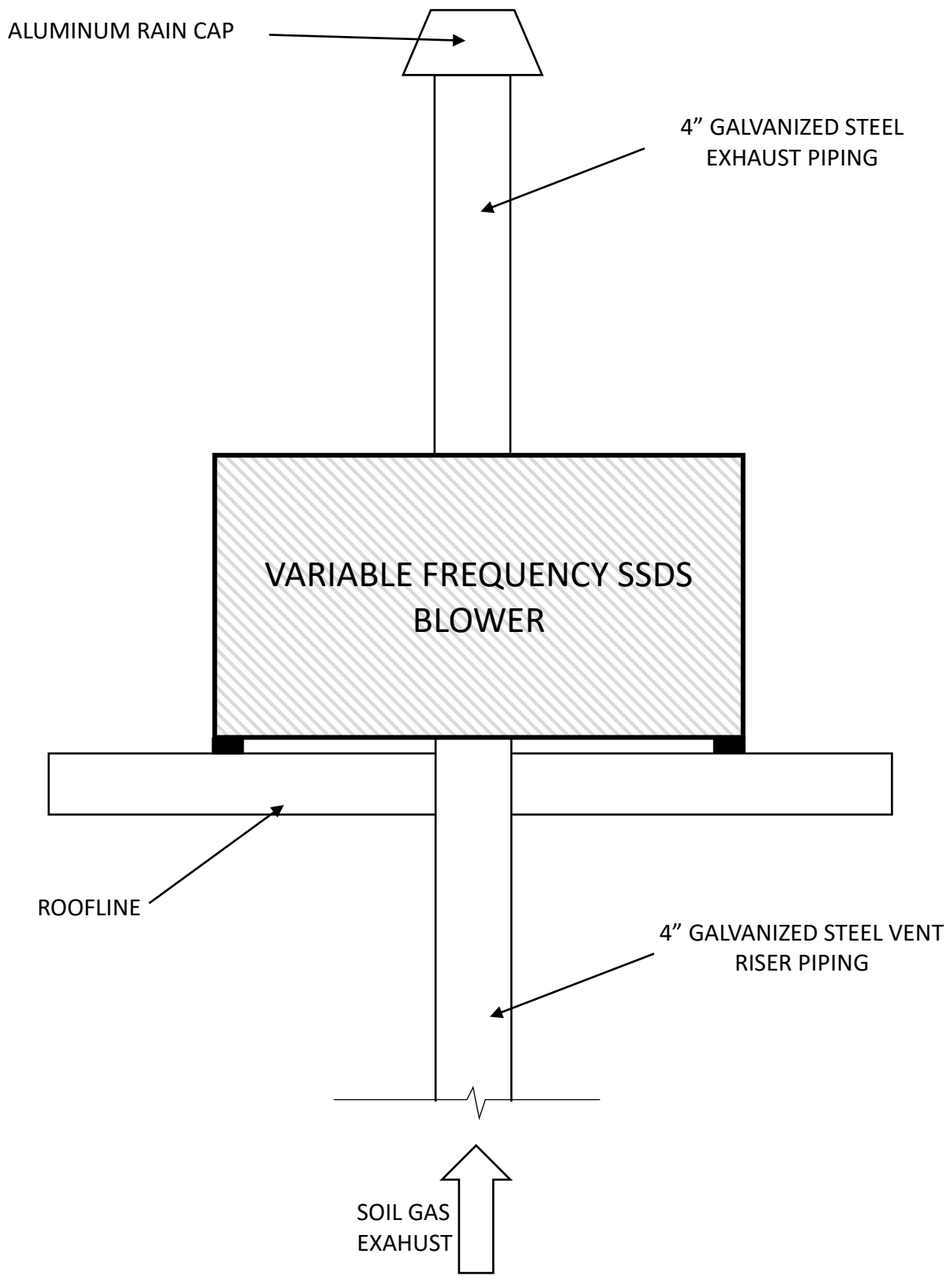
170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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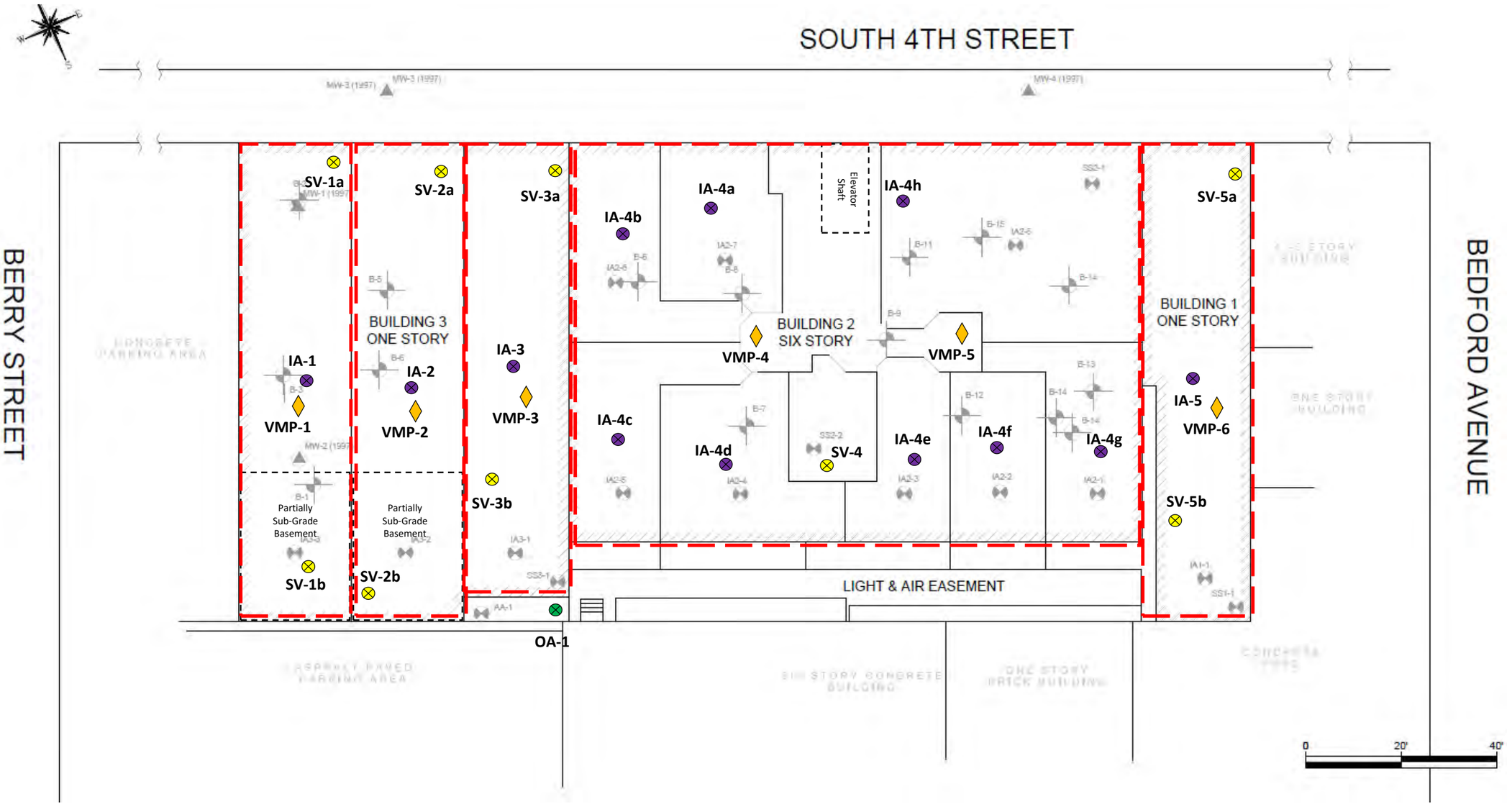

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

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BOHEMIA, NEW YORK 11716
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FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530143204
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_007	
Test Start Time		7:55:00 AM
Test Start Date		9/9/2022
Test Length [D:H:M]		0:06:05
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.009
Mass Minimum [mg/m3]		0.002
Mass Maximum [mg/m3]		0.029
Mass TWA [mg/m3]		0.006
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		365

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.01		
120	0.01		
180	0.012		
240	0.011		
300	0.009		
360	0.009		
420	0.01		
480	0.011		
540	0.01		
600	0.01		
660	0.009		
720	0.009		
780	0.009		
840	0.009		
900	0.009		
960	0.009		
1020	0.008		
1080	0.008		
1140	0.01		
1200	0.009		
1260	0.01		
1320	0.008		
1380	0.008		
1440	0.008		
1500	0.008		
1560	0.026		
1620	0.016		

1680	0.019
1740	0.008
1800	0.008
1860	0.01
1920	0.008
1980	0.008
2040	0.008
2100	0.009
2160	0.01
2220	0.008
2280	0.009
2340	0.008
2400	0.008
2460	0.009
2520	0.008
2580	0.008
2640	0.007
2700	0.008
2760	0.014
2820	0.012
2880	0.009
2940	0.009
3000	0.008
3060	0.008
3120	0.012
3180	0.009
3240	0.009
3300	0.008
3360	0.008
3420	0.008
3480	0.008
3540	0.008
3600	0.008
3660	0.007
3720	0.007
3780	0.007
3840	0.007
3900	0.007
3960	0.007
4020	0.007
4080	0.007
4140	0.027
4200	0.012
4260	0.007
4320	0.007
4380	0.008
4440	0.008

4500	0.007
4560	0.007
4620	0.007
4680	0.007
4740	0.007
4800	0.007
4860	0.008
4920	0.007
4980	0.007
5040	0.007
5100	0.007
5160	0.007
5220	0.007
5280	0.008
5340	0.008
5400	0.008
5460	0.008
5520	0.007
5580	0.008
5640	0.008
5700	0.007
5760	0.007
5820	0.007
5880	0.007
5940	0.007
6000	0.007
6060	0.007
6120	0.006
6180	0.007
6240	0.007
6300	0.006
6360	0.007
6420	0.007
6480	0.007
6540	0.008
6600	0.007
6660	0.006
6720	0.007
6780	0.007
6840	0.007
6900	0.011
6960	0.007
7020	0.006
7080	0.007
7140	0.007
7200	0.007
7260	0.007

7320	0.007
7380	0.006
7440	0.01
7500	0.009
7560	0.008
7620	0.007
7680	0.008
7740	0.008
7800	0.006
7860	0.007
7920	0.007
7980	0.007
8040	0.01
8100	0.008
8160	0.007
8220	0.007
8280	0.007
8340	0.009
8400	0.009
8460	0.009
8520	0.008
8580	0.008
8640	0.008
8700	0.011
8760	0.01
8820	0.01
8880	0.01
8940	0.009
9000	0.008
9060	0.007
9120	0.008
9180	0.008
9240	0.008
9300	0.009
9360	0.008
9420	0.007
9480	0.007
9540	0.008
9600	0.008
9660	0.008
9720	0.008
9780	0.008
9840	0.008
9900	0.008
9960	0.009
10020	0.009
10080	0.008

10140	0.008
10200	0.008
10260	0.008
10320	0.008
10380	0.008
10440	0.008
10500	0.008
10560	0.009
10620	0.008
10680	0.008
10740	0.008
10800	0.008
10860	0.008
10920	0.008
10980	0.008
11040	0.009
11100	0.009
11160	0.009
11220	0.009
11280	0.009
11340	0.009
11400	0.009
11460	0.009
11520	0.01
11580	0.011
11640	0.009
11700	0.009
11760	0.009
11820	0.011
11880	0.011
11940	0.01
12000	0.01
12060	0.01
12120	0.009
12180	0.01
12240	0.009
12300	0.009
12360	0.01
12420	0.01
12480	0.009
12540	0.009
12600	0.009
12660	0.009
12720	0.009
12780	0.009
12840	0.009
12900	0.009

12960	0.011
13020	0.009
13080	0.012
13140	0.009
13200	0.008
13260	0.01
13320	0.011
13380	0.009
13440	0.01
13500	0.01
13560	0.01
13620	0.01
13680	0.009
13740	0.013
13800	0.01
13860	0.01
13920	0.009
13980	0.009
14040	0.009
14100	0.01
14160	0.009
14220	0.009
14280	0.009
14340	0.009
14400	0.009
14460	0.009
14520	0.009
14580	0.009
14640	0.009
14700	0.009
14760	0.009
14820	0.009
14880	0.009
14940	0.009
15000	0.009
15060	0.009
15120	0.008
15180	0.008
15240	0.009
15300	0.009
15360	0.008
15420	0.009
15480	0.008
15540	0.009
15600	0.009
15660	0.009
15720	0.009

15780	0.01
15840	0.009
15900	0.009
15960	0.008
16020	0.009
16080	0.009
16140	0.009
16200	0.009
16260	0.009
16320	0.009
16380	0.009
16440	0.009
16500	0.009
16560	0.009
16620	0.01
16680	0.009
16740	0.009
16800	0.009
16860	0.01
16920	0.01
16980	0.009
17040	0.009
17100	0.011
17160	0.013
17220	0.011
17280	0.012
17340	0.009
17400	0.01
17460	0.01
17520	0.01
17580	0.01
17640	0.009
17700	0.01
17760	0.01
17820	0.01
17880	0.011
17940	0.016
18000	0.012
18060	0.01
18120	0.01
18180	0.012
18240	0.011
18300	0.01
18360	0.011
18420	0.013
18480	0.014
18540	0.014

18600	0.013
18660	0.011
18720	0.011
18780	0.011
18840	0.012
18900	0.01
18960	0.011
19020	0.009
19080	0.008
19140	0.007
19200	0.007
19260	0.006
19320	0.005
19380	0.007
19440	0.007
19500	0.01
19560	0.009
19620	0.013
19680	0.029
19740	0.012
19800	0.007
19860	0.011
19920	0.008
19980	0.005
20040	0.005
20100	0.004
20160	0.005
20220	0.005
20280	0.004
20340	0.004
20400	0.003
20460	0.003
20520	0.003
20580	0.003
20640	0.003
20700	0.003
20760	0.004
20820	0.004
20880	0.005
20940	0.003
21000	0.002
21060	0.003
21120	0.003
21180	0.003
21240	0.004
21300	0.004
21360	0.004

21420	0.002
21480	0.002
21540	0.002
21600	0.003
21660	0.004
21720	0.004
21780	0.004
21840	0.004
21900	0.003

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street | Job No.: 13817

Location: 100 South 4th street Brooklyn NY | On-site Personnel: C Evertz

Day & Date: 9-9-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes

Background Reading (particulates) mg/m³

Background Reading (organic vapors) 0.0 ppm

Calibration Dates: Particulate Meters: Photoionization Detector:

Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings

Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				
0715				
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930				access to room
0945			0.0	
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	
1145			0.0	
			0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215				
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430			0.0	
1445			0.0	
1500			0.0	
1515			0.0	
1530			0.0	
1545			0.0	
1600				
1615				
1630				
1645				
1700				

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welcome to solid ground… *www.impactenvironmental.com*

September 13, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#11 - Interim Remedial Measures Progress Report (9/12/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

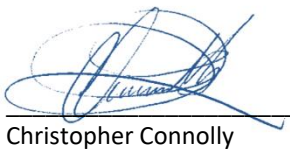
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 12, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 12, 2022

- IEC Provided NYSDEC with Facility Permits for the Filpro #2 gravel. NYSDEC approved usage of this material on September 12, 2022.
- CG backfilled SP-1, SP-2, SP-3, SP-13, SP-14, and SP-17, with Filpro #2 gravel, and sealed each point with concrete at grade.
- Clean Globe Environmental (CG) continued running piping in ceiling between SP-14 and SP-13 and began running vertical and horizontal piping from SP-17 towards future location of SP-16.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

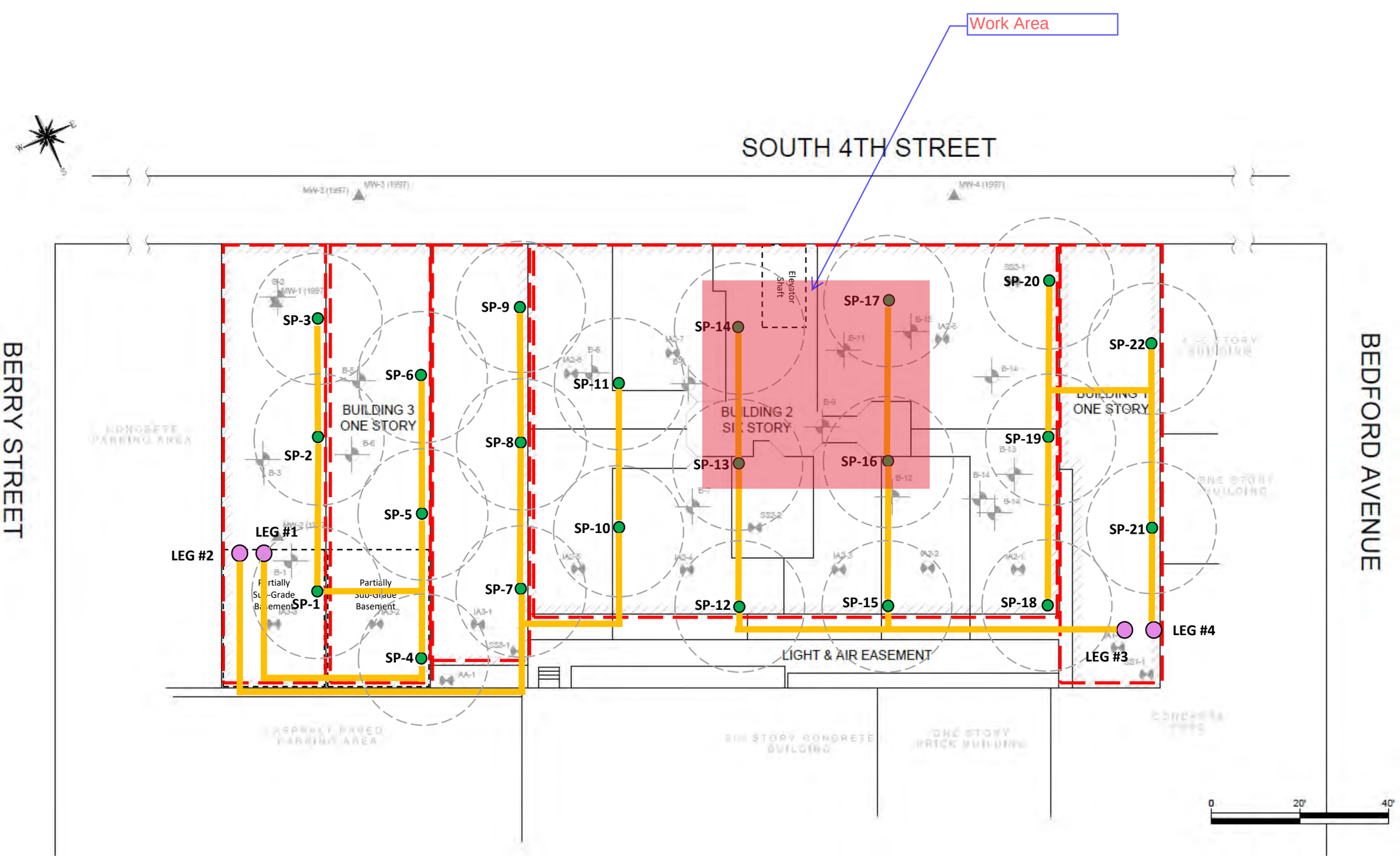
Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC

S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of completion, backfilling, and sealing of SP-17.

Photograph No. 2: View of piping run from SP-17



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

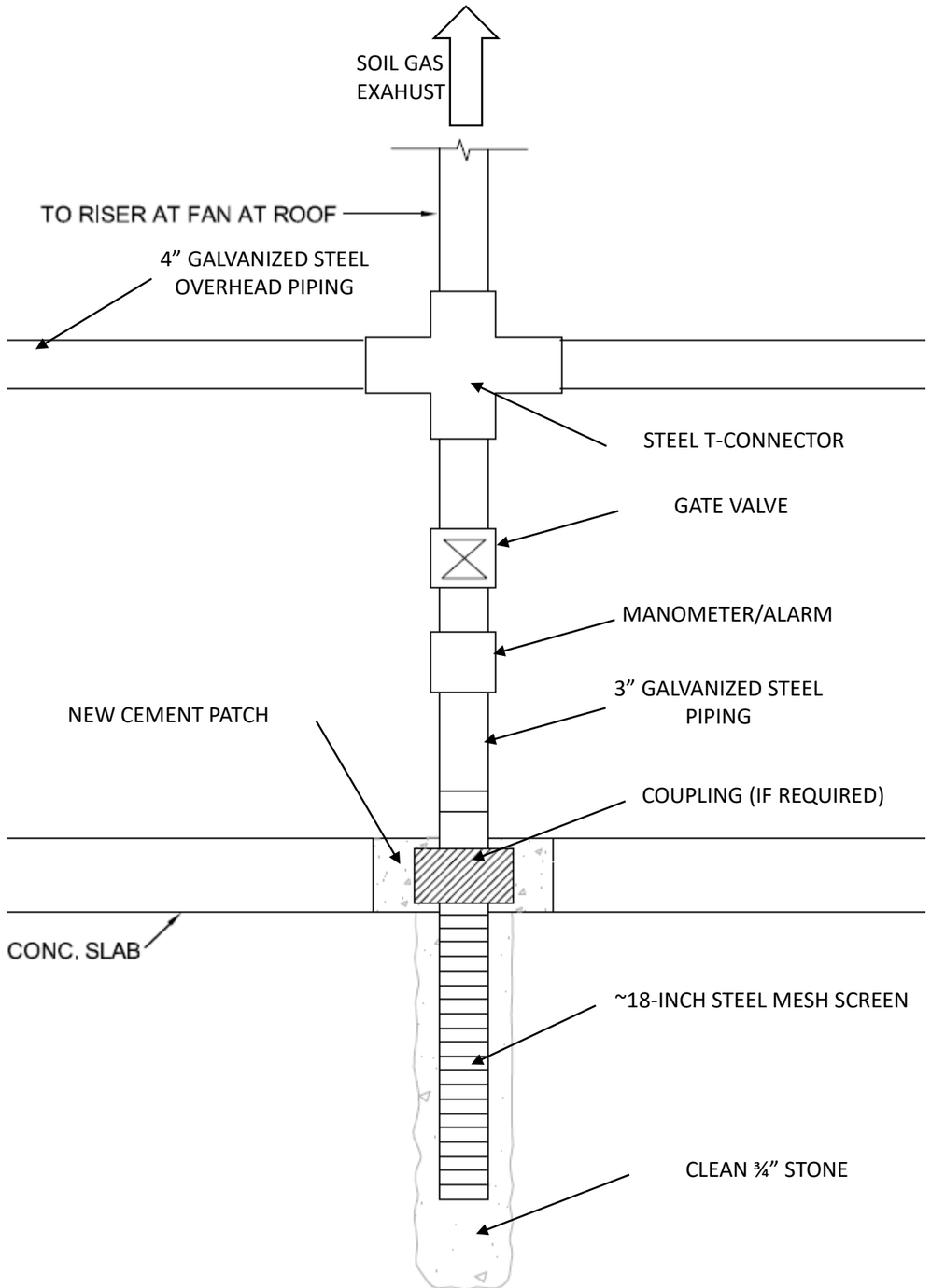
Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

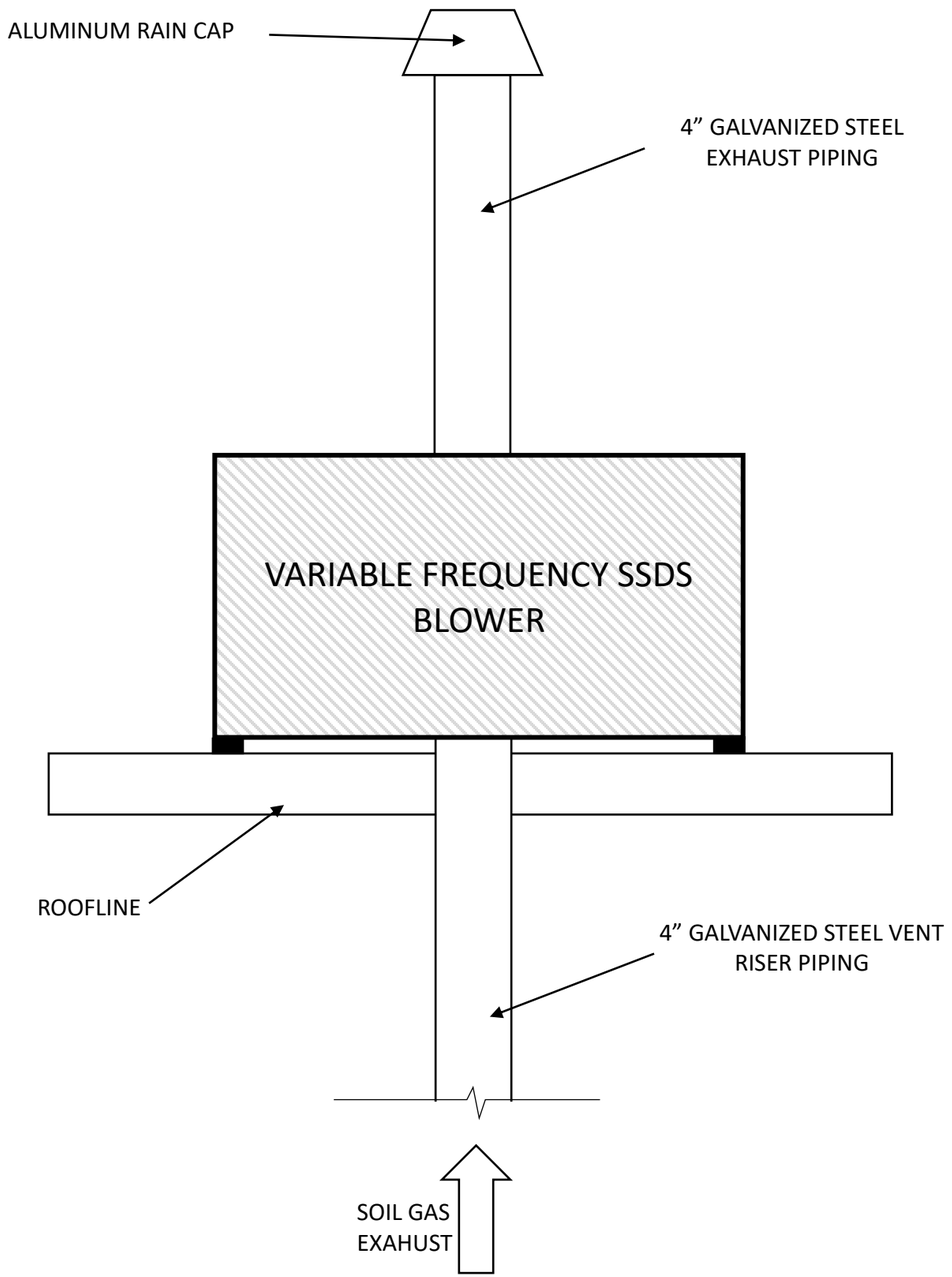
Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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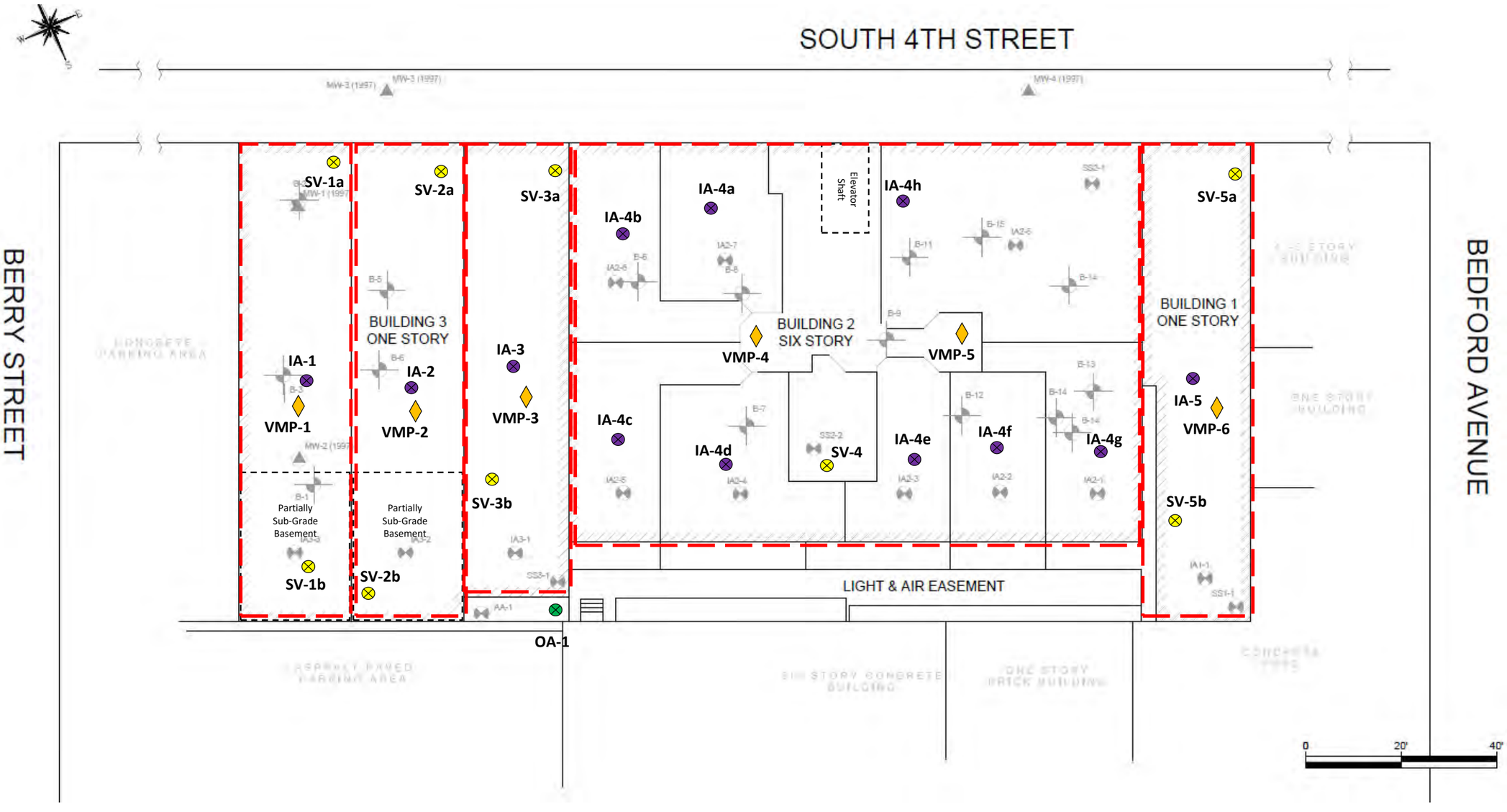

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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IMPACT ENVIRONMENTAL CLOSURES, INC.

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BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
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Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530153015
Firmware Version	3.1
Calibration Date	2/22/2022
Test Name	MANUAL_009
Test Start Time	9:18:11 AM
Test Start Date	9/12/2022
Test Length [D:H:M]	0:05:59
Test Interval [M:S]	1:00
Mass Average [mg/m3]	-0.012
Mass Minimum [mg/m3]	-0.021
Mass Maximum [mg/m3]	0.45
Mass TWA [mg/m3]	-0.009
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	359

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.028		
120	0.017		
180	0.011		
240	0.002		
300	0		
360	-0.001		
420	-0.004		
480	-0.005		
540	-0.006		
600	-0.007		
660	-0.008		
720	-0.009		
780	-0.009		
840	-0.01		
900	-0.01		
960	-0.011		
1020	-0.011		
1080	-0.011		
1140	-0.011		
1200	-0.012		
1260	-0.012		
1320	-0.012		
1380	-0.013		
1440	-0.013		
1500	-0.013		
1560	-0.013		
1620	-0.013		

1680	-0.014
1740	-0.014
1800	-0.014
1860	-0.014
1920	-0.014
1980	-0.014
2040	-0.014
2100	-0.014
2160	-0.014
2220	-0.015
2280	-0.015
2340	-0.015
2400	-0.015
2460	-0.015
2520	-0.015
2580	-0.015
2640	-0.015
2700	-0.015
2760	-0.015
2820	-0.015
2880	-0.015
2940	-0.016
3000	-0.016
3060	-0.016
3120	-0.016
3180	-0.016
3240	-0.016
3300	-0.016
3360	-0.016
3420	-0.016
3480	-0.016
3540	-0.016
3600	-0.016
3660	0.003
3720	0
3780	-0.003
3840	-0.007
3900	-0.009
3960	-0.01
4020	-0.012
4080	-0.013
4140	-0.014
4200	-0.014
4260	-0.015
4320	-0.015
4380	-0.016
4440	-0.016

4500	-0.016
4560	-0.016
4620	-0.017
4680	-0.017
4740	-0.017
4800	-0.017
4860	-0.017
4920	-0.017
4980	-0.017
5040	-0.017
5100	-0.017
5160	-0.017
5220	-0.017
5280	-0.017
5340	-0.018
5400	-0.018
5460	-0.018
5520	-0.018
5580	-0.018
5640	-0.018
5700	-0.018
5760	-0.018
5820	-0.018
5880	-0.018
5940	-0.018
6000	-0.018
6060	-0.018
6120	-0.018
6180	-0.018
6240	-0.018
6300	-0.018
6360	-0.018
6420	-0.018
6480	-0.018
6540	-0.018
6600	-0.018
6660	-0.018
6720	-0.018
6780	-0.018
6840	-0.018
6900	-0.018
6960	-0.018
7020	-0.018
7080	-0.019
7140	-0.019
7200	-0.019
7260	-0.019

7320	-0.019
7380	-0.019
7440	-0.019
7500	-0.019
7560	-0.019
7620	-0.019
7680	-0.019
7740	-0.019
7800	-0.019
7860	-0.019
7920	-0.019
7980	-0.019
8040	-0.019
8100	-0.019
8160	-0.019
8220	-0.019
8280	-0.019
8340	-0.019
8400	-0.019
8460	-0.019
8520	-0.019
8580	-0.019
8640	-0.019
8700	-0.019
8760	-0.019
8820	-0.019
8880	-0.019
8940	-0.019
9000	-0.019
9060	-0.019
9120	-0.019
9180	-0.019
9240	-0.019
9300	-0.019
9360	-0.019
9420	-0.019
9480	-0.019
9540	-0.019
9600	-0.019
9660	-0.019
9720	-0.019
9780	-0.019
9840	-0.019
9900	-0.019
9960	-0.019
10020	-0.019
10080	-0.019

10140	-0.02
10200	-0.02
10260	-0.02
10320	-0.02
10380	-0.02
10440	-0.02
10500	-0.02
10560	-0.02
10620	-0.02
10680	-0.02
10740	-0.02
10800	-0.02
10860	-0.02
10920	-0.02
10980	-0.02
11040	-0.02
11100	-0.02
11160	-0.02
11220	-0.02
11280	-0.02
11340	-0.02
11400	-0.02
11460	-0.02
11520	-0.02
11580	-0.02
11640	-0.02
11700	-0.02
11760	-0.02
11820	-0.02
11880	-0.02
11940	-0.02
12000	-0.02
12060	-0.02
12120	-0.02
12180	-0.02
12240	-0.02
12300	-0.02
12360	-0.02
12420	-0.02
12480	-0.02
12540	-0.02
12600	-0.02
12660	-0.02
12720	-0.02
12780	-0.02
12840	-0.02
12900	-0.02

12960	-0.02
13020	-0.02
13080	-0.02
13140	-0.02
13200	-0.02
13260	-0.02
13320	-0.02
13380	-0.02
13440	-0.02
13500	-0.02
13560	-0.02
13620	-0.02
13680	-0.02
13740	-0.02
13800	-0.02
13860	-0.02
13920	-0.02
13980	-0.02
14040	-0.02
14100	-0.02
14160	-0.02
14220	-0.02
14280	-0.02
14340	0.45
14400	0.268
14460	0.175
14520	0.124
14580	0.091
14640	0.067
14700	0.043
14760	0.026
14820	0.019
14880	0.009
14940	0.004
15000	0
15060	-0.004
15120	-0.007
15180	-0.009
15240	-0.011
15300	-0.013
15360	-0.013
15420	-0.016
15480	-0.016
15540	-0.017
15600	-0.018
15660	-0.018
15720	-0.019

15780	-0.019
15840	-0.019
15900	-0.02
15960	-0.02
16020	-0.02
16080	-0.02
16140	-0.02
16200	-0.02
16260	-0.02
16320	-0.02
16380	-0.02
16440	-0.02
16500	-0.02
16560	-0.021
16620	-0.021
16680	-0.02
16740	-0.021
16800	-0.021
16860	-0.021
16920	-0.021
16980	-0.021
17040	-0.021
17100	-0.021
17160	-0.021
17220	-0.021
17280	-0.021
17340	-0.021
17400	-0.021
17460	-0.021
17520	-0.021
17580	-0.021
17640	-0.021
17700	-0.021
17760	-0.021
17820	-0.021
17880	-0.021
17940	-0.021
18000	-0.021
18060	-0.021
18120	-0.021
18180	-0.021
18240	-0.021
18300	-0.021
18360	-0.021
18420	-0.021
18480	-0.021
18540	-0.021

18600	-0.021
18660	-0.021
18720	-0.021
18780	-0.021
18840	-0.021
18900	-0.021
18960	-0.021
19020	-0.021
19080	-0.021
19140	-0.021
19200	-0.021
19260	-0.021
19320	-0.021
19380	-0.021
19440	-0.021
19500	-0.021
19560	-0.021
19620	-0.021
19680	-0.021
19740	-0.021
19800	0.156
19860	0.085
19920	0.048
19980	0.029
20040	0.017
20100	0.008
20160	0.004
20220	0
20280	-0.003
20340	-0.007
20400	-0.009
20460	-0.011
20520	-0.012
20580	-0.015
20640	-0.016
20700	-0.017
20760	-0.017
20820	-0.018
20880	-0.019
20940	-0.019
21000	-0.019
21060	-0.019
21120	-0.02
21180	-0.02
21240	-0.02
21300	-0.02
21360	-0.02

21420	-0.02
21480	-0.021
21540	-0.021

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street
Job No.: 13817
Location: 100 South 4th street Brooklyn NY
On-site Personnel: C Evertz
Day & Date: 9-12-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes
Background Reading (particulates) mg/m³
Background Reading (organic vapors) 0.0 ppm
Calibration Dates: Particulate Meters: Photoionization Detector:
Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings
Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				
0715				
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930			0.0	
0945			0.0	
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	
1145			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215			0.0	
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			6.0	
1430			0.0	
1445			0.0	
1500			0.0	
1515			0.0	
1530			0.0	
1545			0.0	
1600				
1615				
1630				
1645				
1700				

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 14, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#12 - Interim Remedial Measures Progress Report (9/13/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

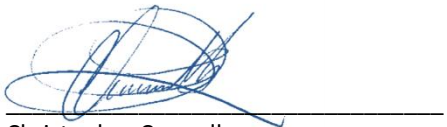
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 13, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 13, 2022

- IEC and CG gained access to apartment #1-F for installation of suction points SP-15 and SP-16.
- Clean Globe Environmental (CG) continued running horizontal piping from SP-17 towards future location of SP-16.
- IEC installed vapor monitoring points VMP-4 and VMP-5 in the lobby of 100 South 4th Street.
- IEC conducted pilot testing on suction points SP-1, SP-14, SP-13, and SP-17. Sufficient negative pressure was detected in vapor monitoring points located proximal to each SP.
- CG began coring SP-16 in apartment #1-F.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.

Planned work for the following day includes coring SP-15 and installing vertical and horizontal SSDS piping in 100 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental

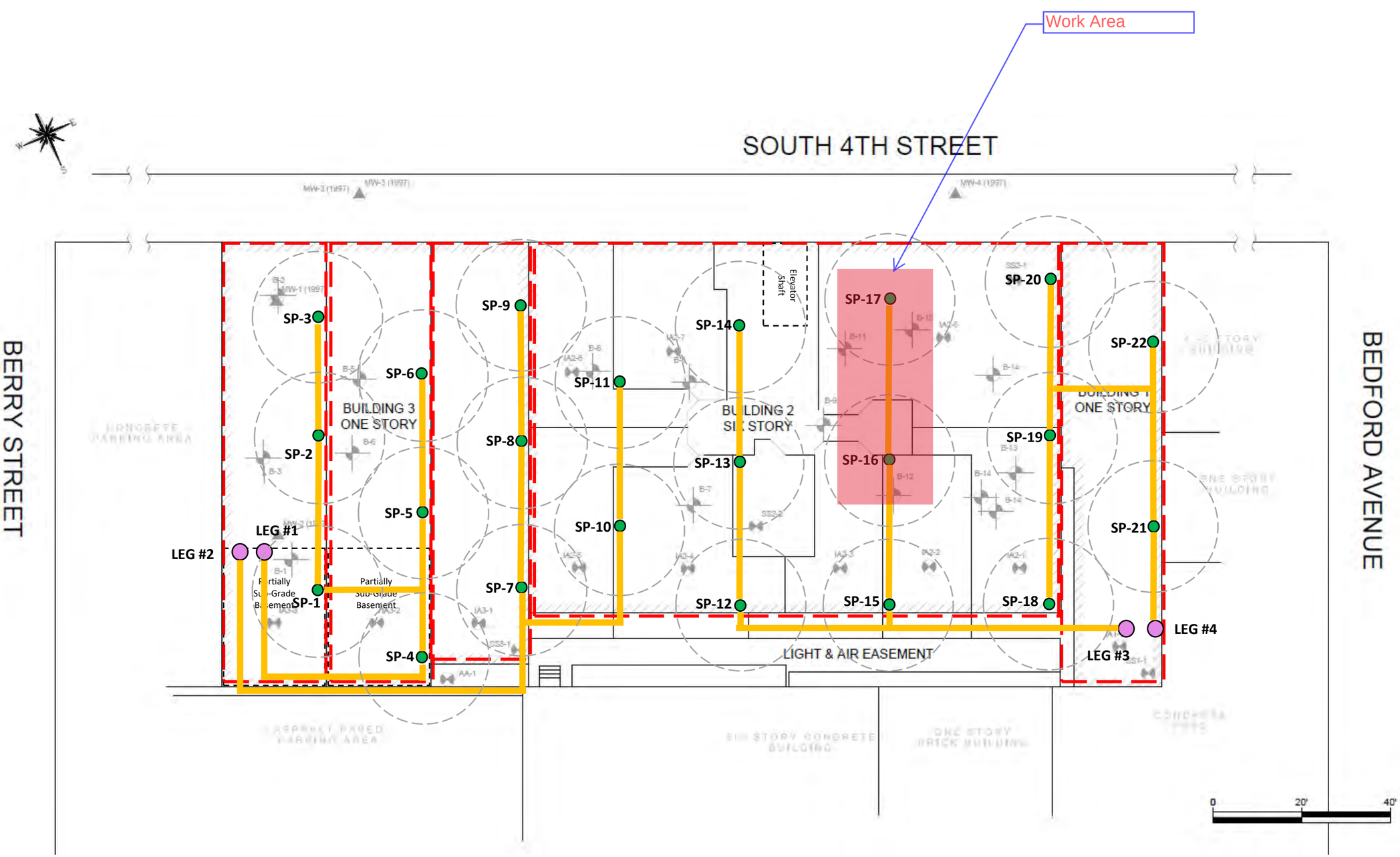
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of coring of SP-16.

Photograph No. 2: View of SP-16

Photograph No. 3: View of completed SP-16



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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Revisions	

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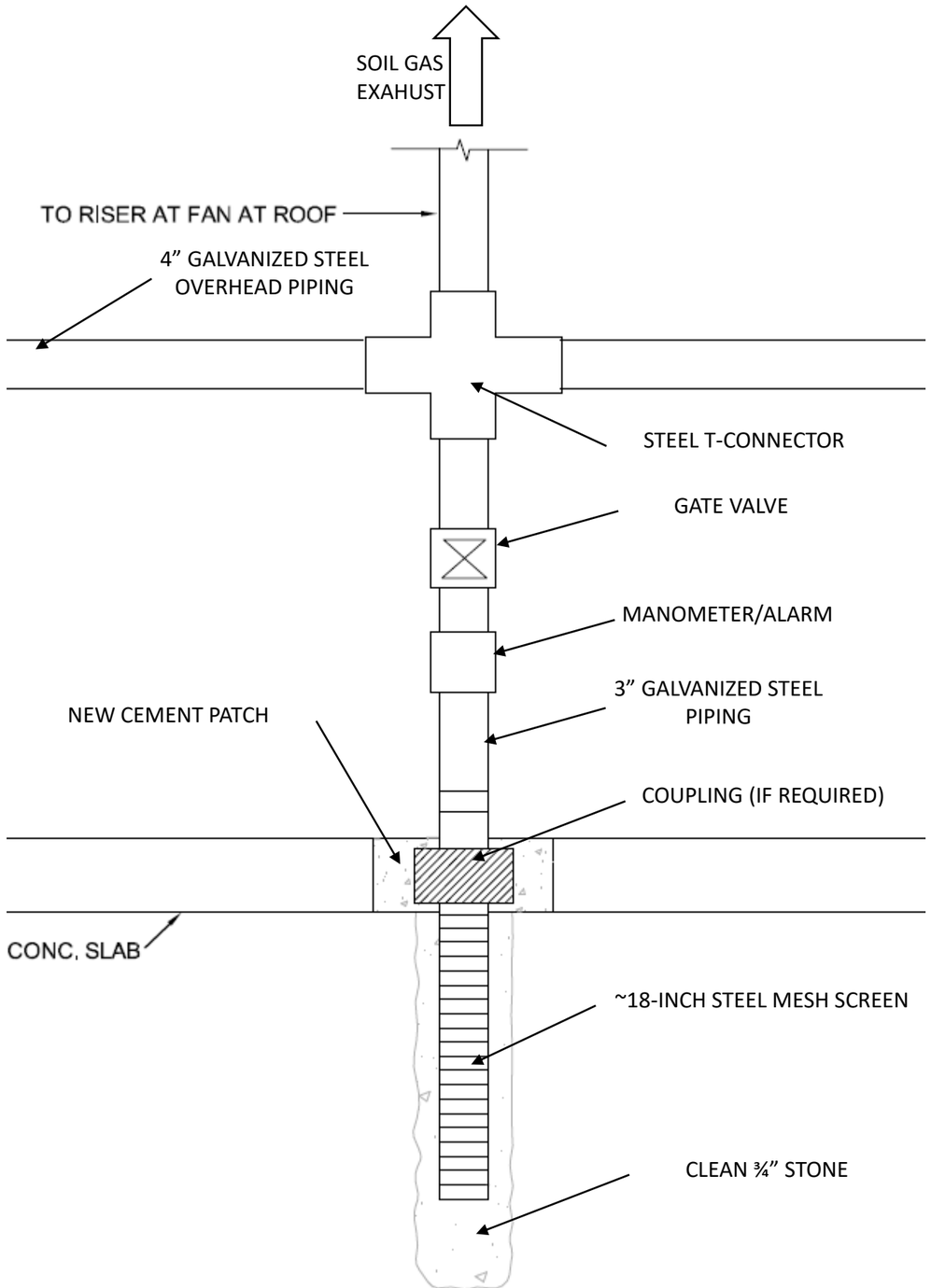
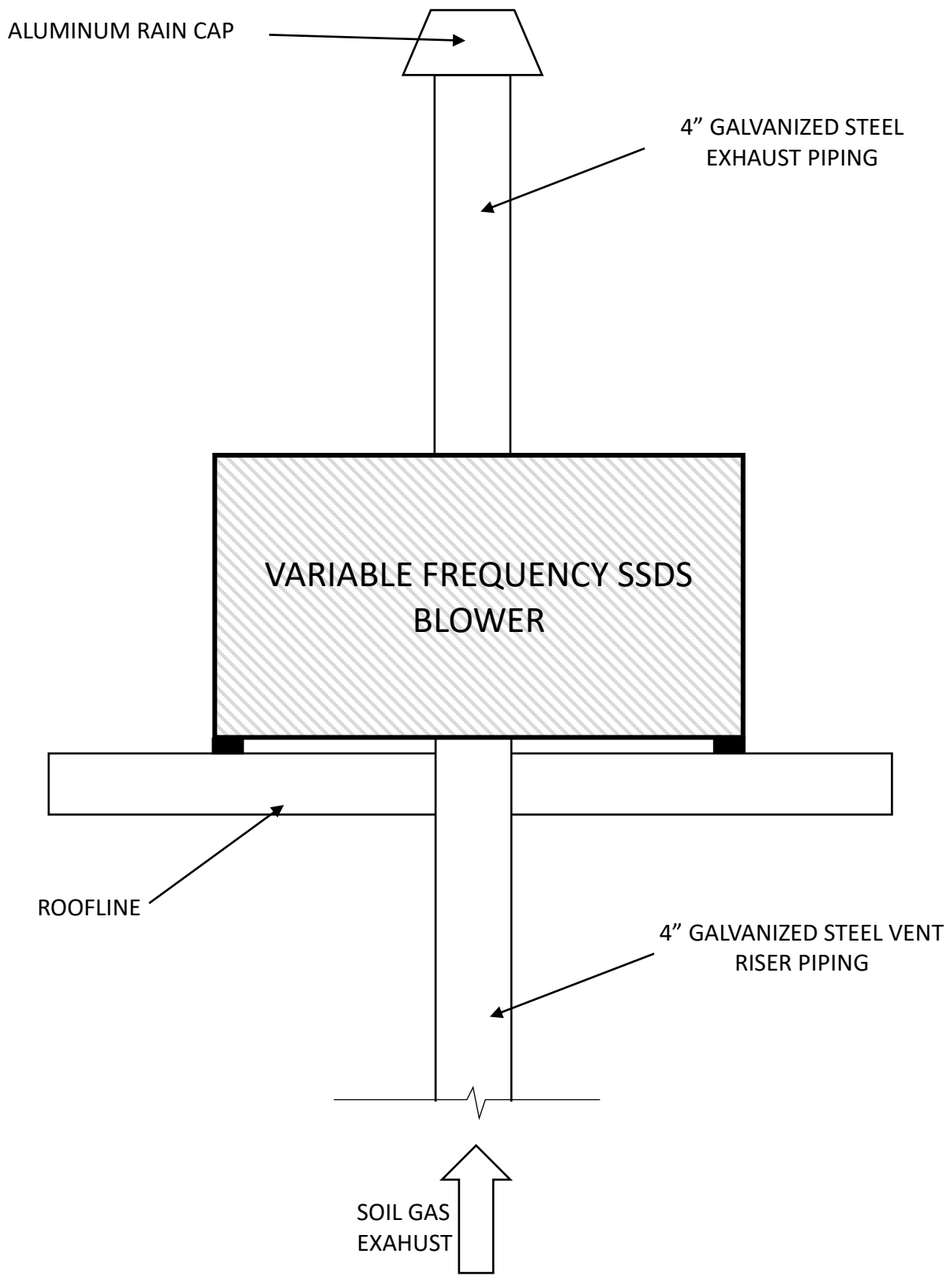


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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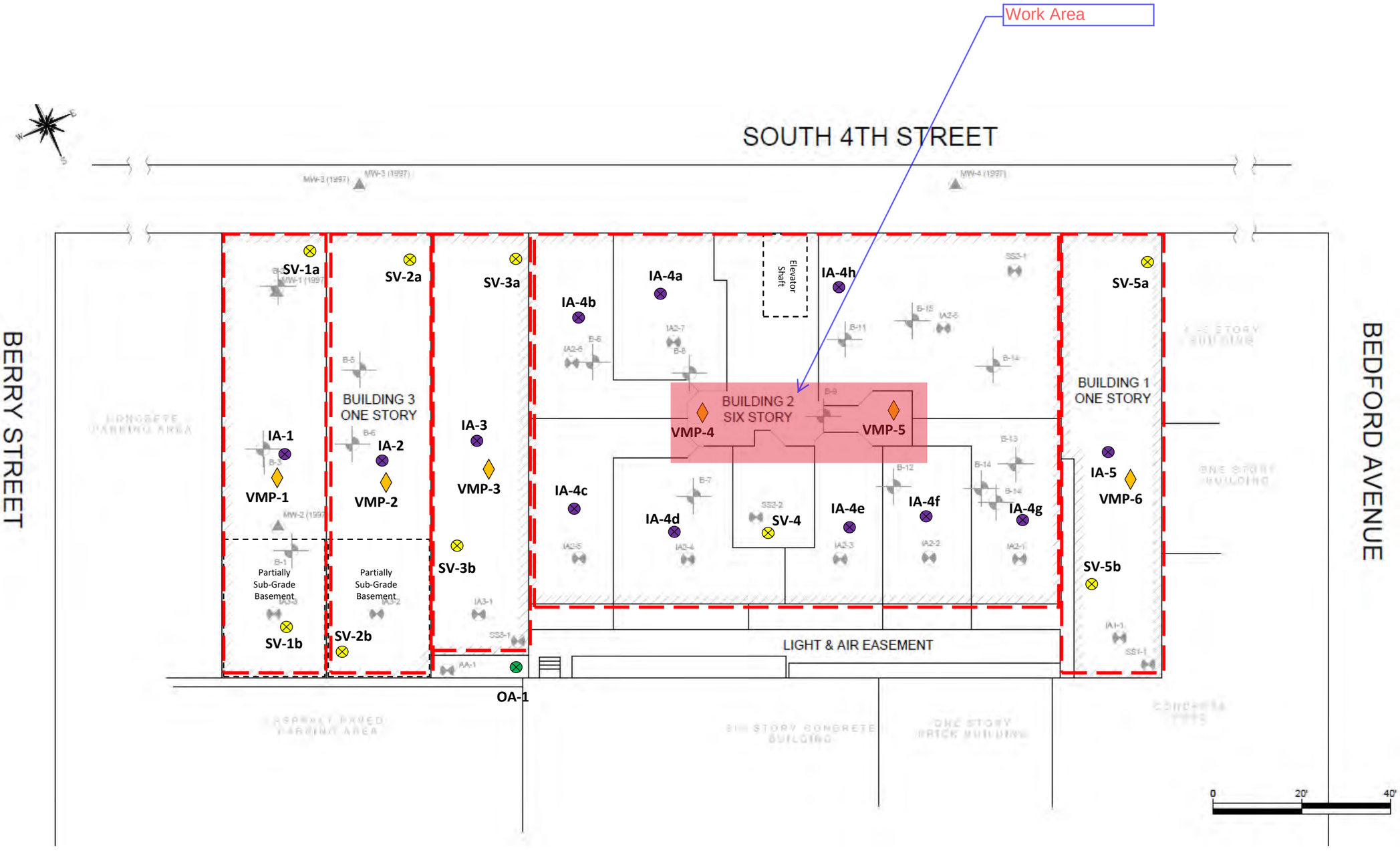

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530153015
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_010	
Test Start Time		10:29:03 AM
Test Start Date		9/13/2022
Test Length [D:H:M]		0:04:30
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.07
Mass Minimum [mg/m3]		-0.003
Mass Maximum [mg/m3]		0.733
Mass TWA [mg/m3]		0.039
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		270

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.049		
120	0.022		
180	0.014		
240	0.009		
300	0.006		
360	0.004		
420	0.002		
480	0		
540	0		
600	0		
660	0		
720	0		
780	-0.001		
840	-0.002		
900	-0.002		
960	-0.003		
1020	0.007		
1080	0.733		
1140	0.045		
1200	0.037		
1260	0.044		
1320	0.052		
1380	0.054		
1440	0.061		
1500	0.072		
1560	0.063		
1620	0.057		

1680	0.073
1740	0.06
1800	0.059
1860	0.055
1920	0.059
1980	0.061
2040	0.059
2100	0.051
2160	0.047
2220	0.052
2280	0.053
2340	0.049
2400	0.053
2460	0.052
2520	0.058
2580	0.056
2640	0.056
2700	0.059
2760	0.059
2820	0.059
2880	0.064
2940	0.068
3000	0.067
3060	0.067
3120	0.067
3180	0.072
3240	0.074
3300	0.073
3360	0.07
3420	0.069
3480	0.072
3540	0.075
3600	0.086
3660	0.078
3720	0.073
3780	0.074
3840	0.074
3900	0.071
3960	0.074
4020	0.072
4080	0.073
4140	0.072
4200	0.078
4260	0.077
4320	0.082
4380	0.083
4440	0.086

4500	0.083
4560	0.088
4620	0.094
4680	0.092
4740	0.093
4800	0.099
4860	0.096
4920	0.091
4980	0.111
5040	0.101
5100	0.096
5160	0.09
5220	0.088
5280	0.092
5340	0.092
5400	0.088
5460	0.087
5520	0.092
5580	0.091
5640	0.093
5700	0.103
5760	0.112
5820	0.11
5880	0.111
5940	0.113
6000	0.092
6060	0.094
6120	0.092
6180	0.088
6240	0.089
6300	0.089
6360	0.091
6420	0.094
6480	0.089
6540	0.089
6600	0.091
6660	0.092
6720	0.088
6780	0.092
6840	0.092
6900	0.089
6960	0.09
7020	0.093
7080	0.091
7140	0.092
7200	0.096
7260	0.098

7320	0.099
7380	0.091
7440	0.091
7500	0.093
7560	0.091
7620	0.088
7680	0.091
7740	0.089
7800	0.088
7860	0.091
7920	0.093
7980	0.09
8040	0.096
8100	0.097
8160	0.099
8220	0.094
8280	0.092
8340	0.092
8400	0.093
8460	0.089
8520	0.09
8580	0.095
8640	0.087
8700	0.083
8760	0.081
8820	0.081
8880	0.08
8940	0.08
9000	0.078
9060	0.076
9120	0.074
9180	0.077
9240	0.075
9300	0.071
9360	0.072
9420	0.071
9480	0.07
9540	0.07
9600	0.067
9660	0.069
9720	0.067
9780	0.068
9840	0.065
9900	0.066
9960	0.064
10020	0.065
10080	0.064

10140	0.063
10200	0.063
10260	0.062
10320	0.06
10380	0.06
10440	0.061
10500	0.059
10560	0.058
10620	0.057
10680	0.055
10740	0.056
10800	0.056
10860	0.055
10920	0.06
10980	0.056
11040	0.054
11100	0.054
11160	0.064
11220	0.055
11280	0.06
11340	0.06
11400	0.053
11460	0.051
11520	0.052
11580	0.052
11640	0.051
11700	0.052
11760	0.053
11820	0.053
11880	0.054
11940	0.056
12000	0.052
12060	0.054
12120	0.053
12180	0.059
12240	0.055
12300	0.053
12360	0.053
12420	0.053
12480	0.051
12540	0.053
12600	0.051
12660	0.051
12720	0.054
12780	0.053
12840	0.05
12900	0.052

12960	0.051
13020	0.052
13080	0.052
13140	0.054
13200	0.054
13260	0.053
13320	0.053
13380	0.052
13440	0.053
13500	0.052
13560	0.054
13620	0.052
13680	0.053
13740	0.053
13800	0.054
13860	0.056
13920	0.056
13980	0.055
14040	0.057
14100	0.058
14160	0.058
14220	0.057
14280	0.061
14340	0.067
14400	0.071
14460	0.069
14520	0.065
14580	0.069
14640	0.067
14700	0.073
14760	0.066
14820	0.071
14880	0.062
14940	0.06
15000	0.093
15060	0.124
15120	0.124
15180	0.091
15240	0.068
15300	0.067
15360	0.081
15420	0.07
15480	0.074
15540	0.065
15600	0.065
15660	0.064
15720	0.064

15780	0.063
15840	0.066
15900	0.068
15960	0.064
16020	0.069
16080	0.07
16140	0.077
16200	0.067

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street | Job No.: 13817

Location: 100 South 4th street Brooklyn NY | On-site Personnel: C Evertz

Day & Date: 9-13-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes

Background Reading (particulates) mg/m³

Background Reading (organic vapors) 0.0 ppm

Calibration Dates: Particulate Meters: Photoionization Detector:

Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings

Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				
0715				
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930				
0945				
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	
1145			0.0	
			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215			0.0	
1230			0.0	
1245			0.0	
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430			0.0	
1445			0.0	
1500			0.0	
1515			0.0	
1530			0.0	
1545			0.0	
1600			0.0	
1615				
1630				
1645				
1700				

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September 15, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#13 - Interim Remedial Measures Progress Report (9/14/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

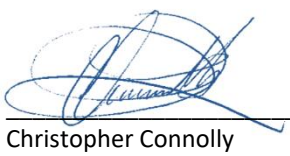
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 14, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 14, 2022

- IEC and CG gained access to apartment #1-F for installation of suction points SP-15 and SP-16.
- Clean Globe Environmental (CG) completed suction points SP-15 and SP-16.
- IEC conducted pilot testing on suction points SP-15 and SP-16. Sufficient negative pressure was detected in vapor monitoring points located proximal to each SP.
- CG began running vertical and horizontal piping between SP-17, SP-16, and SP-15.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, due to a data upload issue, PID logged data is not available for this day. Real time interval readings are presented in the attached Air Monitoring Log for your review in lieu of the logged data.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street.

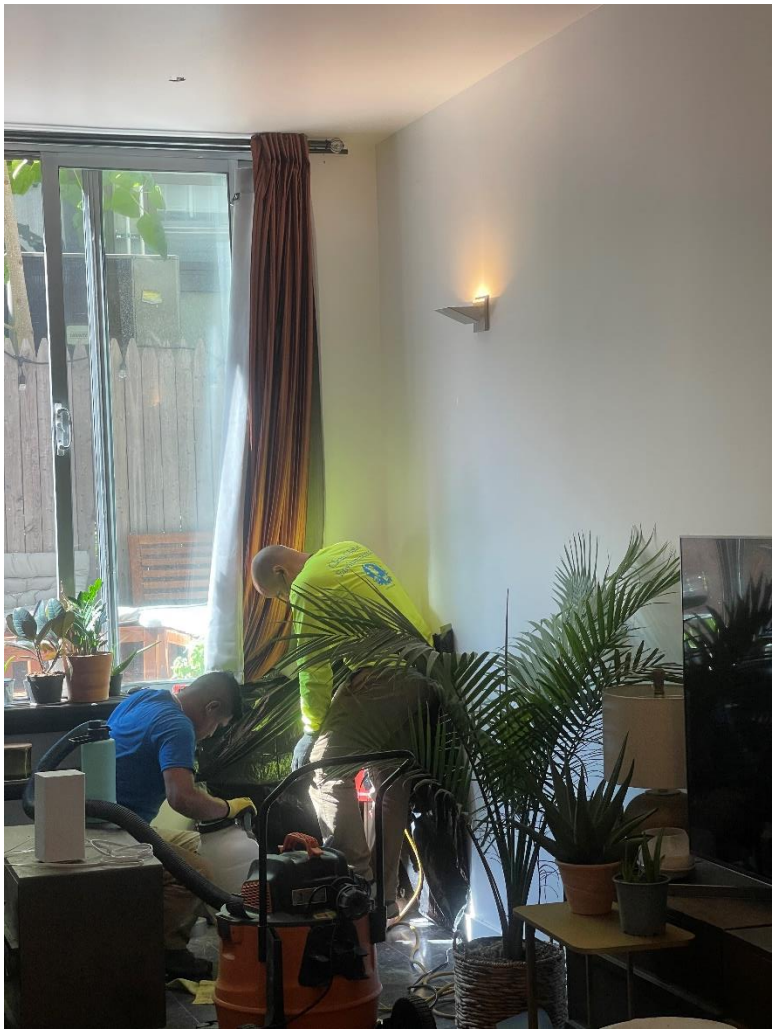
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: G. Mendez-Chicas, Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

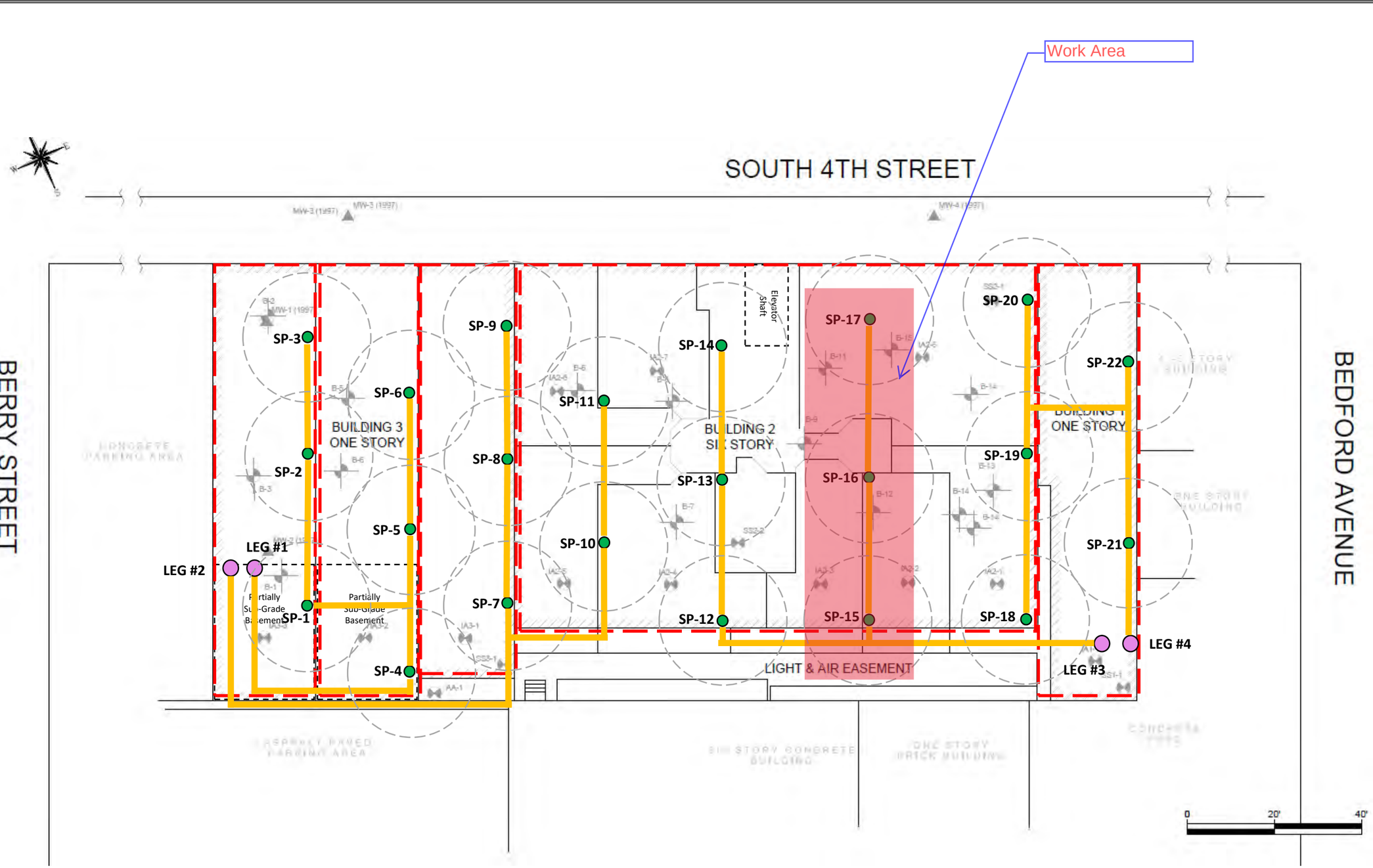
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map



Photograph No. 1: View of coring of SP-15.

Photograph No. 2: View of SP-15

Photograph No. 3: View of backfilling SP-15



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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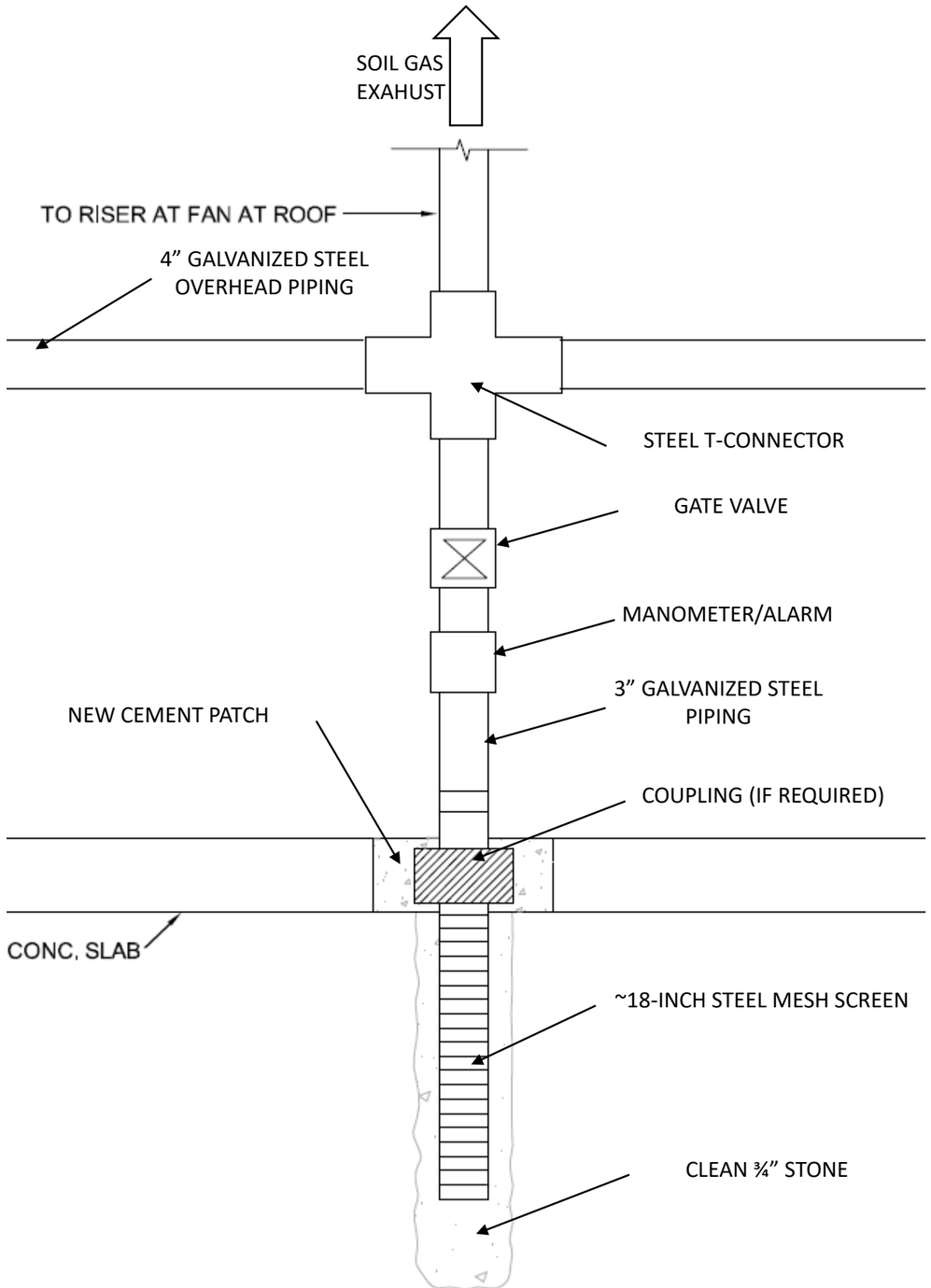
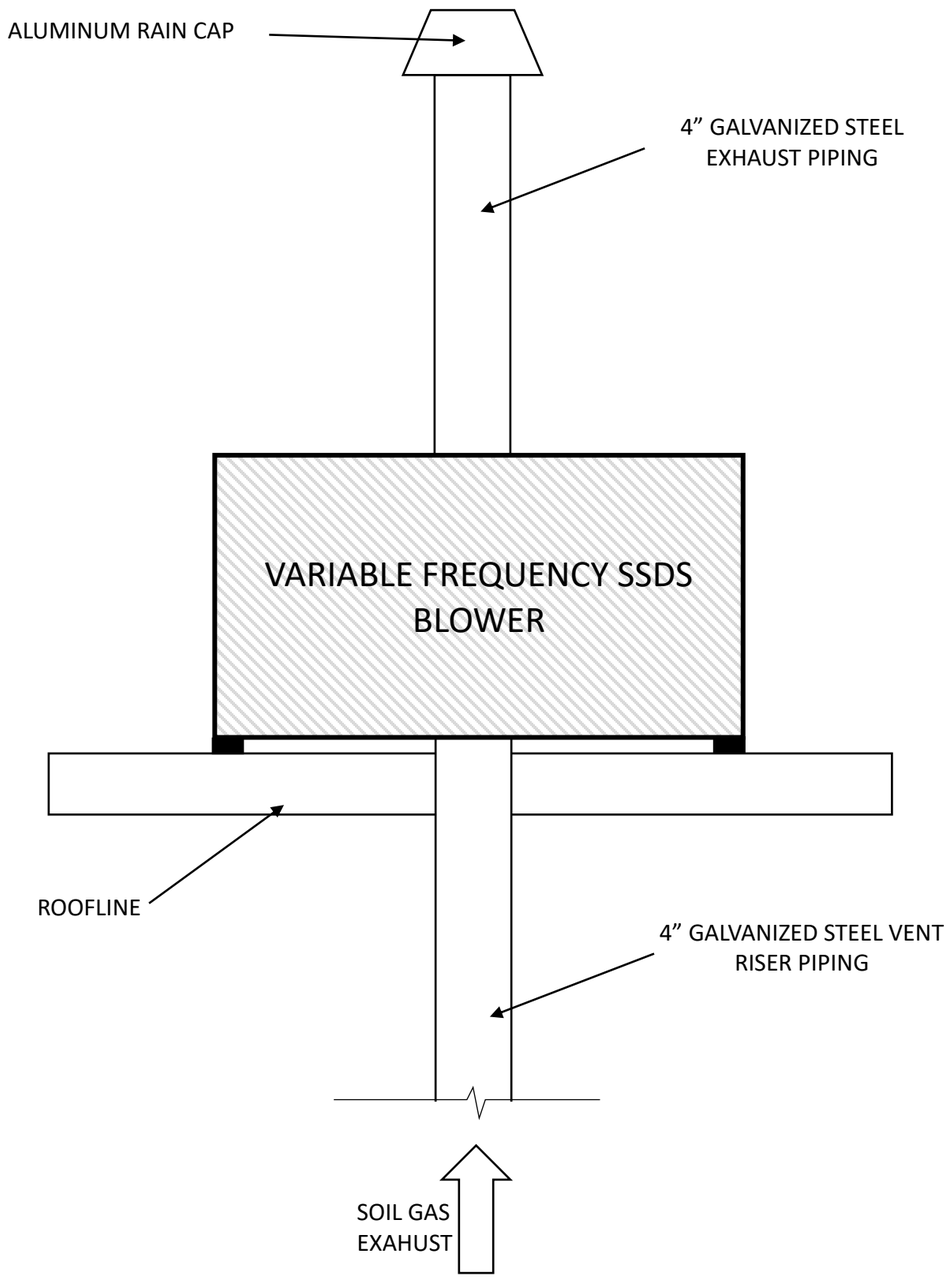
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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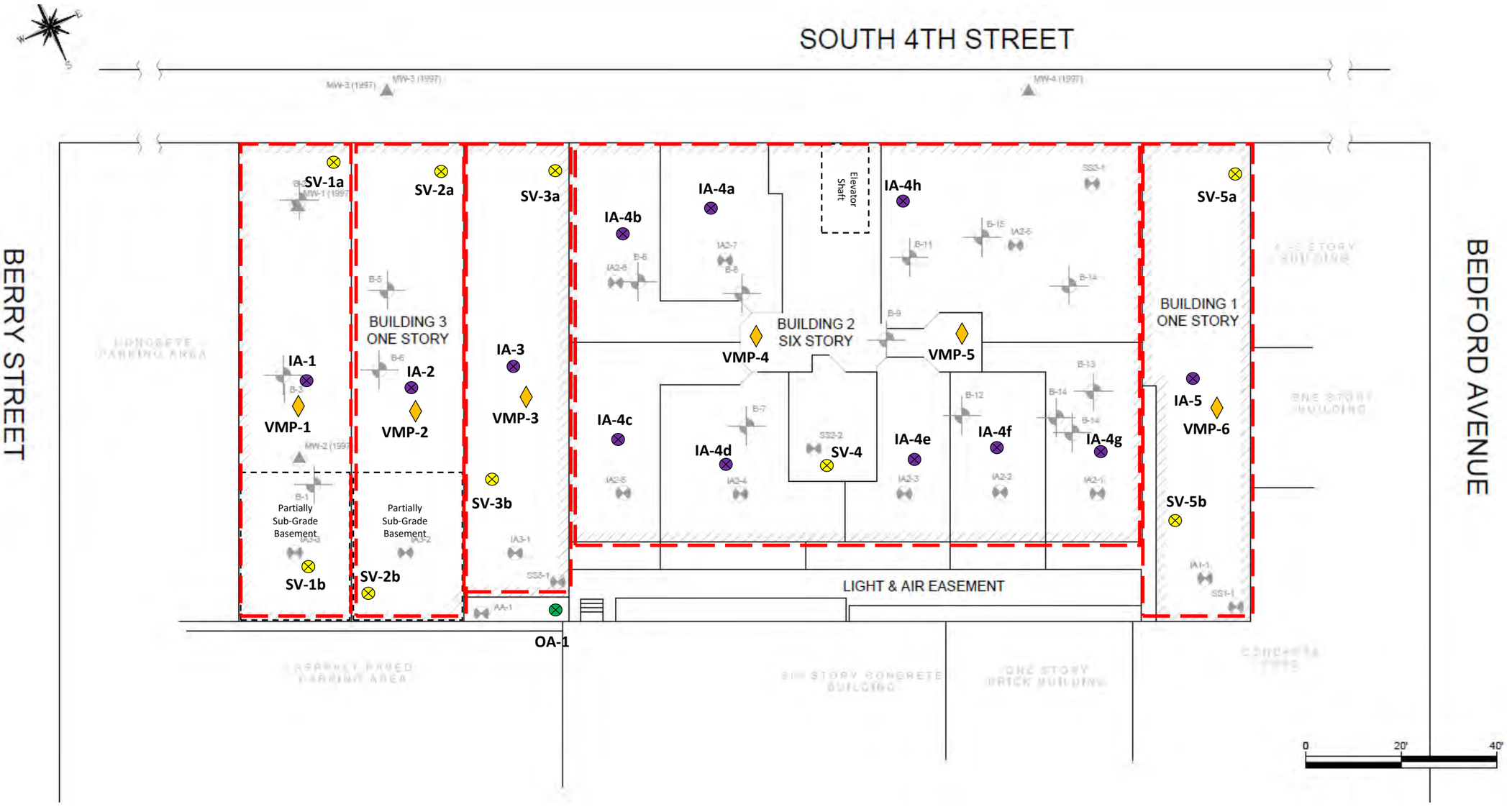

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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FAX (631) 269-1599

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530153015
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_011	
Test Start Time		10:08:45 AM
Test Start Date		9/14/2022
Test Length [D:H:M]		0:00:29
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.017
Mass Minimum [mg/m3]		0.002
Mass Maximum [mg/m3]		0.071
Mass TWA [mg/m3]		0.001
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		29

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.043		
120	0.036		
180	0.062		
240	0.029		
300	0.014		
360	0.013		
420	0.016		
480	0.013		
540	0.009		
600	0.009		
660	0.009		
720	0.008		
780	0.007		
840	0.009		
900	0.008		
960	0.008		
1020	0.007		
1080	0.008		
1140	0.002		
1200	0.011		
1260	0.004		
1320	0.004		
1380	0.003		
1440	0.003		
1500	0.071		
1560	0.043		
1620	0.014		

1680	0.006
1740	0.014

On- Site Dust and Volatile Organic Vapor Monitoring

Project: 100 South 4th street | Job No.: 13817

Location: 100 South 4th street Brooklyn NY | On-site Personnel: C Evertz

Day & Date: 9-14-22

	AM	PM
Wind Direction		
Temperature Range:		°F

Sample Interval: 15 minutes

Background Reading (particulates) mg/m³

Background Reading (organic vapors) 0.0 ppm

Calibration Dates: Particulate Meters: Photoionization Detector:

Action Level/Response: Organic vapors: > 5ppm above background levels/ 15 minute readings

Particulates: 0.100 mg/m³ above up wind reading/15 minute period

Time	Particulate levels: UPWIND (mg/m³)	Particulate levels: DOWNWIND (mg/m³)	ORGANIC VAPOR LEVELS (ppm)	NOTES
0700				
0715				
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930				
0945				
1000			0.0	
1015			0.0	
1030			0.0	
1045			0.0	
1100			0.0	
1115			0.0	
1130			0.0	
1145			0.0	

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANCI VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215				
1230				
1245				
1300			0.0	
1315			0.0	
1330			0.0	
1345			0.0	
1400			0.0	
1415			0.0	
1430			0.0	
1445			0.0	
1500			0.0	
1515			0.0	
1530			0.0	
1545				
1600				
1615				
1630				
1645				
1700				

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September 16, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#14 - Interim Remedial Measures Progress Report (9/15/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

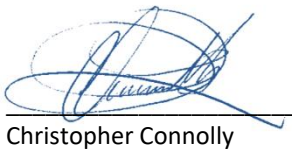
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 15, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 15, 2022

- CG continued running vertical and horizontal piping between SP-17, SP-16, and SP-15.
- CG began routing piping through rear wall of apartment 1-F to exterior.
- No ground intrusive activities were performed; thus, CAMP was not required.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

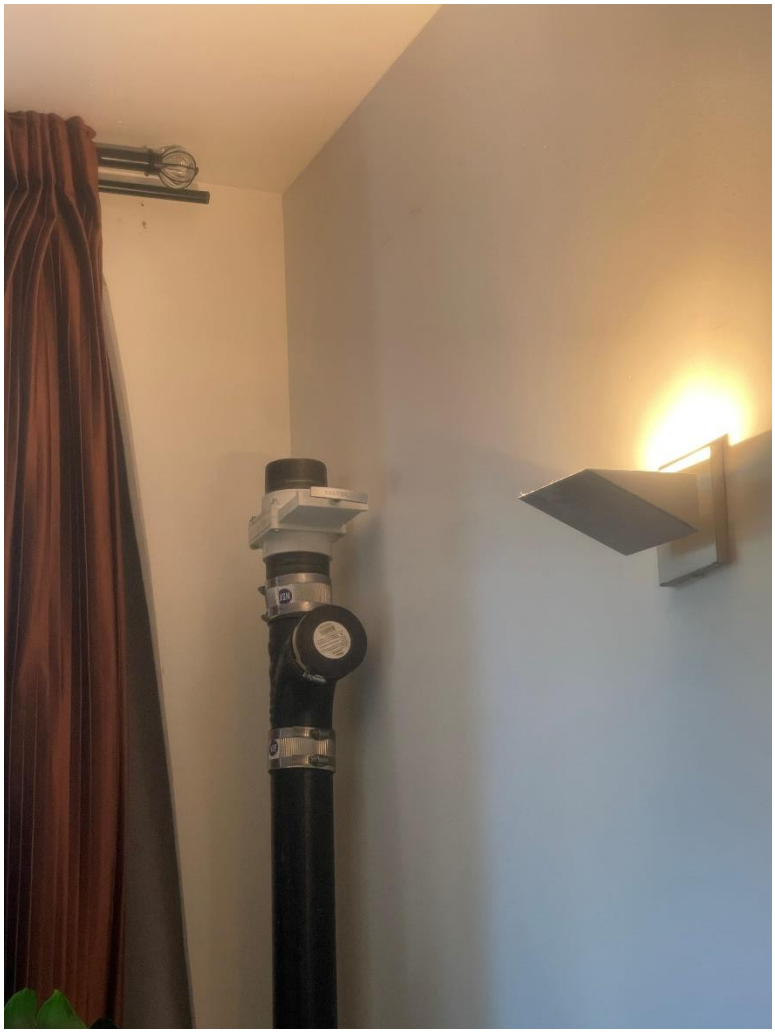


Christopher Connolly
Project Manager
Environmental Professional

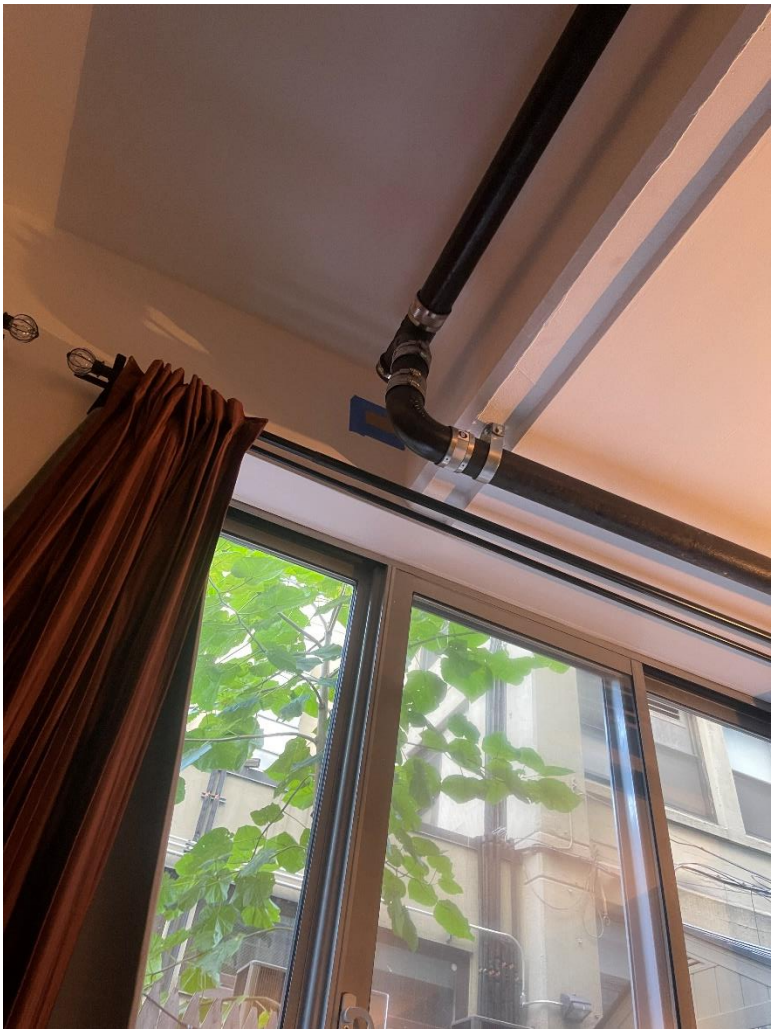
Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

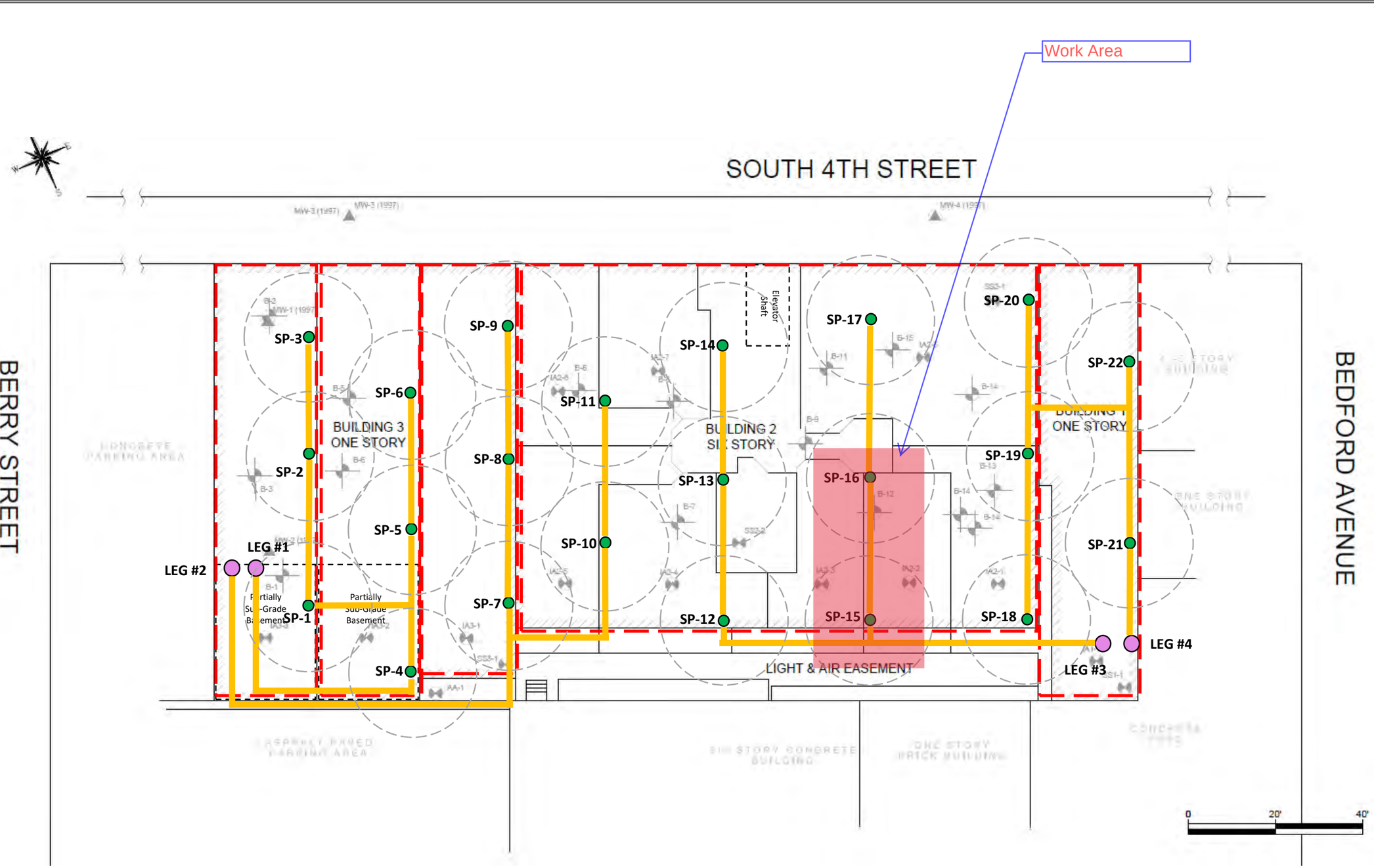
Photograph No. 1: View of pipe run from SP-16 towards SP-15.



Photograph No. 2: View of valve on SP-15



Photograph No. 3: View of pipe run to exit via rear exterior wall



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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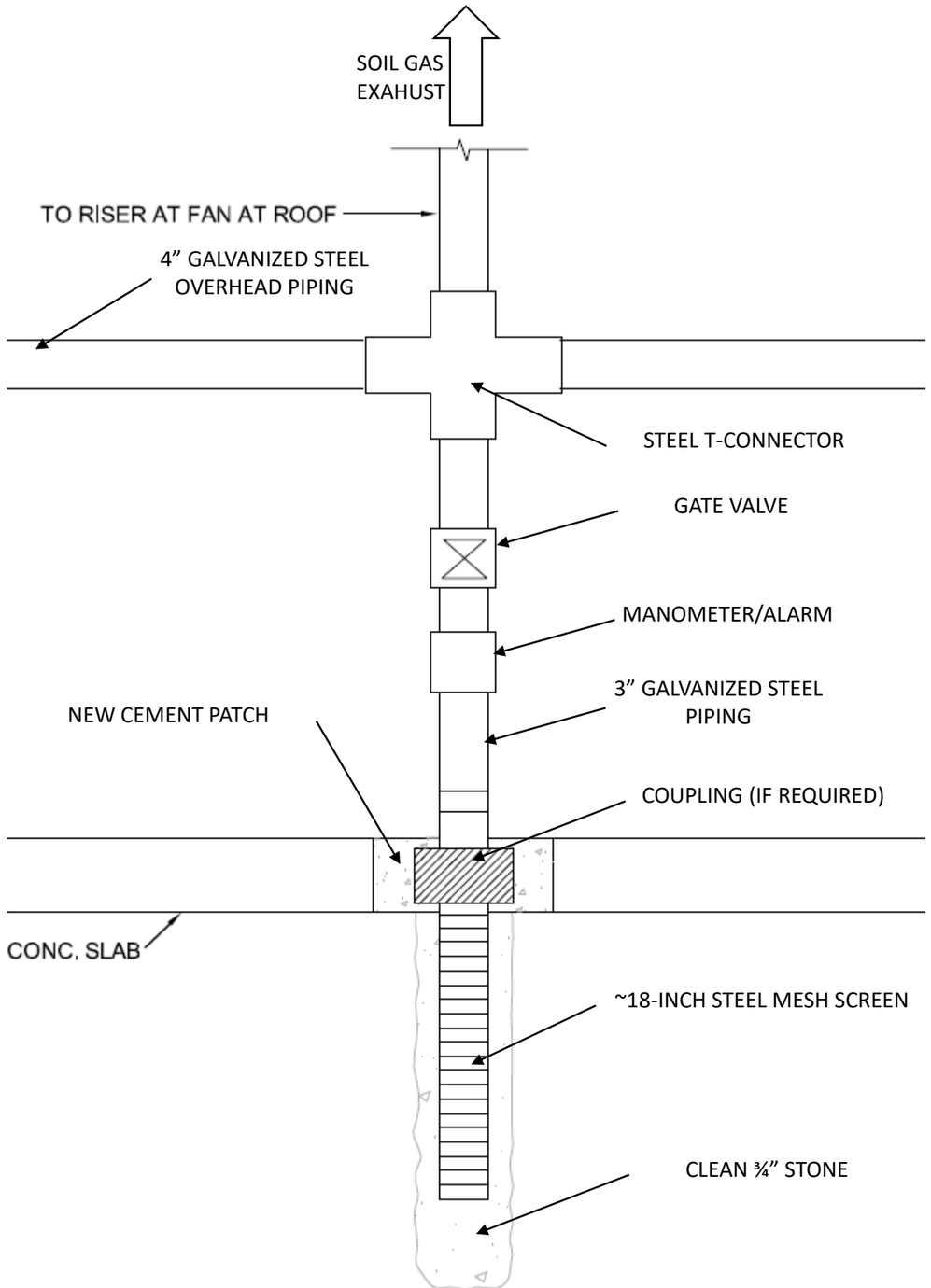
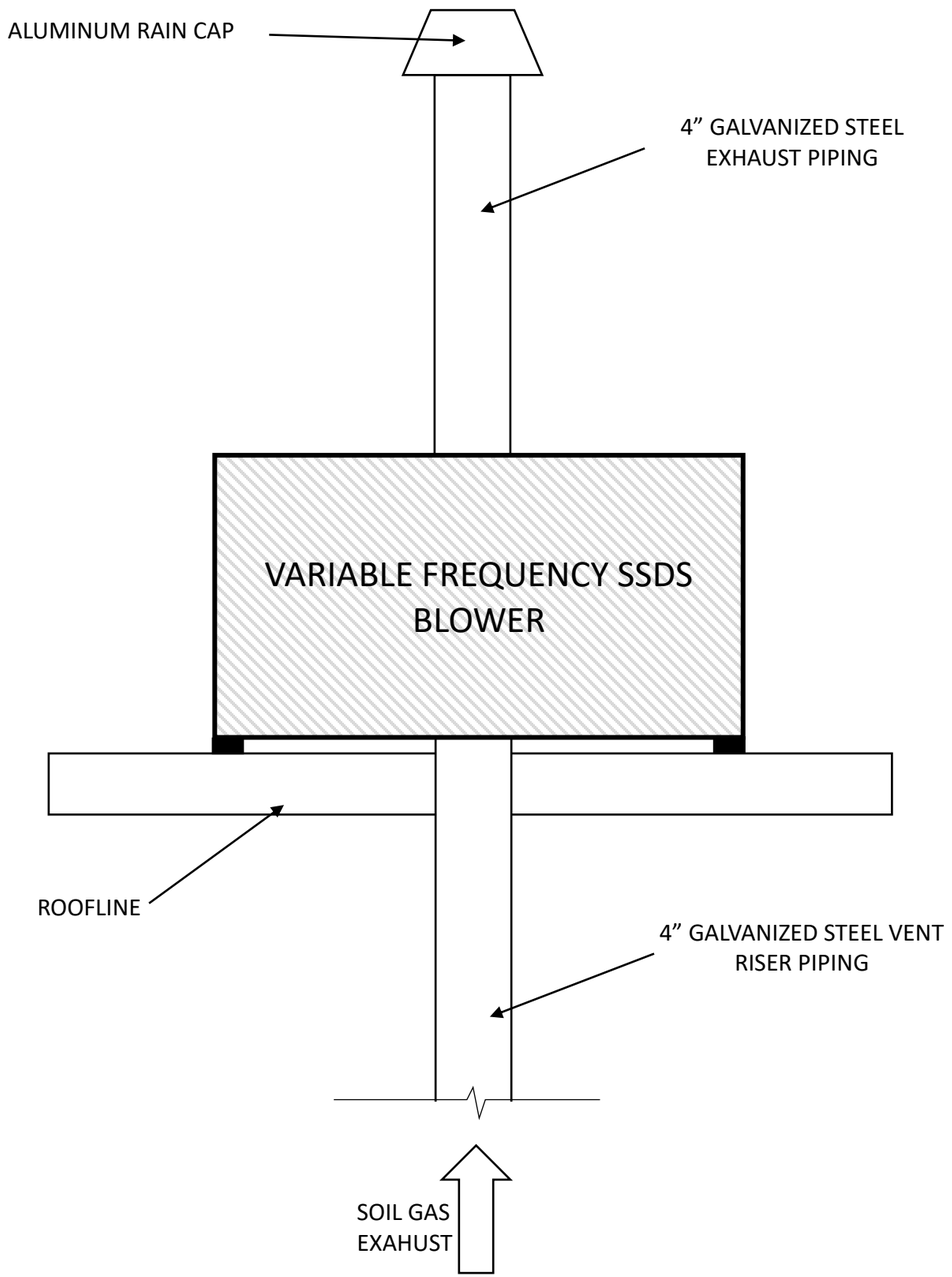


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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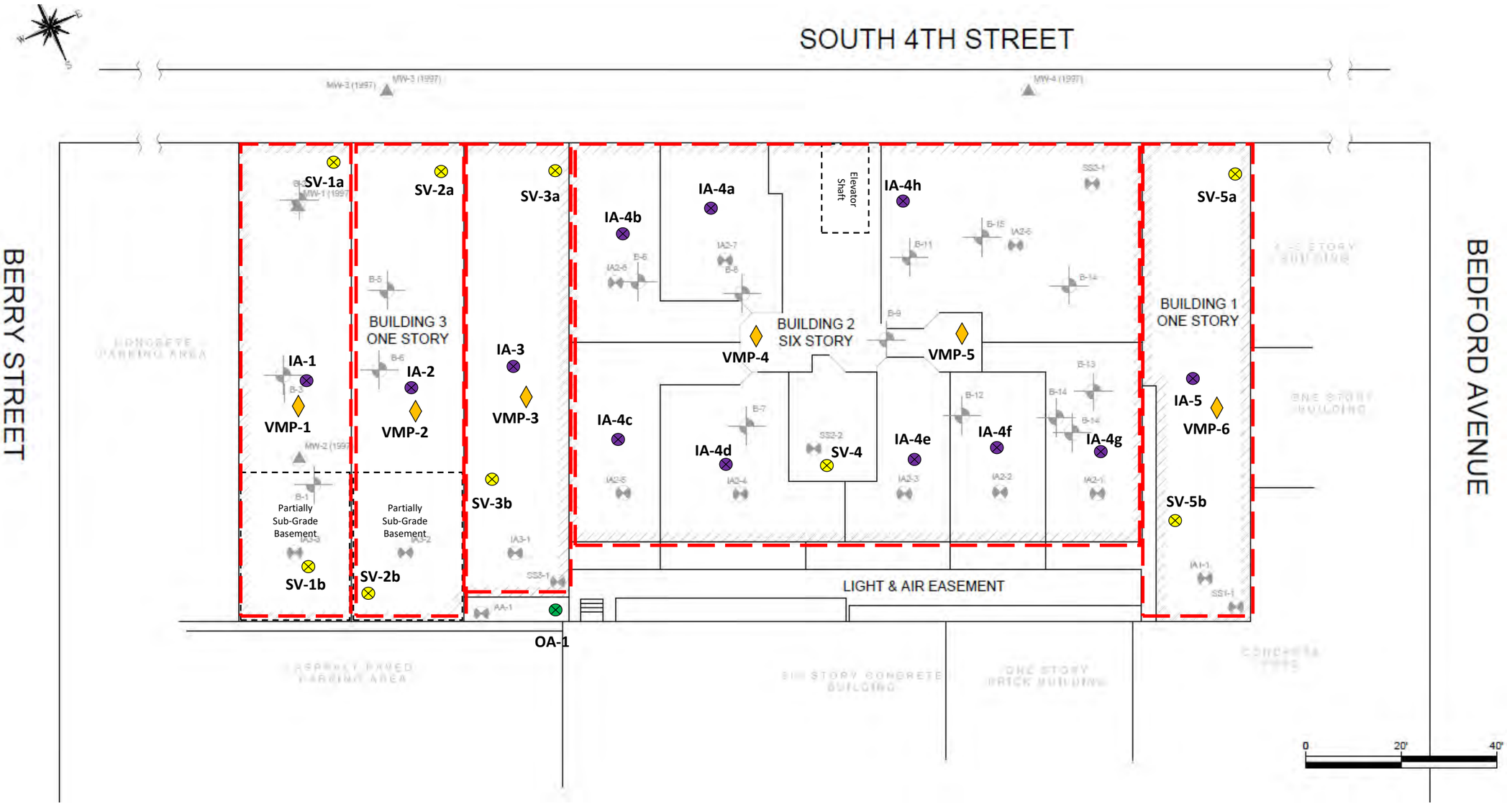

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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FAX (631) 269-1599

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September 19, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#15 - Interim Remedial Measures Progress Report (9/16/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

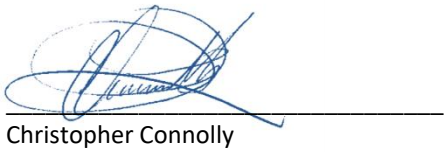
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 16, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 16, 2022

- CG completed running vertical and horizontal piping between SP-17, SP-16, and SP-15.
- Began coring SP-18 in apartment 1-G. Tenants returned early, and work had to cease.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 100 South 4th Street, and beginning installing suction points in 104 South 4th Street..

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 - CAMP Logs
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map

Photograph No. 1: View of pipe run in ceiling of apartment 1-F

Photograph No. 2: View of completed pipe run in apartment 1-F between SP-16 and SP-15

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530143204
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_014	
Test Start Time		12:51:06 PM
Test Start Date		9/16/2022
Test Length [D:H:M]		0:00:13
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.027
Mass Minimum [mg/m3]		0.01
Mass Maximum [mg/m3]		0.048
Mass TWA [mg/m3]		0
Photometric User Cal		1
Flow User Cal		0
Errors	Flow Error	
Number of Samples		13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.039		
120	0.048		
180	0.019		
240	0.019		
300	0.04		
360	0.01		
420	0.041		
480	0.013		
540	0.039		
600	0.019		
660	0.018		
720	0.034		
780	0.011		

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time
592-908437	9/16/2022 10:26:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:25:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:24:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:23:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:22:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:21:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:20:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:19:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:18:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:17:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:16:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:15:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:14:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-908437	9/16/2022 10:08:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:07:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 10:06:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-908437	9/16/2022 9:57:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 9:56:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 9:55:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 9:54:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-908437	9/16/2022 9:53:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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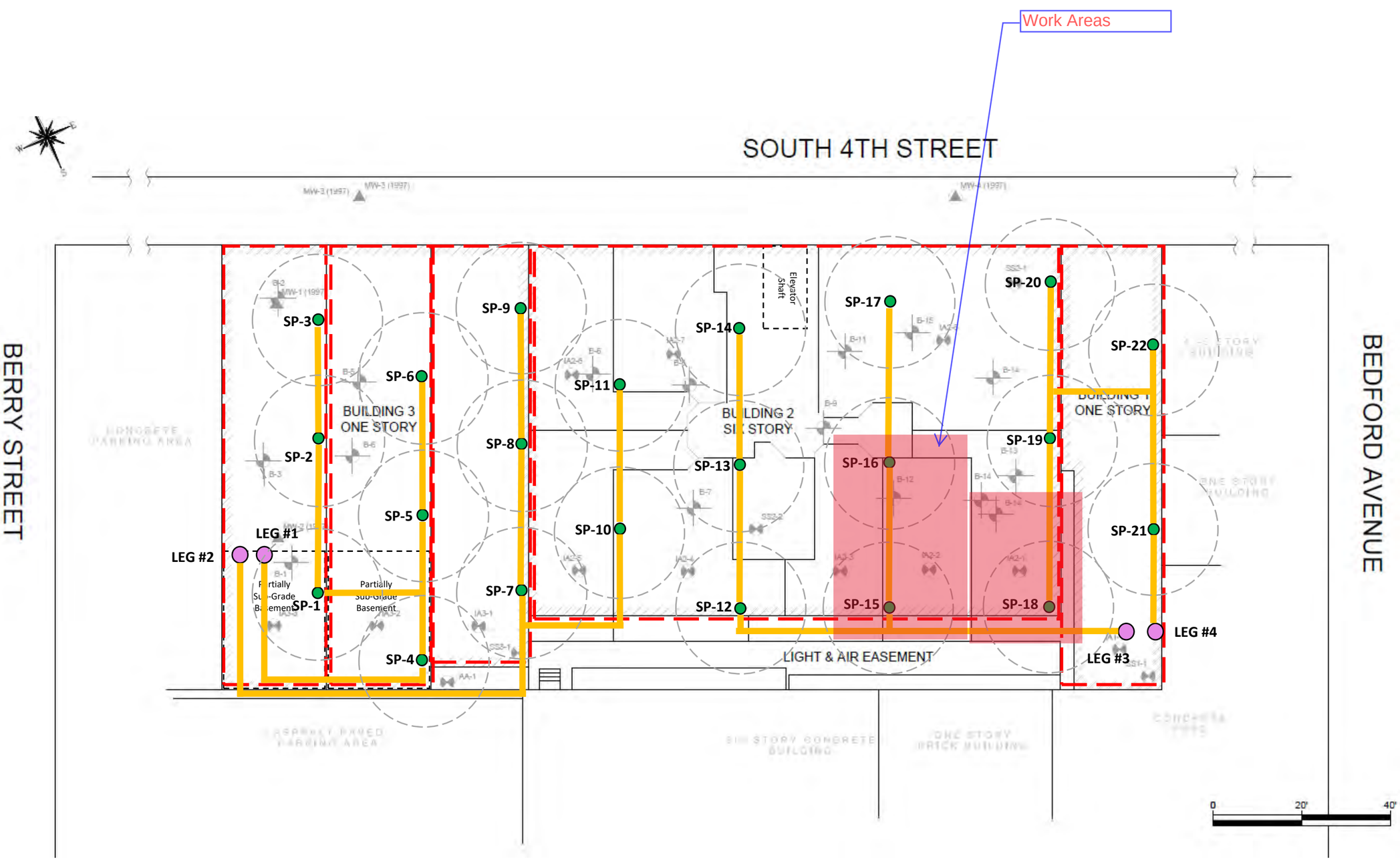
592-908437	9/16/2022 9:40:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0		0.0																			
592-908437	9/16/2022 9:39:12 AM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0		0.0																			
592-908437	9/16/2022 9:38:12 AM	Config	60	PID	ppm	SC23030239N5								9/15/2022	100.0	100.0	50.0	100.0	50.0	15000.0	Isobutylene	1		Hygiene Mod	Manual	Normal Mode	Power Down	00000001	00000001	48	9/16/2022 9:	9/16/2022 10:26:12 AM



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

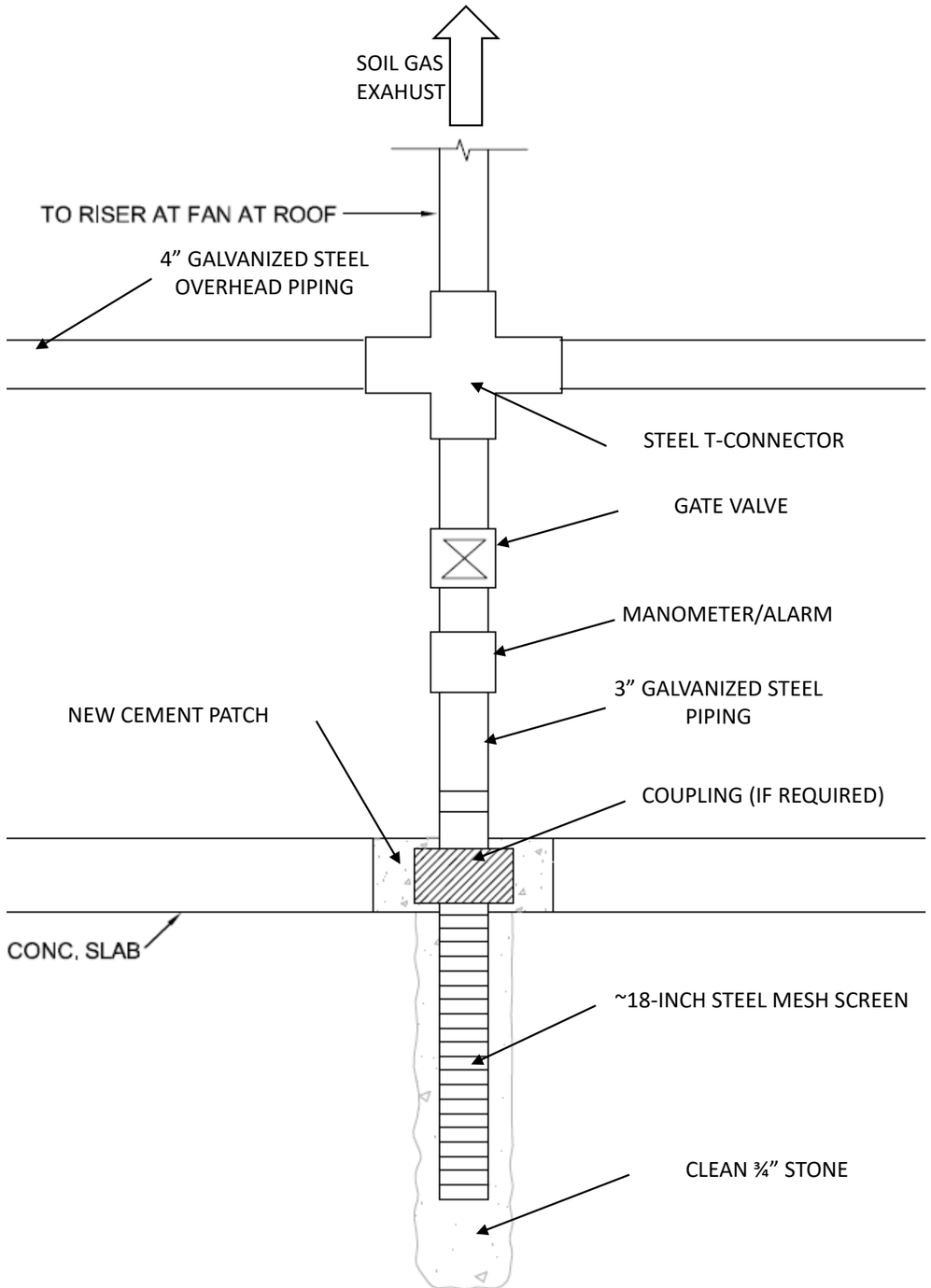
Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

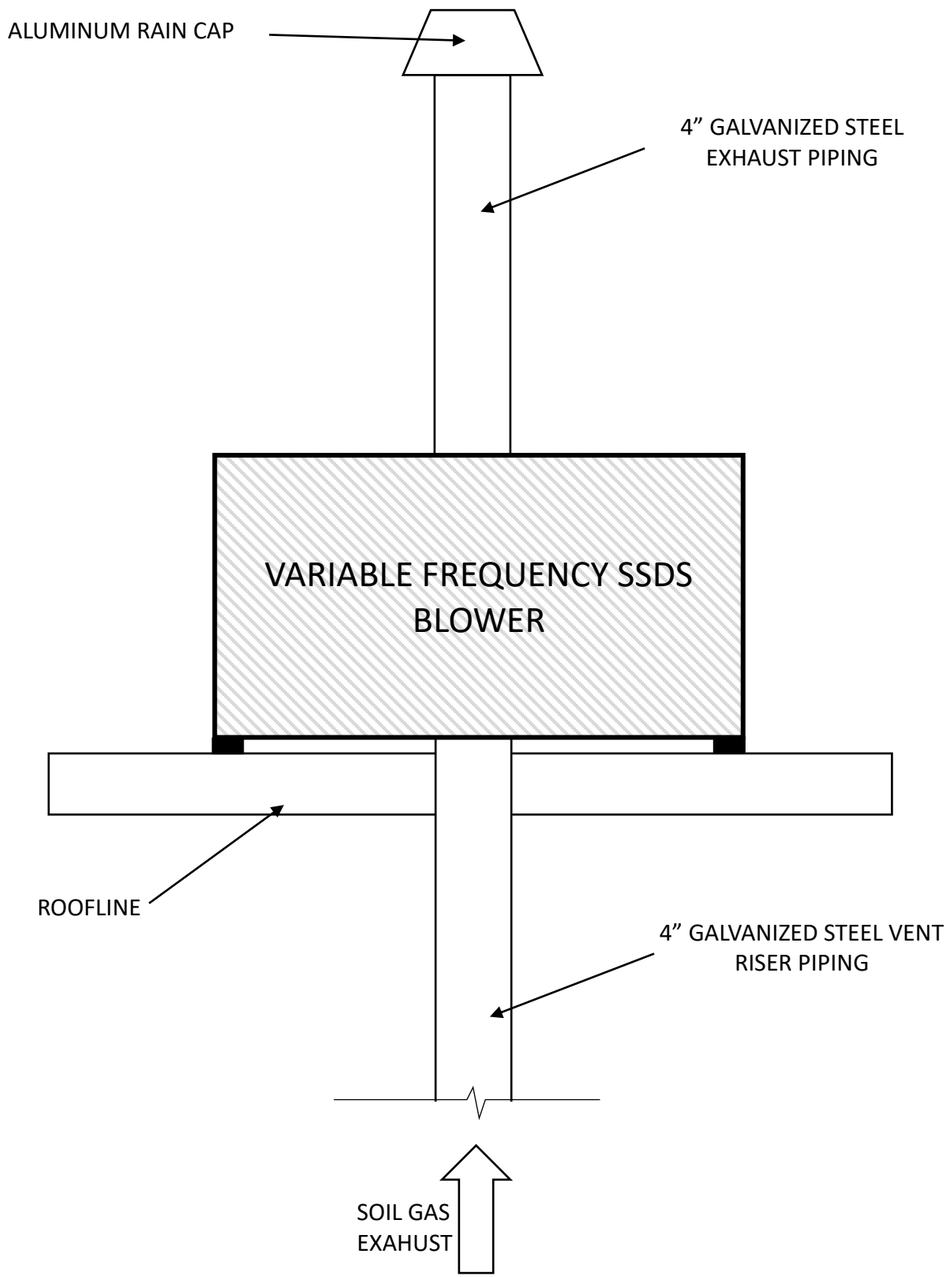
Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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BOHEMIA, NEW YORK 11716
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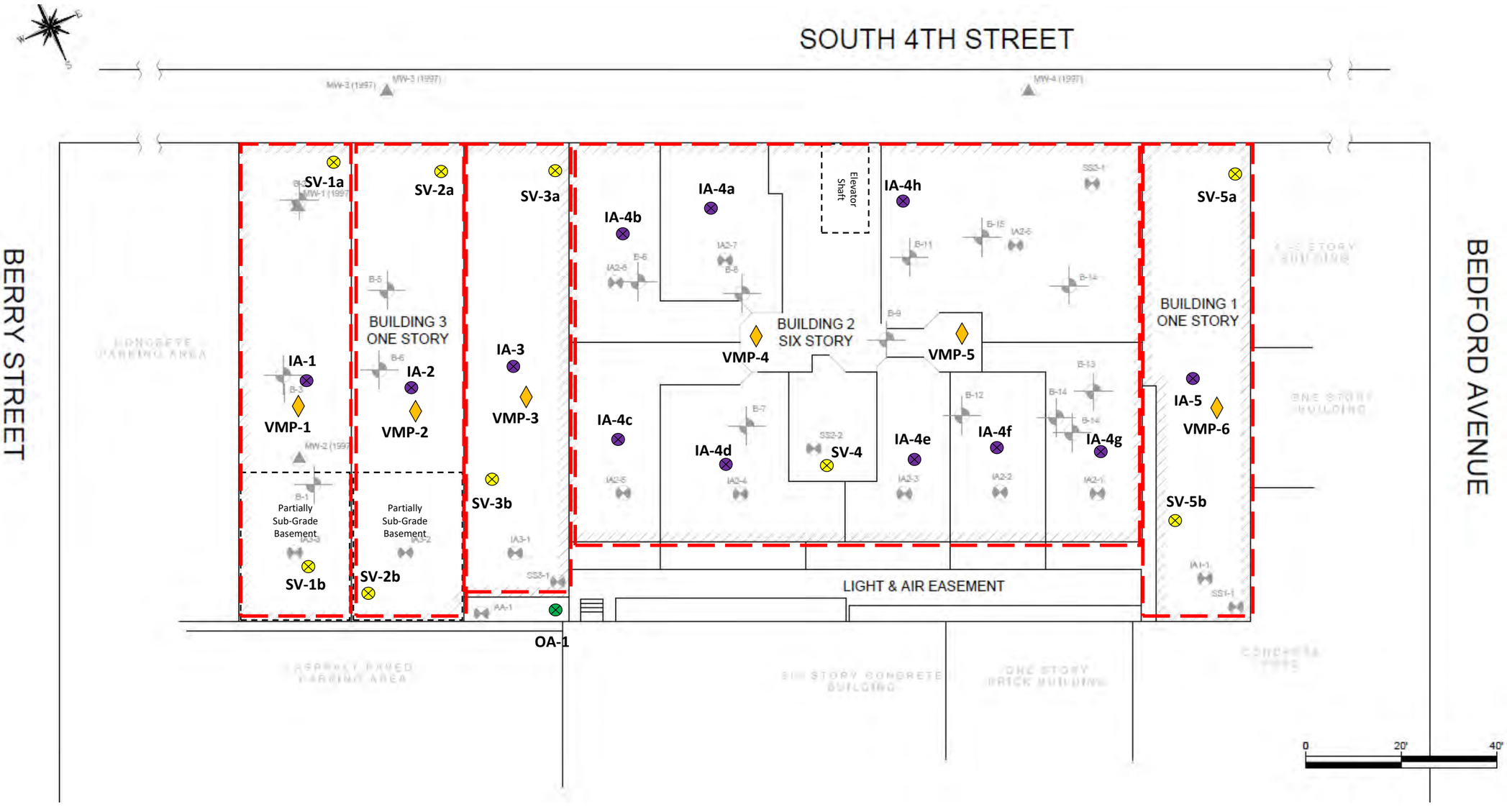

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 20, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#16 - Interim Remedial Measures Progress Report (9/19/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

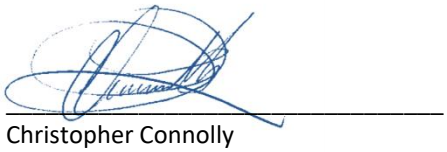
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 19, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 19, 2022

- CG installed suction points SP-20, SP-21, and SP-22 in 104 South 4th Street, and portions of the vertical piping.
- IEC installed vapor monitoring point VMP-6 in the center of 104 South 4th Street.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 104 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

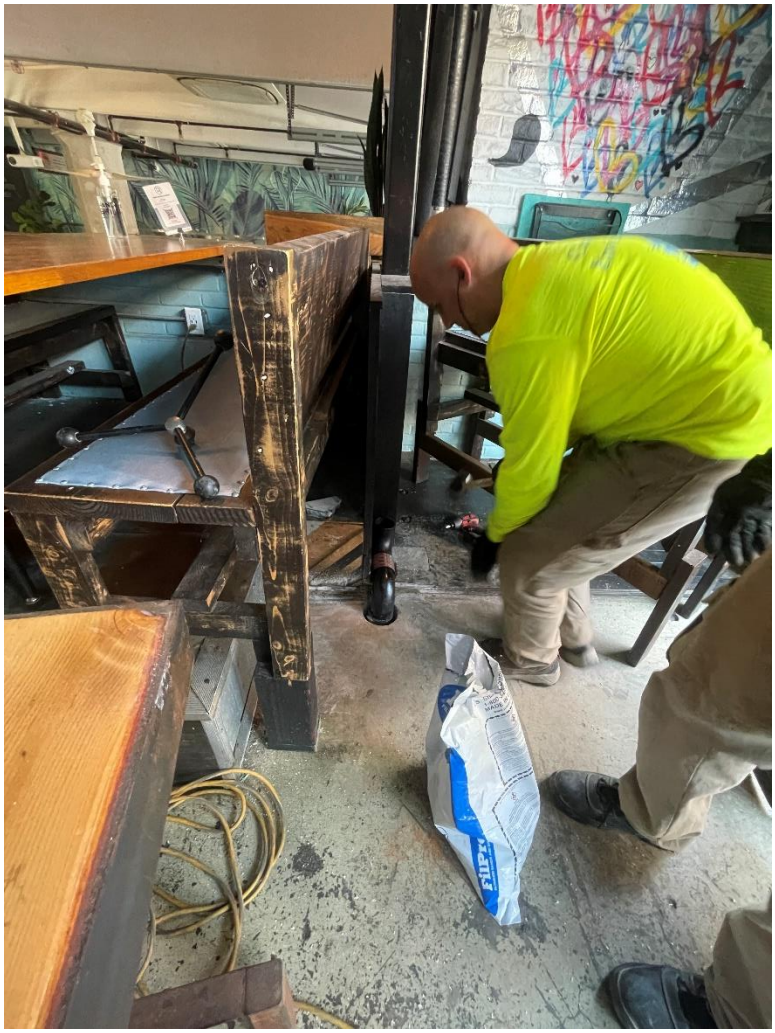


Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

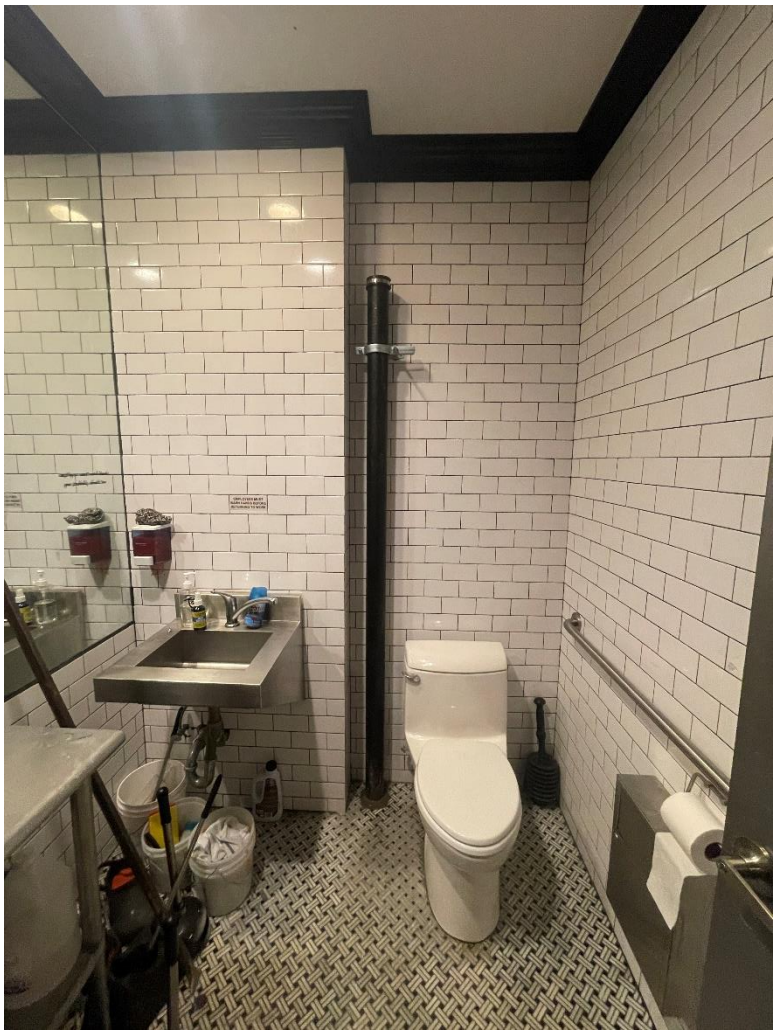
Attachments: Attachment 1 – Photo Log
Attachment 2 - CAMP data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installed vapor monitoring point VMP-6 in 104 South 4th Street



Photograph No. 2: View of installation of suction point SP-20 in 104 South 4th Street

Photograph No. 2: View of installation of suction point SP-22 and vertical piping in 104 South 4th Street



Photograph No. 2: View of installation of suction point SP-21 and vertical piping in 104 South 4th Street

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530143204
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_016	
Test Start Time		9:02:56 AM
Test Start Date		9/19/2022
Test Length [D:H:M]		0:00:13
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.027
Mass Minimum [mg/m3]		0.01
Mass Maximum [mg/m3]		0.048
Mass TWA [mg/m3]		0
Photometric User Cal		1
Flow User Cal		0
Errors	Flow Error	
Number of Samples		13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.039		
120	0.048		
180	0.019		
240	0.019		
300	0.04		
360	0.01		
420	0.041		
480	0.013		
540	0.039		
600	0.019		
660	0.018		
720	0.034		
780	0.011		

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time
592-915111	9/19/22 1:37 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-915111	9/19/22 1:35 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:34 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:33 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-915111	9/19/22 1:31 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:30 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:29 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:28 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-915111	9/19/22 1:13 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:12 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-915111	9/19/22 1:10 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:09 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-915111	9/19/22 1:08 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-915111	9/19/22 12:01 PM	Readings		PID		SC23030505WB	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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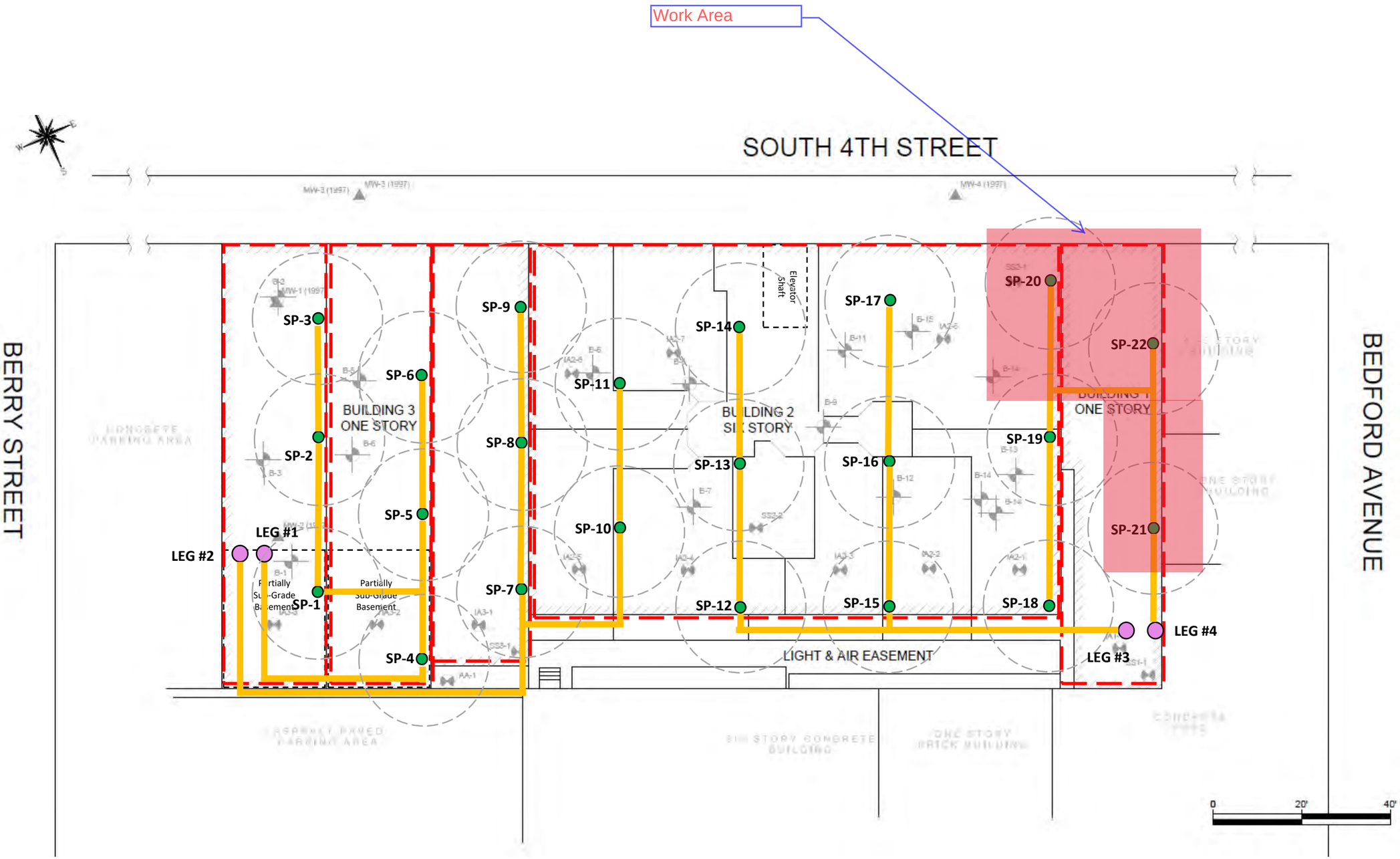

Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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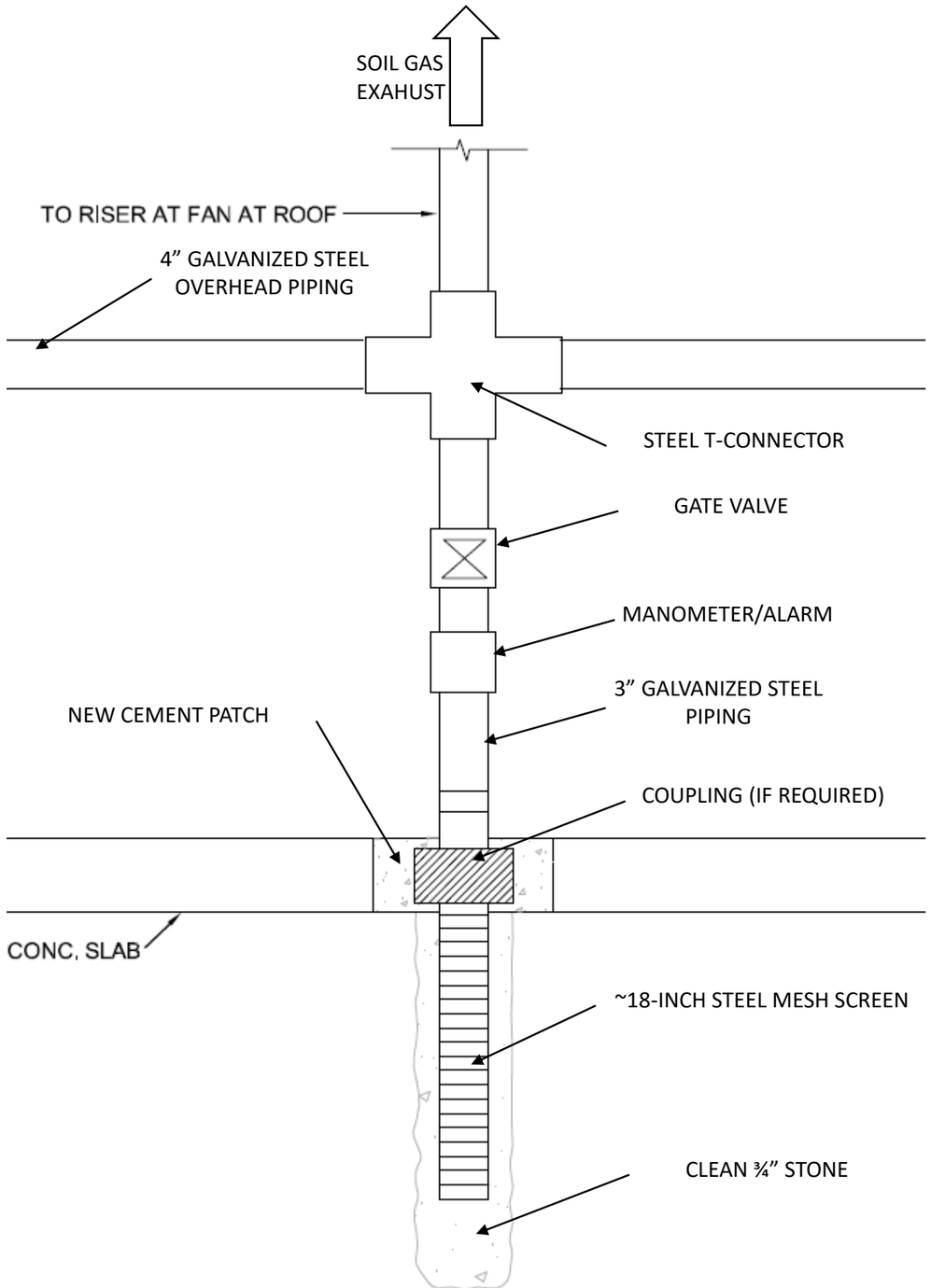
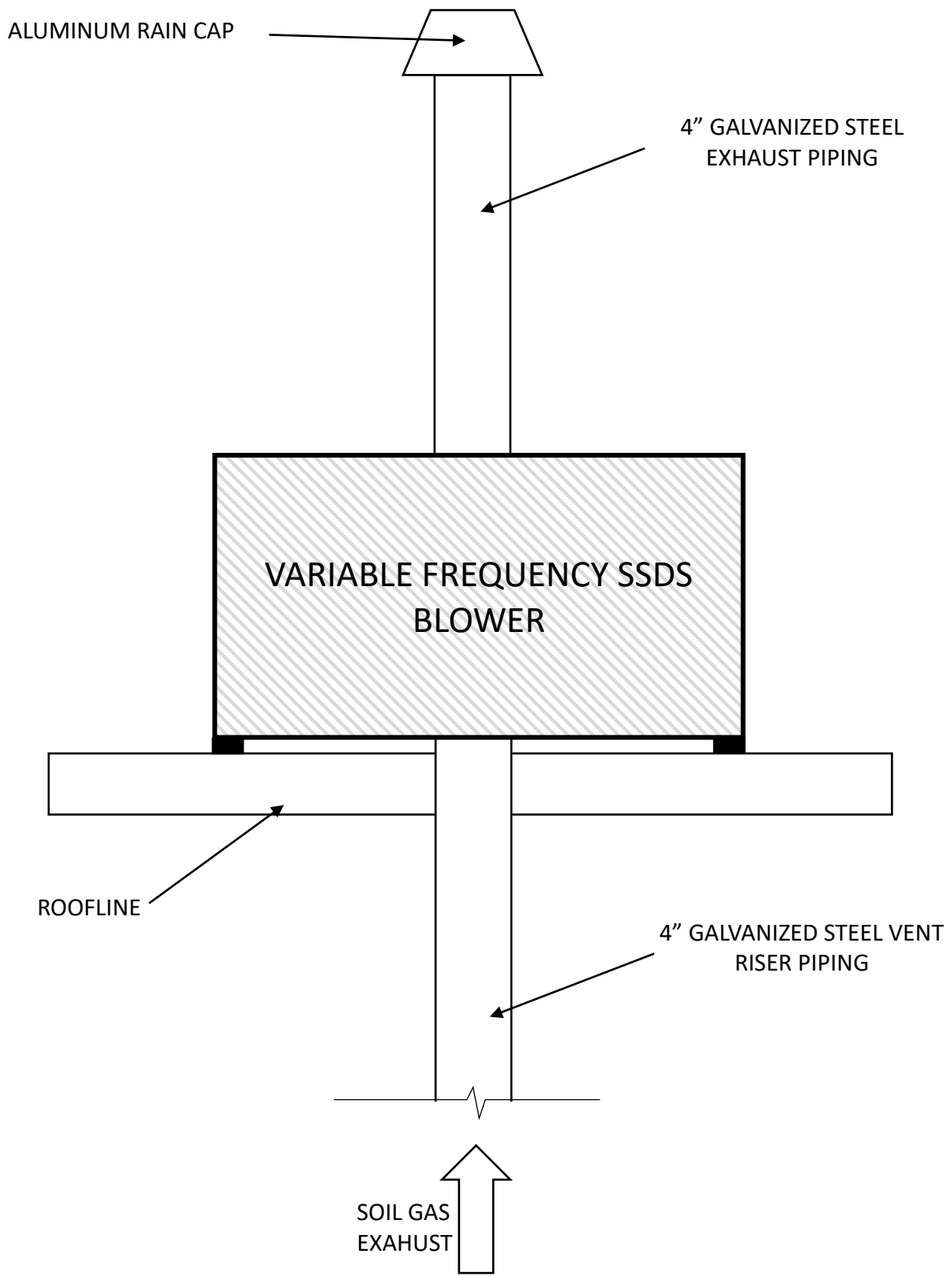
IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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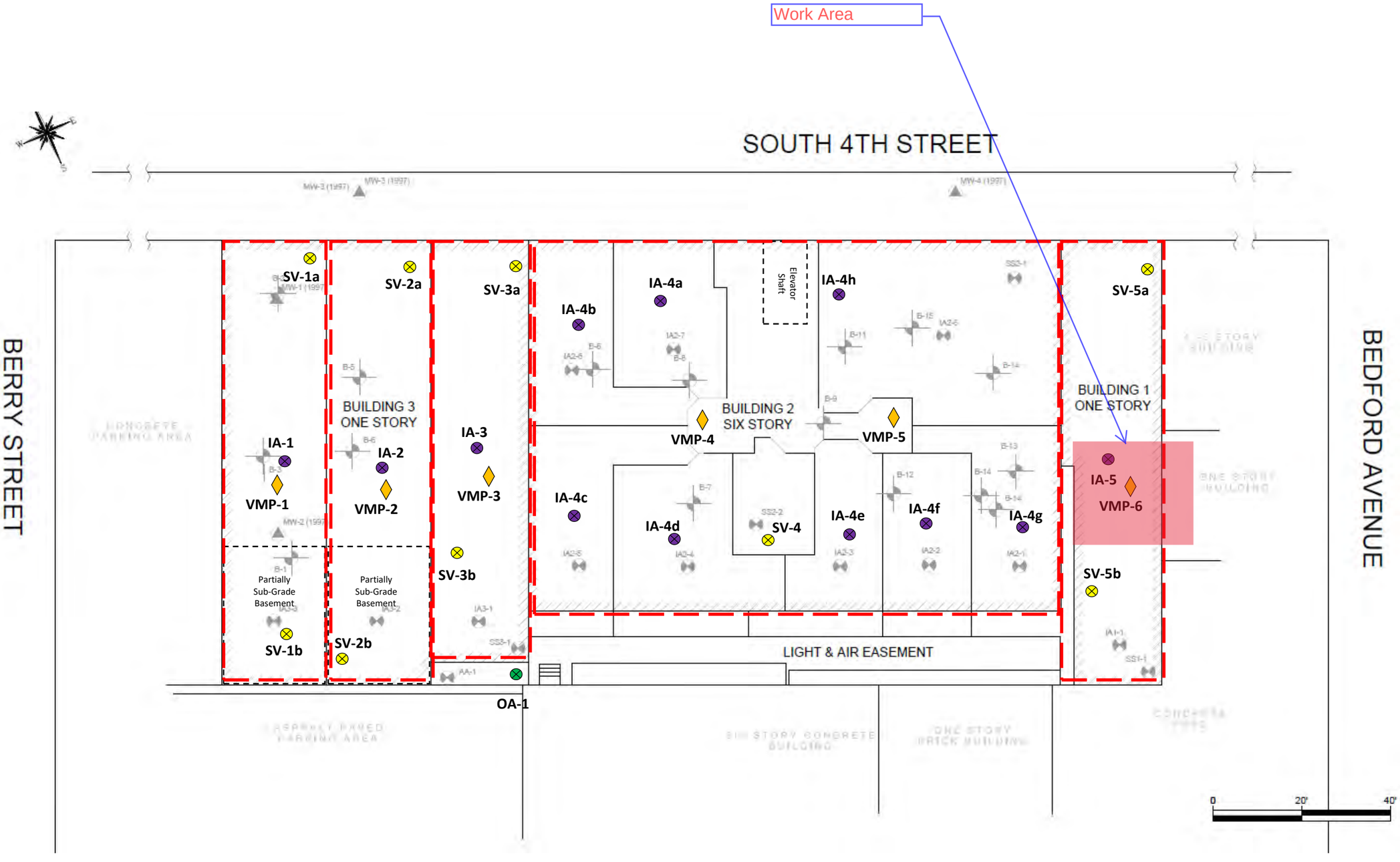

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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welcome to solid ground… *www.impactenvironmental.com*

September 21, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#17 - Interim Remedial Measures Progress Report (9/20/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

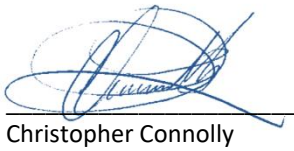
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 20, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 20, 2022

- CG installed vertical and horizontal piping from suction points SP-20, SP-21, and SP-22 in 104 South 4th Street.
- No ground intrusive activities were performed; thus, CAMP was not required.

Planned work for the following day includes installing vertical and horizontal SSDS piping in 104 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

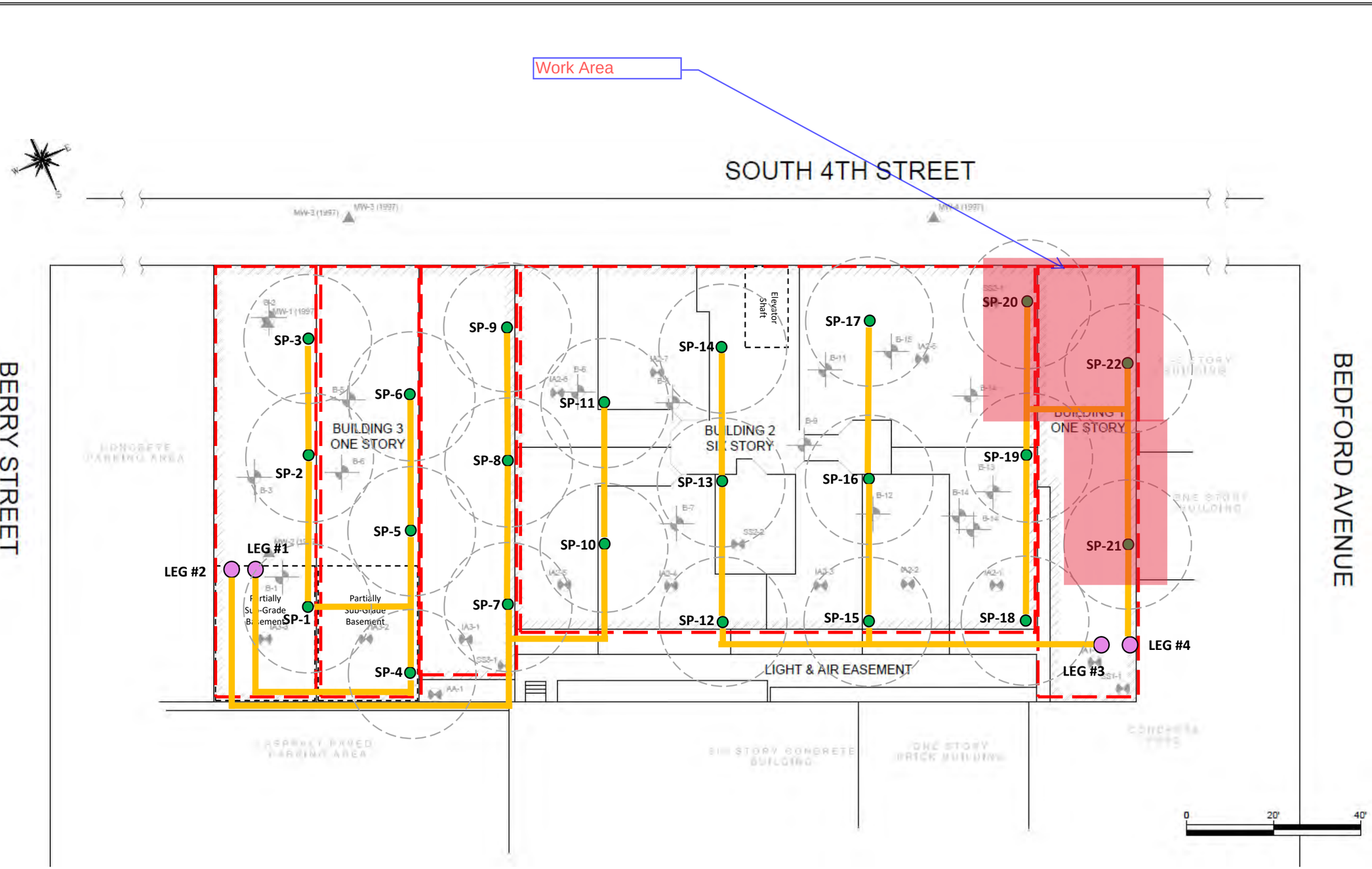
Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of riser piping and valve for SP-22

Photograph No. 2: View of installation of riser piping and valve for SP-21

Photograph No. 3: View of riser piping for SP-20



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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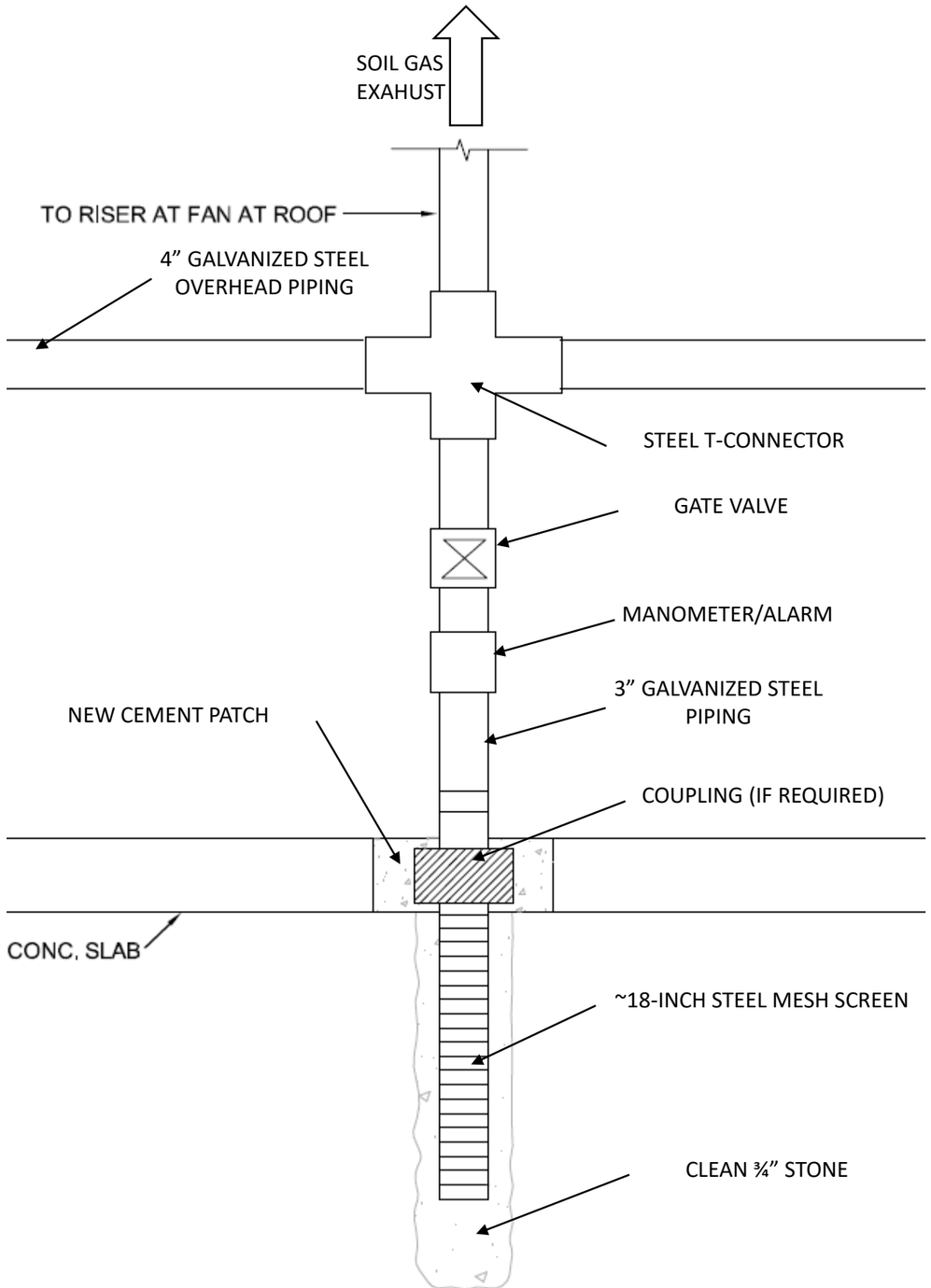
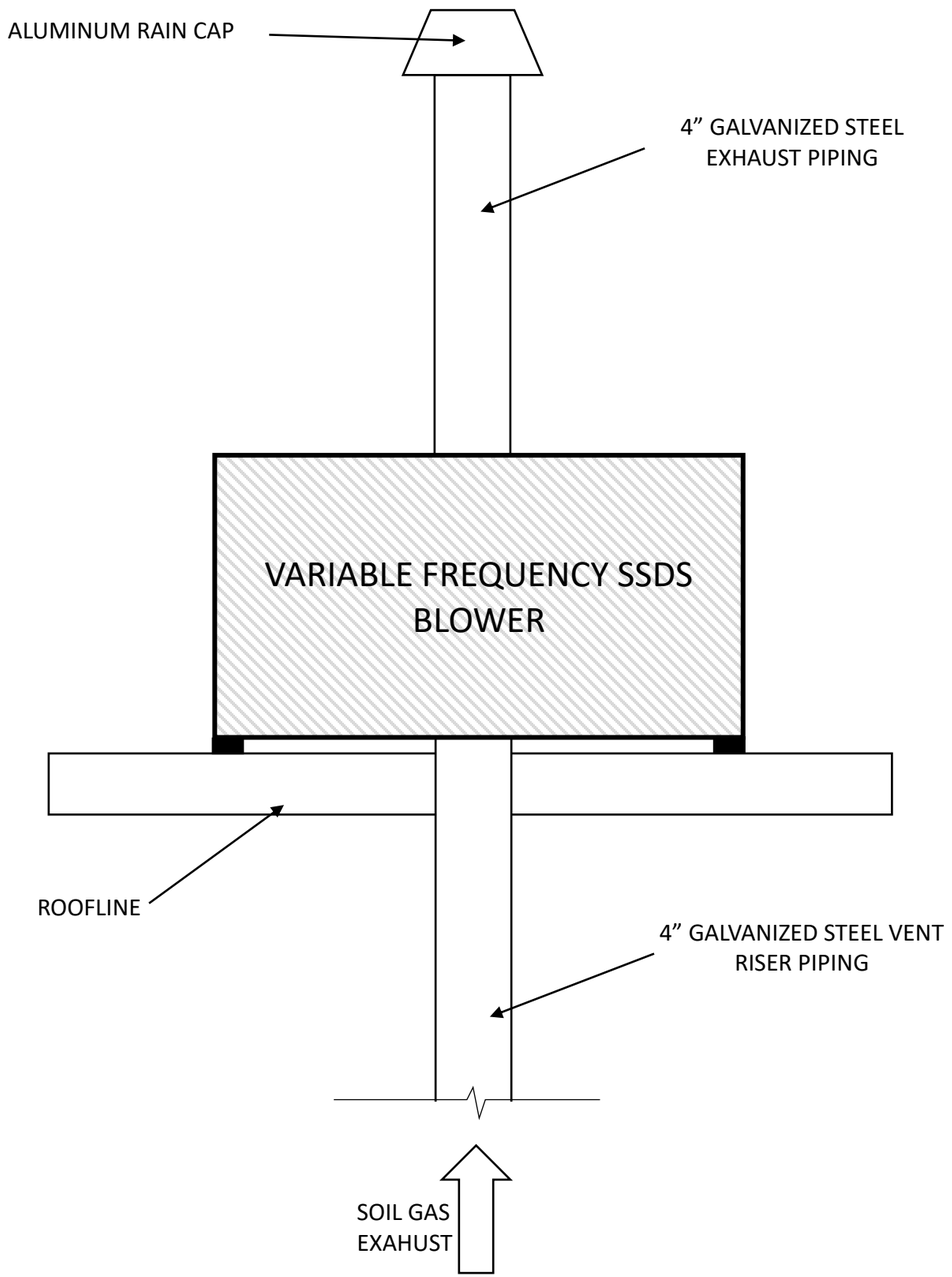


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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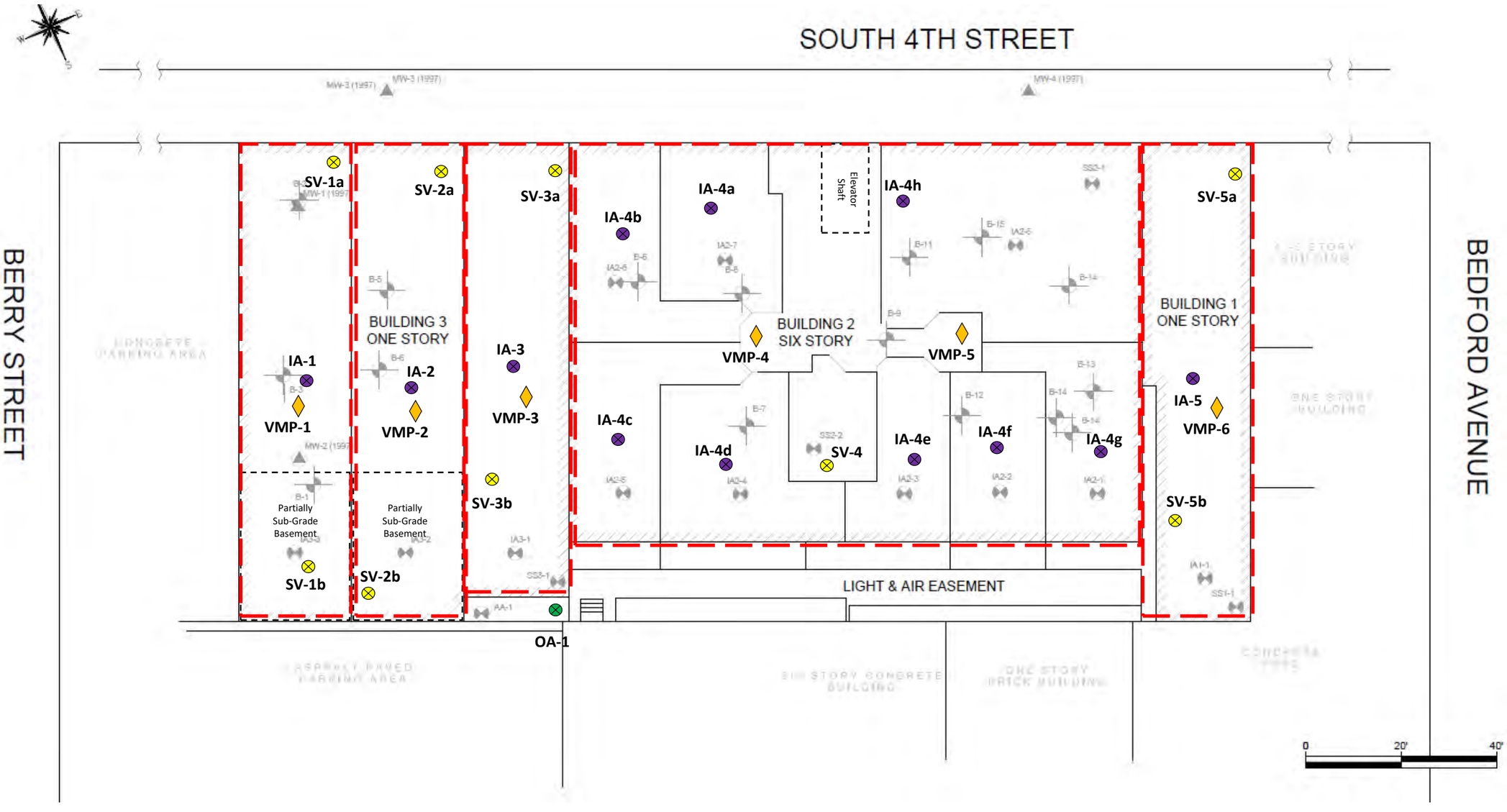

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

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welcome to solid ground… *www.impactenvironmental.com*

September 22, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#18 - Interim Remedial Measures Progress Report (9/21/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 21, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 21, 2022

- CG installed vertical and horizontal piping from suction points SP-20, SP-21, and SP-22 in 104 South 4th Street.
- No ground intrusive activities were performed; thus, CAMP was not required.

Planned work for the following day includes installing suction points in 98b South 4th Street (gym).

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

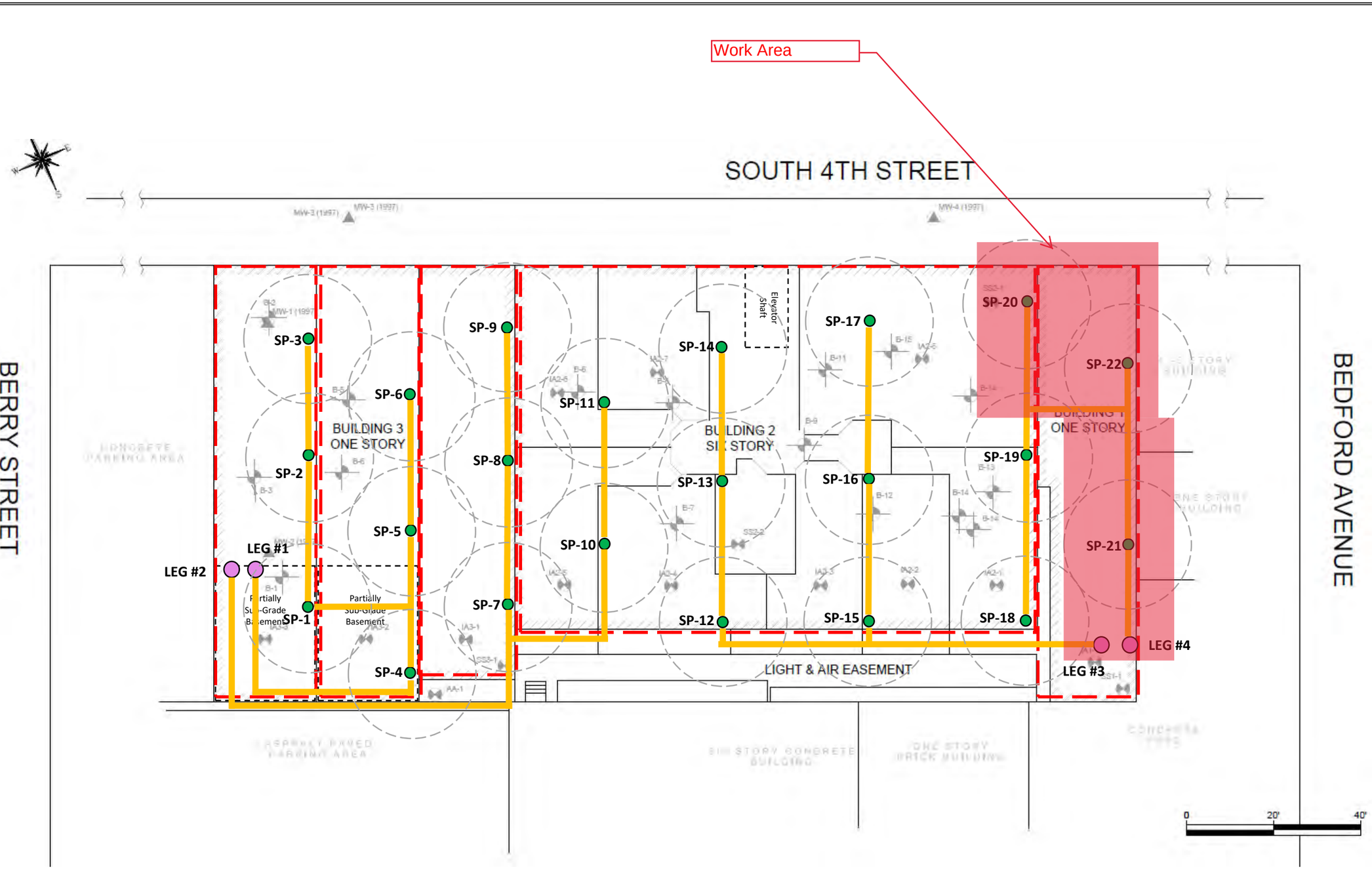
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of riser piping and valve for SP-20

Photograph No. 2: View of installation of horizontal piping for SP-20 to SP-21

Photograph No. 3: View of horizontal piping for SP-21 and SP-22

Photograph No. 4: View of piping exiting the bar onto the rooftop



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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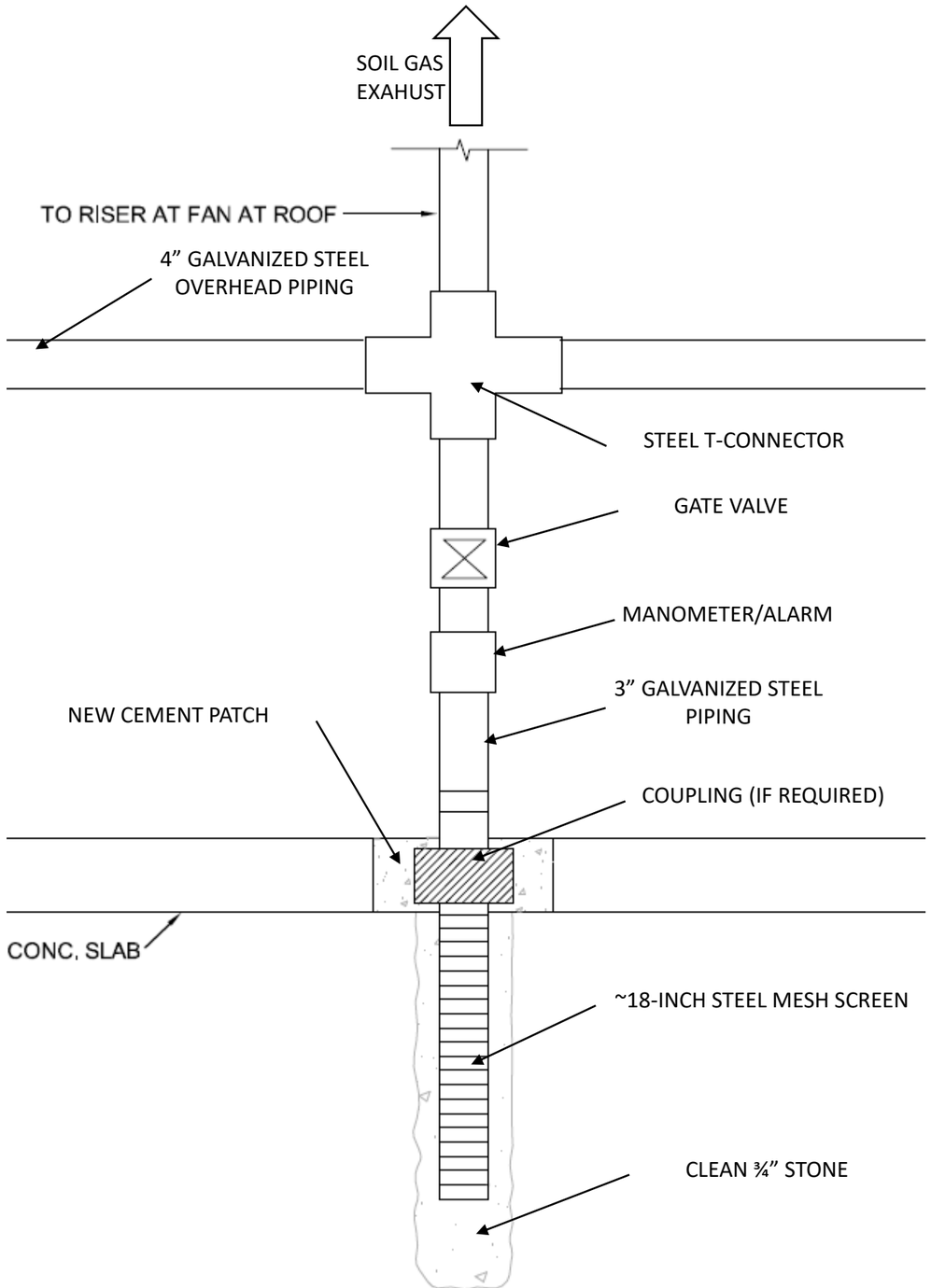
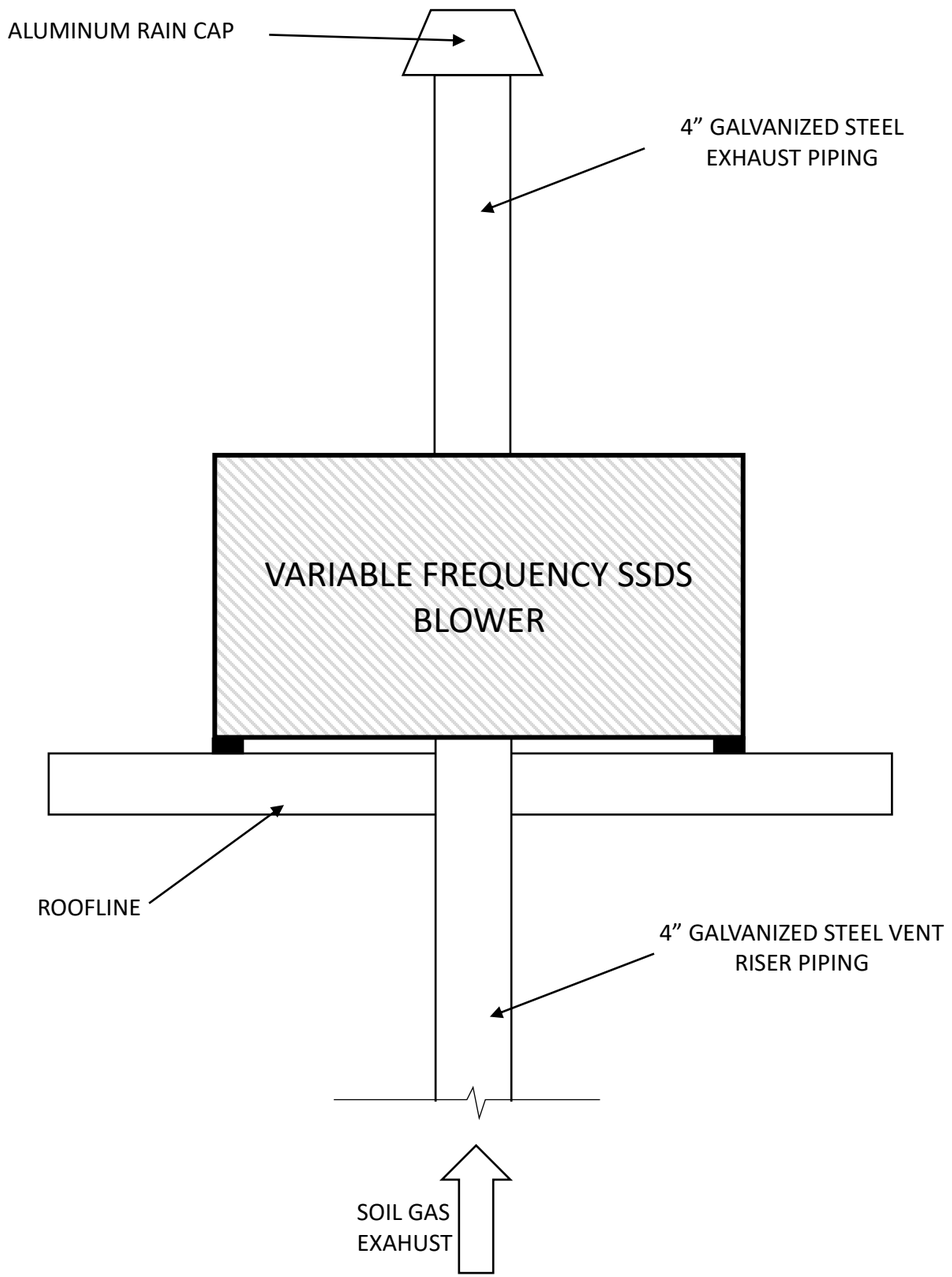


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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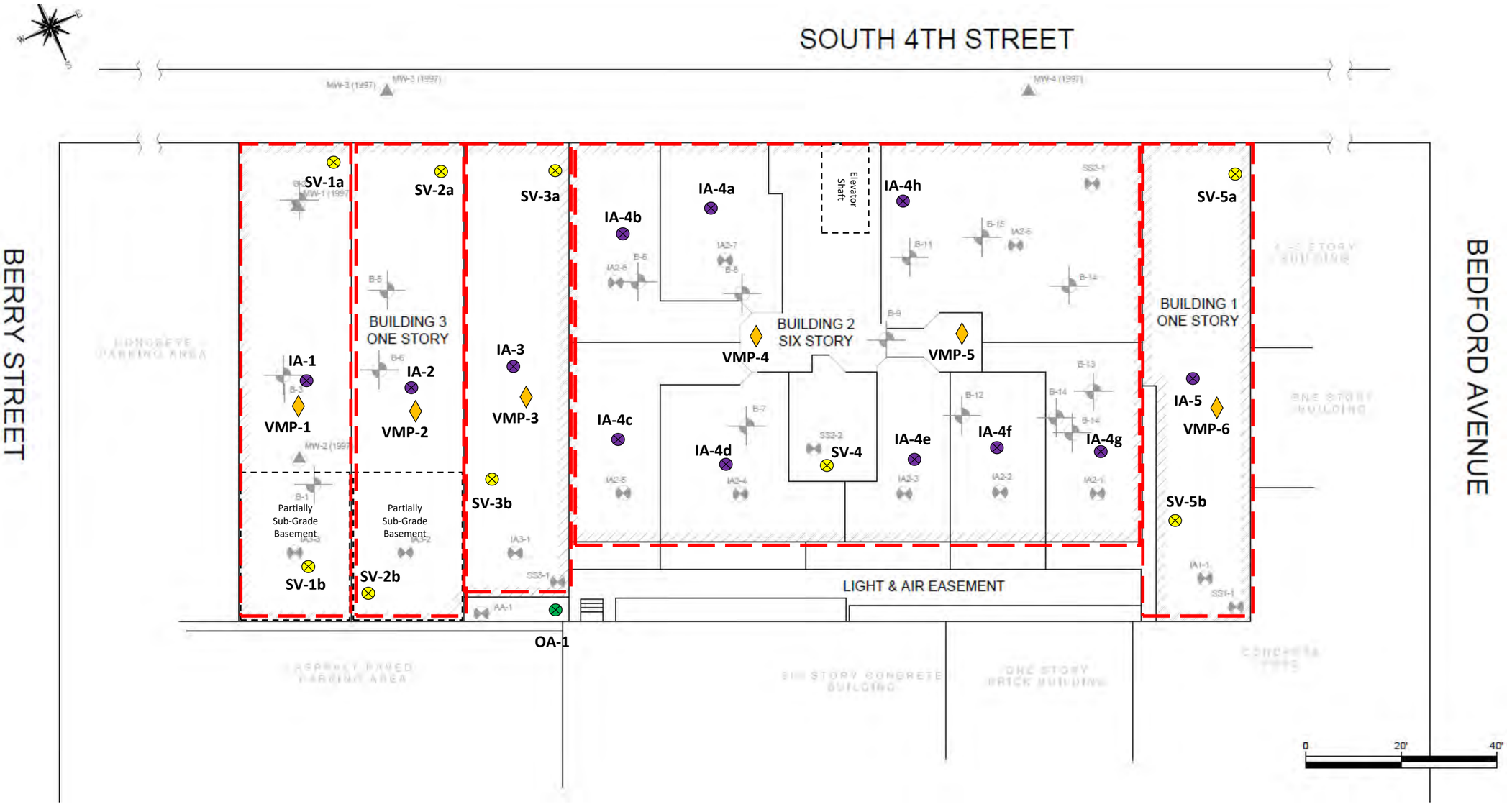
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 23, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#19 - Interim Remedial Measures Progress Report (9/22/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

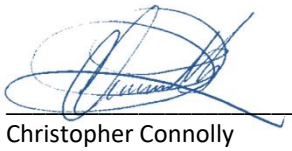
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 22, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 22, 2022

- CG installed suction points SP-6, SP-5, and SP-4 in 98b South 4th Street.
- CG began installing vertical riser piping from each of the three (3) suction points.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note prior to work commencing, the DustTrak and PID apparatus were showing high background readings, despite there being no work or visible dust. The apparatus were re-calibrated, and nominal levels were recorded from thereon in.

Planned work for the following day includes installing horizontal piping in 98b South 4th Street (gym).

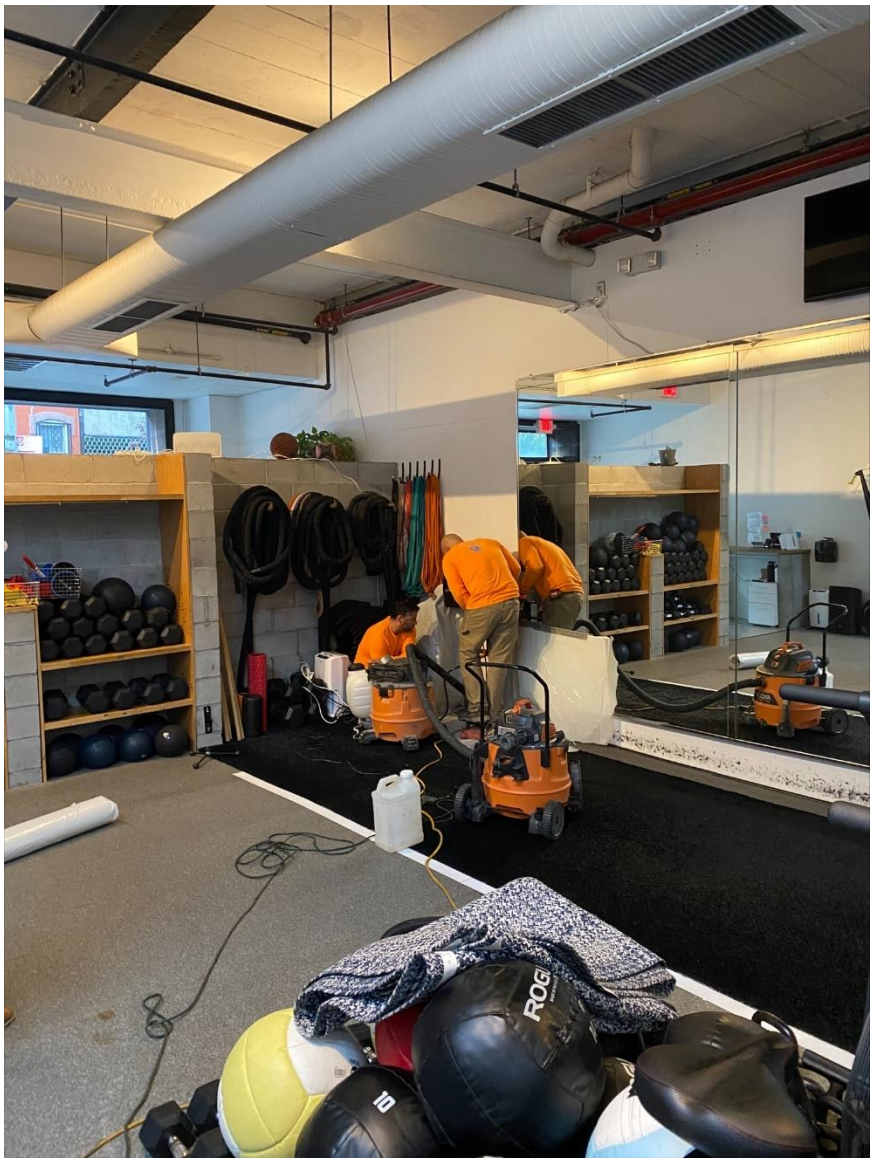
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

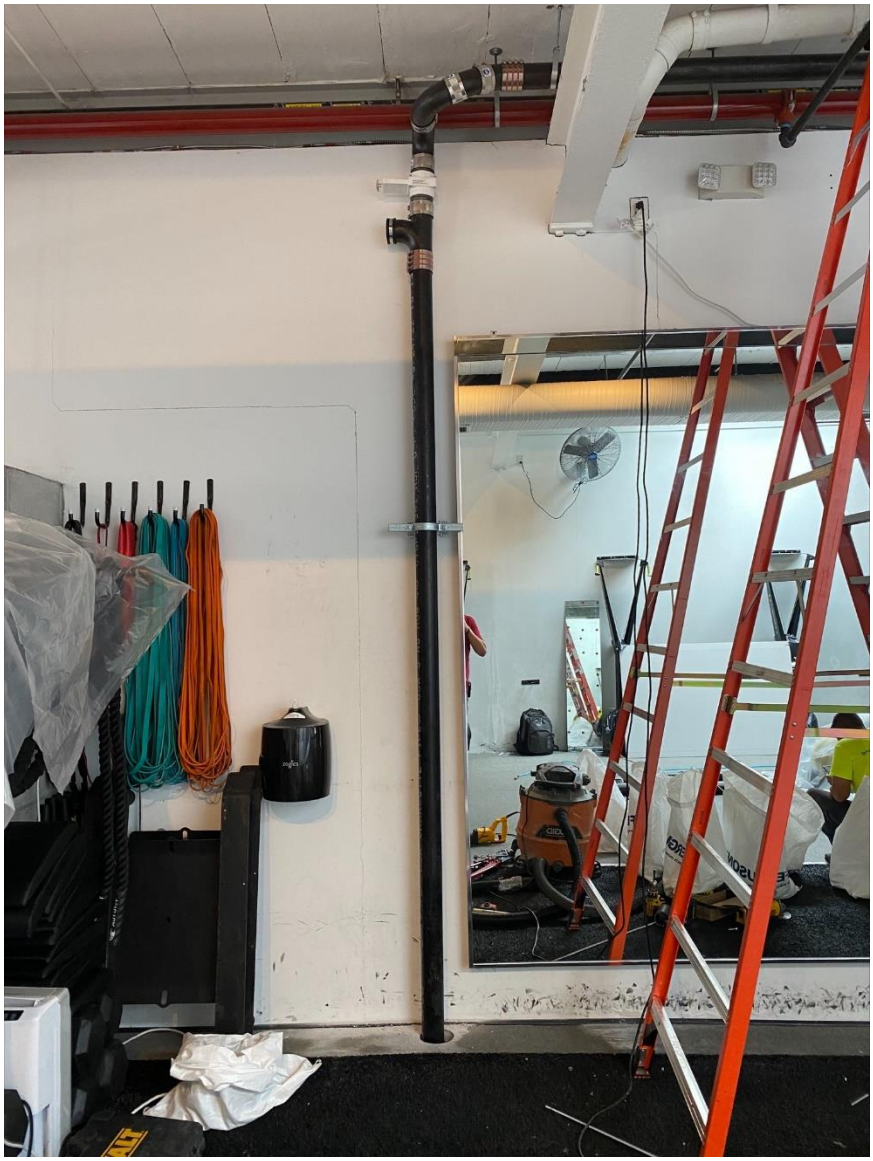
Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map



Photograph No. 1: View of installation of SP-6

Photograph No. 2: View of installation of SP-5

Photograph No. 3: View of installation of SP-4



Photograph No. 4: View of riser piping and valve for SP-6

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530153015
Firmware Version	3.1
Calibration Date	2/22/2022
Test Name	MANUAL_016
Test Start Time	9:22:54 AM
Test Start Date	9/22/2022
Test Length [D:H:M]	0:06:36
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.155
Mass Minimum [mg/m3]	0.017
Mass Maximum [mg/m3]	0.665
Mass TWA [mg/m3]	0.128
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	396

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.631		
120	0.635		
180	0.641		
240	0.635		
300	0.641		
360	0.645		
420	0.64		
480	0.635		
540	0.646		
600	0.649		
660	0.647		
720	0.66		
780	0.657		
840	0.663		
900	0.664		
960	0.663		
1020	0.662		
1080	0.662		
1140	0.665		
1200	0.651		
1260	0.655		
1320	0.651		
1380	0.652		
1440	0.646		
1500	0.621		
1560	0.597		
1620	0.589		

1680	0.574
1740	0.547
1800	0.55
1860	0.533
1920	0.518
1980	0.492
2040	0.487
2100	0.468
2160	0.463
2220	0.464
2280	0.438
2340	0.427
2400	0.417
2460	0.418
2520	0.415
2580	0.415
2640	0.412
2700	0.409
2760	0.408
2820	0.409
2880	0.402
2940	0.397
3000	0.396
3060	0.405
3120	0.401
3180	0.394
3240	0.39
3300	0.392
3360	0.385
3420	0.379
3480	0.369
3540	0.363
3600	0.366
3660	0.358
3720	0.358
3780	0.355
3840	0.353
3900	0.341
3960	0.342
4020	0.336
4080	0.333
4140	0.326
4200	0.323
4260	0.321
4320	0.31
4380	0.311
4440	0.306

4500	0.302
4560	0.297
4620	0.293
4680	0.285
4740	0.283
4800	0.281
4860	0.274
4920	0.268
4980	0.264
5040	0.26
5100	0.257
5160	0.254
5220	0.25
5280	0.248
5340	0.243
5400	0.24
5460	0.235
5520	0.233
5580	0.23
5640	0.229
5700	0.224
5760	0.218
5820	0.214
5880	0.206
5940	0.195
6000	0.189
6060	0.186
6120	0.18
6180	0.182
6240	0.175
6300	0.17
6360	0.166
6420	0.164
6480	0.161
6540	0.157
6600	0.151
6660	0.16
6720	0.158
6780	0.154
6840	0.148
6900	0.151
6960	0.143
7020	0.145
7080	0.138
7140	0.139
7200	0.137
7260	0.133

7320	0.137
7380	0.144
7440	0.152
7500	0.147
7560	0.181
7620	0.182
7680	0.159
7740	0.174
7800	0.147
7860	0.142
7920	0.15
7980	0.142
8040	0.142
8100	0.142
8160	0.133
8220	0.126
8280	0.133
8340	0.129
8400	0.124
8460	0.121
8520	0.114
8580	0.113
8640	0.11
8700	0.105
8760	0.098
8820	0.111
8880	0.104
8940	0.098
9000	0.096
9060	0.095
9120	0.097
9180	0.094
9240	0.09
9300	0.113
9360	0.093
9420	0.097
9480	0.103
9540	0.115
9600	0.131
9660	0.11
9720	0.099
9780	0.109
9840	0.096
9900	0.093
9960	0.088
10020	0.089
10080	0.085

10140	0.087
10200	0.087
10260	0.093
10320	0.085
10380	0.085
10440	0.088
10500	0.087
10560	0.079
10620	0.073
10680	0.071
10740	0.073
10800	0.071
10860	0.065
10920	0.063
10980	0.058
11040	0.057
11100	0.053
11160	0.051
11220	0.048
11280	0.05
11340	0.048
11400	0.053
11460	0.051
11520	0.053
11580	0.05
11640	0.053
11700	0.05
11760	0.047
11820	0.046
11880	0.048
11940	0.046
12000	0.04
12060	0.043
12120	0.033
12180	0.033
12240	0.037
12300	0.035
12360	0.034
12420	0.031
12480	0.034
12540	0.035
12600	0.031
12660	0.032
12720	0.033
12780	0.026
12840	0.028
12900	0.035

12960	0.031
13020	0.029
13080	0.027
13140	0.029
13200	0.03
13260	0.025
13320	0.027
13380	0.028
13440	0.03
13500	0.032
13560	0.035
13620	0.027
13680	0.027
13740	0.032
13800	0.026
13860	0.024
13920	0.025
13980	0.022
14040	0.023
14100	0.024
14160	0.025
14220	0.03
14280	0.033
14340	0.029
14400	0.021
14460	0.024
14520	0.026
14580	0.024
14640	0.026
14700	0.02
14760	0.019
14820	0.022
14880	0.019
14940	0.018
15000	0.017
15060	0.028
15120	0.035
15180	0.041
15240	0.041
15300	0.039
15360	0.042
15420	0.039
15480	0.035
15540	0.033
15600	0.034
15660	0.038
15720	0.033

15780	0.034
15840	0.034
15900	0.029
15960	0.026
16020	0.03
16080	0.031
16140	0.033
16200	0.029
16260	0.031
16320	0.03
16380	0.024
16440	0.029
16500	0.02
16560	0.023
16620	0.022
16680	0.022
16740	0.023
16800	0.027
16860	0.027
16920	0.026
16980	0.023
17040	0.022
17100	0.026
17160	0.024
17220	0.024
17280	0.03
17340	0.034
17400	0.028
17460	0.028
17520	0.03
17580	0.028
17640	0.037
17700	0.031
17760	0.03
17820	0.032
17880	0.035
17940	0.034
18000	0.032
18060	0.029
18120	0.032
18180	0.026
18240	0.035
18300	0.035
18360	0.033
18420	0.028
18480	0.029
18540	0.03

18600	0.035
18660	0.032
18720	0.028
18780	0.036
18840	0.05
18900	0.045
18960	0.063
19020	0.035
19080	0.027
19140	0.028
19200	0.026
19260	0.022
19320	0.029
19380	0.028
19440	0.039
19500	0.036
19560	0.04
19620	0.037
19680	0.05
19740	0.095
19800	0.075
19860	0.091
19920	0.074
19980	0.057
20040	0.054
20100	0.05
20160	0.05
20220	0.048
20280	0.044
20340	0.043
20400	0.039
20460	0.034
20520	0.036
20580	0.035
20640	0.035
20700	0.03
20760	0.03
20820	0.028
20880	0.04
20940	0.047
21000	0.036
21060	0.034
21120	0.029
21180	0.032
21240	0.039
21300	0.035
21360	0.033

21420	0.035
21480	0.033
21540	0.035
21600	0.037
21660	0.037
21720	0.045
21780	0.063
21840	0.056
21900	0.055
21960	0.049
22020	0.05
22080	0.052
22140	0.061
22200	0.079
22260	0.08
22320	0.084
22380	0.082
22440	0.073
22500	0.061
22560	0.057
22620	0.056
22680	0.051
22740	0.061
22800	0.057
22860	0.047
22920	0.048
22980	0.045
23040	0.049
23100	0.05
23160	0.054
23220	0.051
23280	0.052
23340	0.055
23400	0.062
23460	0.059
23520	0.063
23580	0.063
23640	0.064
23700	0.065
23760	0.064

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Readine	Sensor 1 Maximum Readine	Sensor 1 Minimum Readine	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-908437	9/22/2022 3:58:10 PM	Readings		PID		SC2303023995	Normal	3.9	3.8	4.1	3.5	3.8	0.8																					
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592-908437	9/22/2022 3:49:10 PM	Readings		PID		SC2303023995	Normal	2.8	3.3	3.8	2.5	3.5	0.7																					
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592-908437	9/22/2022 3:36:10 PM	Readings		PID		SC2303023995	Normal	4.1	3.6	4.3	3.2	4.1	0.6																					
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592-908437	9/22/2022 3:11:10 PM	Readings		PID		SC2303023995	Normal	2.3	2.6	2.7	2.3	3.0	0.4																					
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592-908437	9/22/2022 3:09:10 PM	Readings		PID		SC2303023995	Normal	2.6	2.7	2.9	2.5	3.0	0.4																					
592-908437	9/22/2022 3:08:10 PM	Readings		PID		SC2303023995	Normal	2.7	2.6	2.7	2.4	3.1	0.4																					
592-908437	9/22/2022 3:07:10 PM	Readings		PID		SC2303023995	Normal	2.5	2.6	2.8	2.4	3.2	0.4																					
592-908437	9/22/2022 3:06:10 PM	Readings		PID		SC2303023995	Normal	2.7	2.7	2.8	2.7	3.2	0.4																					
592-908437	9/22/2022 3:05:10 PM	Readings		PID		SC2303023995	Normal	2.9	2.9	3.8	2.6	3.2	0.4																					
592-908437	9/22/2022 3:04:10 PM	Readings		PID		SC2303023995	Normal	2.8	2.6	2.8	2.4	3.2	0.4																					
592-908437	9/22/2022 3:03:10 PM	Readings		PID		SC2303023995	Normal	2.6	2.7	2.9	2.4	3.2	0.4																					
592-908437	9/22/2022 3:02:10 PM	Readings		PID		SC2303023995	Normal	2.9	3.0	3.4	2.8	3.2	0.4																					
592-908437	9/22/2022 3:01:10 PM	Readings		PID		SC2303023995	Normal	2.9	3.0	3.5	2.6	3.2	0.4																					
592-908437	9/22/2022 3:00:10 PM	Readings		PID		SC2303023995	Normal	3.5	3.1	3.6	2.7	3.1	0.4																					
592-908437	9/22/2022 2:59:10 PM	Readings		PID		SC2303023995	Normal	2.7	2.9	3.1	2.6	3.0	0.4																					
592-908437	9/22/2022 2:58:10 PM	Readings		PID		SC2303023995	Normal	2.5	2.9	3.2	2.4	2.9	0.3																					
592-908437	9/22/2022 2:57:10 PM	Readings		PID		SC2303023995	Normal	3.0	3.2	3.5	3.0	2.8	0.3																					
592-908437	9/22/2022 2:56:10 PM	Readings		PID		SC2303023995	Normal	3.2	3.2	3.4	2.8	2.7	0.3																					
592-908437	9/22/2022 2:55:10 PM	Readings		PID		SC2303023995	Normal	2.9	2.9	3.2	2.6	2.5	0.3																					
592-908437	9/22/2022 2:54:10 PM	Readings		PID		SC2303023995	Normal	3.2	3.6	4.3	3.0	2.4	0.3																					
592-908437	9/22/2022 2:53:10 PM	Readings		PID		SC2303023995	Normal	4.0	3.3	4.0	3.1	2.3	0.3																					
592-908437	9/22/2022 2:52:10 PM	Readings		PID		SC2303023995	Normal	3.2	3.1	3.3	2.8	2.1	0.3																					
592-908437	9/22/2022 2:51:10 PM	Readings		PID		SC2303023995	Normal	3.0	3.1	3.2	2.9	1.9	0.3																					
592-908437	9/22/2022 2:50:10 PM	Readings		PID		SC2303023995	Normal	3.0	2.9	3.0	2.8	1.7	0.3																					
592-908437	9/22/2022 2:49:10 PM	Readings		PID		SC2303023995	Normal	2.9	2.9	3.2	2.6	1.6	0.3																					
592-908437	9/22/2022 2:48:10 PM	Readings		PID		SC2303023995	Normal	2.9	2.7	3.2	2.6	1.5	0.3																					
592-908437	9/22/2022 2:47:10 PM	Readings		PID		SC2303023995	Normal	2.8	2.4	2.8	2.1	1.3	0.3																					
592-908437	9/22/2022 2:46:10 PM	Readings		PID		SC2303023995	Normal	2.1	2.0	2.2	2.0	1.2	0.3																					
592-908437	9/22/2022 2:45:10 PM	Readings		PID		SC2303023995	Normal	2.0	1.9	2.1	1.7	1.1	0.3																					
592-908437	9/22/2022 2:44:10 PM	Readings		PID		SC2303023995	Normal	1.7	1.7	1.8	1.5	1.0	0.3																					
592-908437	9/22/2022 2:43:10 PM	Readings		PID		SC2303023995	Normal	1.6	1.2	1.7	0.9	0.9	0.3																					
592-908437	9/22/2022 2:42:10 PM	Readings		PID		SC2303023995	Normal	1.0	1.0	1.0	0.9	0.8	0.3																					
592-908437	9/22/2022 2:41:10 PM	Readings		PID		SC2303023995	Normal	0.9	0.9	0.9	0.9	0.8	0.3																					
592-908437	9/22/2022 2:40:10 PM	Readings		PID		SC2303023995	Normal	0.9	1.0	1.1	0.9	0.7	0.3																					
592-908437	9/22/2022 2:39:10 PM	Readings		PID		SC2303023995	Normal	1.1	1.0	1.1	0.9	0.7	0.3																					
592-908437	9/22/2022 2:38:10 PM	Readings		PID		SC2303023995	Normal	0.9	1.0	1.0	0.8	0.7	0.2																					
592-908437	9/22/2022 2:37:10 PM	Readings		PID		SC2303023995	Normal	0.8	0.9	1.0	0.7	0.6	0.2																					
592-908437	9/22/2022 2:36:10 PM	Readings		PID		SC2303023995	Normal	0.7	0.7	0.8	0.7	0.6	0.2																					
592-908437	9/22/2022 2:35:10 PM	Readings		PID		SC2303023995	Normal	0.8	0.8	0.8	0.7	0.6	0.2																					
592-908437	9/22/2022 2:34:10 PM	Readings		PID		SC2303023995	Normal	0.8	0.8	0.9	0.7	0.6	0.2																					
592-908437	9/22/2022 2:33:10 PM	Readings		PID		SC2303023995	Normal	0.8	0.7	0.8	0.6	0.6	0.2																					
592-908437	9/22/2022 2:32:10 PM	Readings		PID		SC2303023995	Normal	0.7	0.6	0.7	0.6	0.6	0.2																					
592-908437	9/22/2022 2:31:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.5	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 2:30:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 2:29:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 2:28:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 2:27:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.6	0.5	0.6	0.2																					
592-908437	9/22/2022 2:26:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:25:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:24:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:23:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:22:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:21:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:20:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:19:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:18:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:17:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	9/22/2022 2:16:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.6	0.6	0.5	0.6	0.2																					
592-908437	9/22/2022 2:15:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.6	0.6	0.5	0.6	0.2																					
592-908437	9/22/2022 2:14:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:13:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:12:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:11:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:10:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:09:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:08:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.7	0.7	0.6	0.6	0.2																					
592-908437	9/22/2022 2:07:10 PM	Readings		PID		SC2303023995	Normal	0.7	0.7	0.7	0.6	0.6	0.2																					
592-908437	9/22/2022 2:06:10 PM	Readings		PID		SC2303023995	Normal	0.7	0.7	0.7	0.6	0.6	0.2																					
592-908437	9/22/2022 2:05:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:04:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:03:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:02:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	9/22/2022 2:01:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 2:00:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:59:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.5	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:58:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.6	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:57:10 PM	Readings		PID		SC2303023995	Normal	0.6	0.6	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:56:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 1:55:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:54:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 1:53:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 1:52:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 1:51:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	9/22/2022 1:50:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.6	0.5	0.5	0.2																					
592-908437	9/22/2022 1:49:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.5	0.4	0.2																					
592-908437	9/22/2022 1:48:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:47:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.5	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:46:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.5	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:45:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:44:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:43:10 PM	Readings		PID		SC2303023995	Normal	0.5	0.4	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:42:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.2																					
592-908437	9/22/2022 1:41:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.5	0.4	0.4	0.2																					
592-908437	9/22/2022 1:40:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.2																					
592-908437	9/22/2022 1:39:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.2																					
592-908437	9/22/2022 1:38:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.2																					
592-908437	9/22/2022 1:37:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.4	0.4	0.4	0.3	0.2																					
592-908437	9/22/2022 1:36:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.3	0.4	0.3	0.3	0.2																					
592-908437	9/22/2022 1:35:10 PM	Readings		PID		SC2303023995	Normal	0.3	0.3	0.4	0.3	0.3	0.2																					
592-908437	9/22/2022 1:34:10 PM	Readings		PID		SC2303023995	Normal	0.4	0.3	0.4	0.3	0.3	0.2																					
592-908437	9/22/2022 1:33:10 PM	Readings		PID		SC2303023995	Normal	0.3	0.3	0.4	0.3	0.3	0.2																					

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592-908437	9/22/2022 11:03:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 11:02:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 11:01:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.4	0.3	0.4	0.1
592-908437	9/22/2022 11:00:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:59:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.1
592-908437	9/22/2022 10:58:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.1
592-908437	9/22/2022 10:57:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.4	0.4	0.1
592-908437	9/22/2022 10:56:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:55:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:54:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:53:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:52:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:51:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:50:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/22/2022 10:49:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.3	0.1
592-908437	9/22/2022 10:48:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:47:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.4	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:46:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.4	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:45:10 AM	Readings	PID	SC2303023995	Normal	0.4	0.3	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:44:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:43:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:42:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.4	0.3	0.3	0.0
592-908437	9/22/2022 10:41:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:40:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:39:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:38:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:37:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:36:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:35:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:34:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:33:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:32:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:31:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:30:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:29:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:28:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:27:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:26:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:25:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:24:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
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592-908437	9/22/2022 10:22:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:21:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:20:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:19:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:18:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/22/2022 10:17:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-908437	9/22/2022 10:16:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:15:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.3	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:14:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:13:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:12:10 AM	Readings	PID	SC2303023995	Normal	0.3	0.2	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:11:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:10:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:09:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:08:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-908437	9/22/2022 10:07:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:06:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:05:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:04:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:03:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:02:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:01:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 10:00:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:59:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:58:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:57:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:55:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:54:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:53:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:52:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:50:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:49:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:48:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:47:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:46:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:45:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:43:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/22/2022 9:42:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:37:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:35:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:31:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/22/2022 9:29:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.1	0.0
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592-908437	9/22/2022 9:27:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.1	0.0
592-908437	9/22/2022 9:26:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.2	0.1	0.0
592-908437	9/22/2022 9:25:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.1	0.1	0.0
592-908437	9/22/2022 9:24:10 AM	Readings	PID	SC2303023995	Normal	0.2	0.2	0.2	0.1	0.1	0.0
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592-908437	9/22/2022 9:21:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:20:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.2	0.1	0.1	0.0
592-908437	9/22/2022 9:19:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:18:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:17:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:16:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:15:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:14:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:13:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:12:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
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592-908437	9/22/2022 9:09:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:08:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:07:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:06:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:05:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:04:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-908437	9/22/2022 9:03:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.0	0.0
592-908437	9/22/2022 9:02:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.0	0.0
592-908437	9/22/2022 9:01:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.1	0.0	0.0
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592-908437	9/22/2022 8:58:10 AM	Readings	PID	SC2303023995	Normal	0.1	0.1	0.1	0.0	0.0	0.0
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592-908437	9/22/2022 8:53:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.1	0.0	0.0	0.0
592-908437	9/22/2022 8:52:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
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592-908437	9/22/2022 8:49:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.1	0.0	0.0	0.0
592-908437	9/22/2022 8:48:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:47:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
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592-908437	9/22/2022 8:45:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:44:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:43:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:42:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:41:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:40:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:39:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:38:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:37:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-908437	9/22/2022 8:36:10 AM	Readings	PID	SC2303023995	Normal	0.0	0.0	0.0	0.0	0.0	0.0
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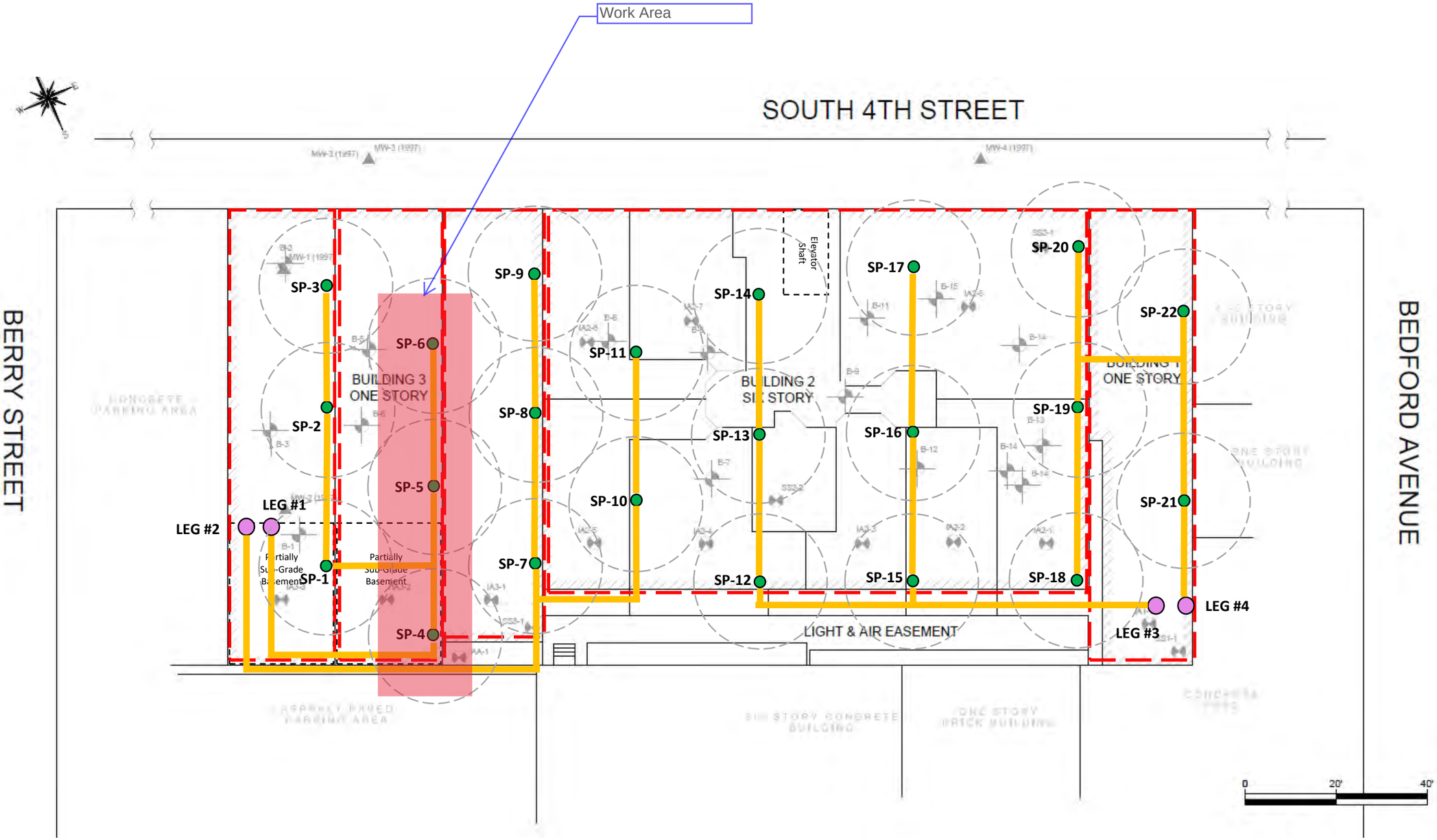
| | | |



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

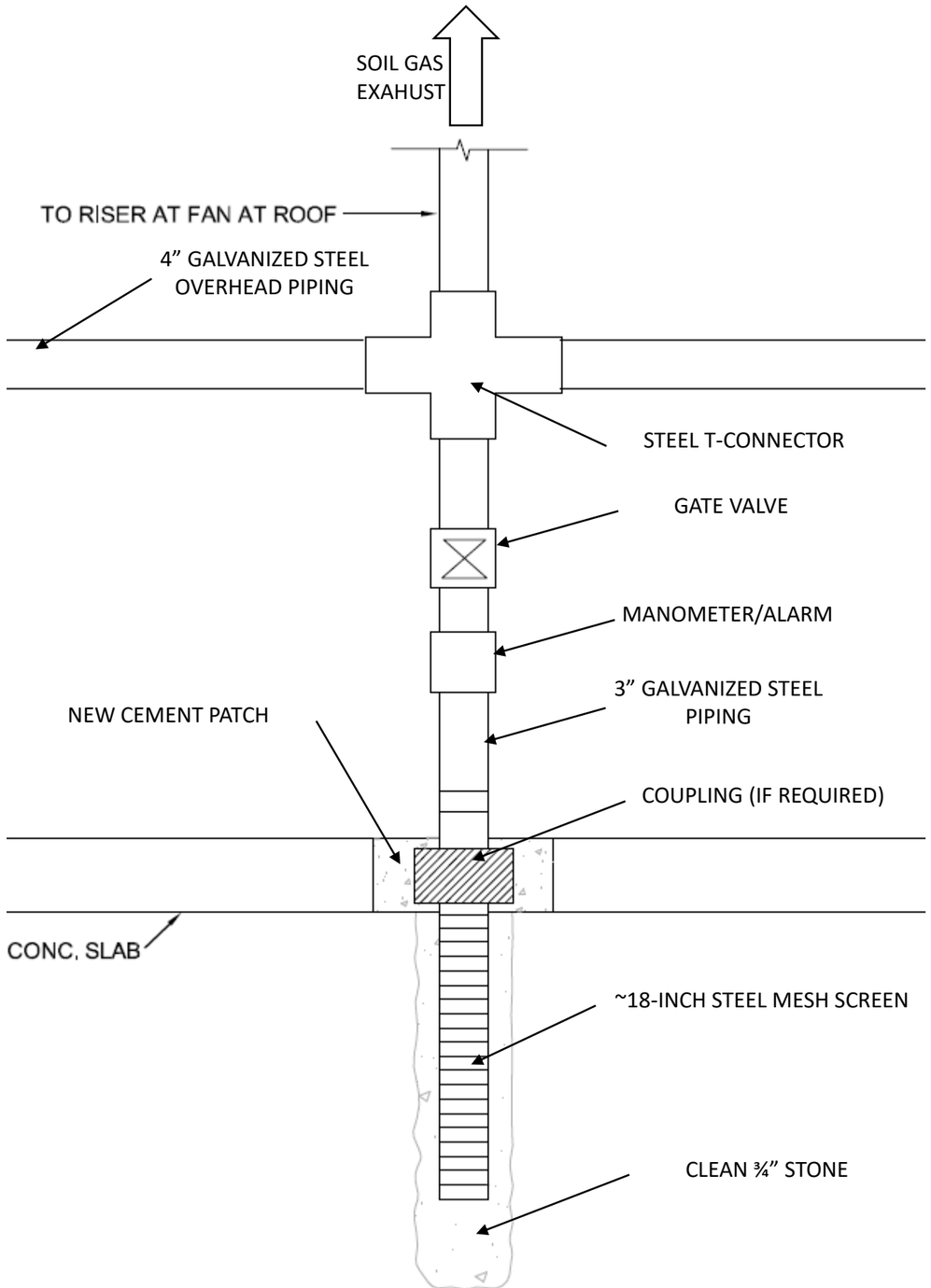
Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

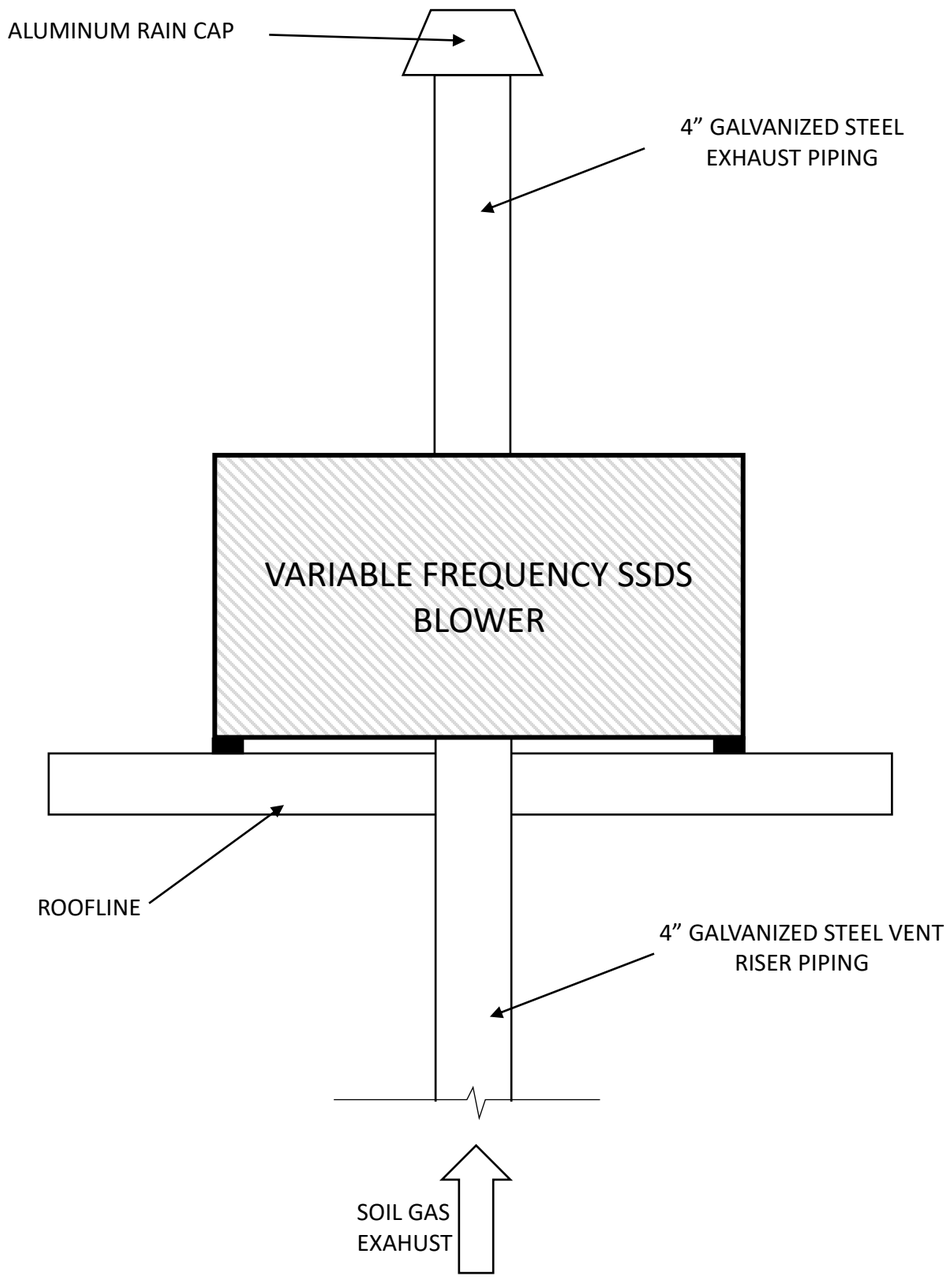
Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
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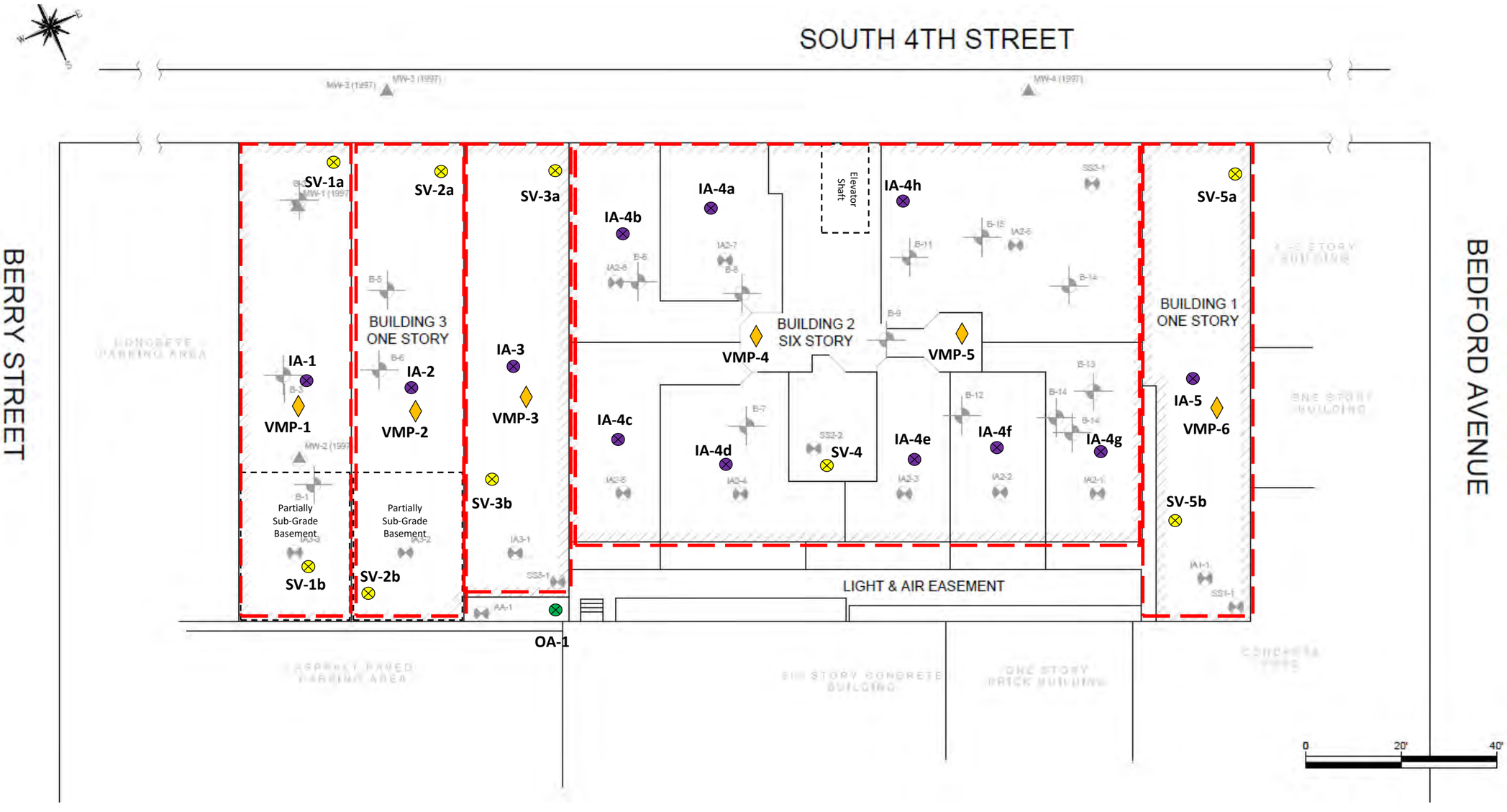

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

September 26, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#20 - Interim Remedial Measures Progress Report (9/23/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 23, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 23, 2022

- CG completed installation of suction point SP-4 in 98b South 4th Street.
- CG continued installing vertical and horizontal piping between suction points SP-4, SP-5, and SP-6.
- IEC conducted pilot testing on suction points SP-4, SP-5, and SP-6. Sufficient negative pressure was encountered in SV-2a, SV-2b, and the newly installed VMP-2.
- CAMP was performed during all ground intrusive activities. CAMP data is presented as an attachment to this report.
- Please note, dust exceedances were detected during extraction of material from SP-4, due to an incorrectly installed filter on the shop vac. Once the alarm was observed, work was halted until dust levels dropped to below the threshold. The filter was replaced, and work resumed. No additional exceedances were noted during continuing work.

Planned work for the following day (Saturday September 24, 2022) includes installing horizontal piping in 98b South 4th Street (gym), and routing piping through second floor office wall to roof.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC

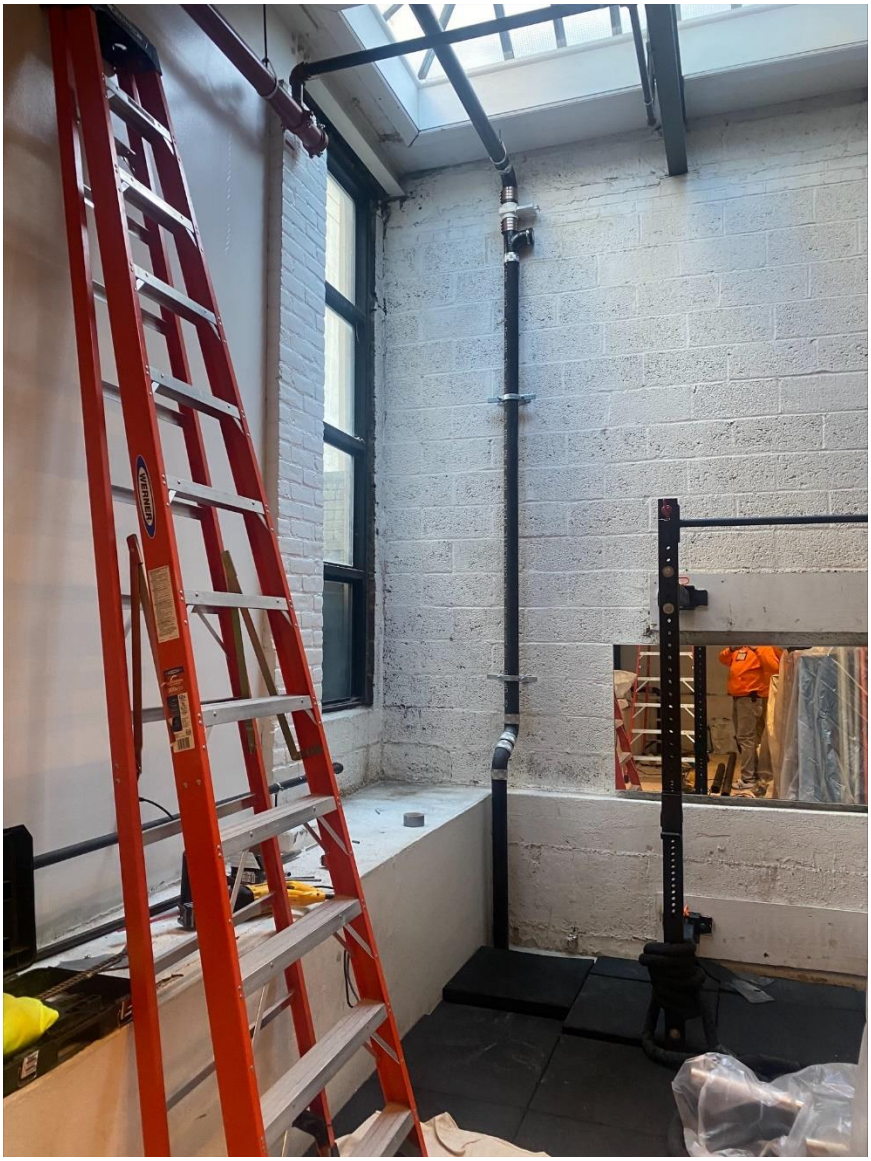
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map

Photograph No. 1: View of suction testing on SP-4

Photograph No. 2: View of CAMP setup proximal to SP-4

Photograph No. 3: View of installation of riser piping and valve for SP-4



Photograph No. 4: View of completed suction point and piping for SP-4

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530153015
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_017	
Test Start Time		8:45:52 AM
Test Start Date		9/23/2022
Test Length [D:H:M]		0:07:02
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.229
Mass Minimum [mg/m3]		0
Mass Maximum [mg/m3]		2.86
Mass TWA [mg/m3]		0.202
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		422

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.02		
120	0.016		
180	0.014		
240	0.014		
300	0.014		
360	0.015		
420	0.012		
480	0.01		
540	0.01		
600	0.01		
660	0.01		
720	0.008		
780	0.006		
840	0.008		
900	0.007		
960	0.006		
1020	0.008		
1080	0.005		
1140	0.004		
1200	0.006		
1260	0.01		
1320	0.017		
1380	0.02		
1440	0.021		
1500	0.019		
1560	0.018		
1620	0.018		

1680	0.015
1740	0.013
1800	0.012
1860	0.016
1920	0.013
1980	0.013
2040	0.013
2100	0.009
2160	0.007
2220	0.007
2280	0.007
2340	0.007
2400	0.005
2460	0.006
2520	0.004
2580	0.006
2640	0.002
2700	0.003
2760	0.003
2820	0.003
2880	0.001
2940	0.001
3000	0.002
3060	0.001
3120	0
3180	0
3240	0.001
3300	0.001
3360	0.001
3420	0.001
3480	0.001
3540	0.001
3600	0.003
3660	0.006
3720	0.005
3780	0.004
3840	0.004
3900	0.002
3960	0.003
4020	0.006
4080	0.006
4140	0.01
4200	0.004
4260	0.003
4320	0.007
4380	0.005
4440	0.003

4500	0.001	
4560	0.002	
4620	0.006	
4680	0.002	
4740	0.003	
4800	0.028	
4860	0.228	
4920	0.535	
4980	0.835	
5040	0.855	
5100	0.936	
5160	1.06	
5220	1.16	
5280	1.28	
5340	1.3	
5400	1.95	1
5460	1.65	1
5520	1.03	
5580	0.975	
5640	0.915	
5700	0.872	
5760	0.742	
5820	0.698	
5880	0.658	
5940	0.603	
6000	0.594	
6060	0.542	
6120	0.509	
6180	0.475	
6240	0.413	
6300	0.273	
6360	0.228	
6420	0.203	
6480	0.221	
6540	0.22	
6600	0.206	
6660	0.172	
6720	0.16	
6780	0.143	
6840	0.134	
6900	0.137	
6960	0.144	
7020	0.126	
7080	0.121	
7140	0.11	
7200	0.115	
7260	0.103	

7320	0.104
7380	0.105
7440	0.095
7500	0.094
7560	0.096
7620	0.09
7680	0.086
7740	0.086
7800	0.08
7860	0.079
7920	0.078
7980	0.076
8040	0.076
8100	0.068
8160	0.063
8220	0.064
8280	0.064
8340	0.064
8400	0.062
8460	0.06
8520	0.055
8580	0.053
8640	0.052
8700	0.054
8760	0.051
8820	0.049
8880	0.048
8940	0.043
9000	0.044
9060	0.044
9120	0.044
9180	0.043
9240	0.041
9300	0.043
9360	0.042
9420	0.039
9480	0.037
9540	0.037
9600	0.037
9660	0.036
9720	0.035
9780	0.036
9840	0.038
9900	0.043
9960	0.042
10020	0.038
10080	0.071

10140	1.05	
10200	2.86	1
10260	2.86	1
10320	2.7	1
10380	2.35	1
10440	2.14	1
10500	2.07	1
10560	2.03	1
10620	1.82	1
10680	1.68	1
10740	1.61	1
10800	1.47	1
10860	1.37	
10920	1.22	
10980	1.17	
11040	1.14	
11100	1.01	
11160	0.976	
11220	0.854	
11280	0.813	
11340	0.782	
11400	0.759	
11460	0.741	
11520	0.684	
11580	0.656	
11640	0.623	
11700	0.548	
11760	0.537	
11820	0.478	
11880	0.459	
11940	0.464	
12000	0.415	
12060	0.38	
12120	0.365	
12180	0.334	
12240	0.344	
12300	0.309	
12360	0.298	
12420	0.289	
12480	0.277	
12540	0.261	
12600	0.242	
12660	0.227	
12720	0.219	
12780	0.22	
12840	0.201	
12900	0.193	

12960	0.207
13020	0.176
13080	0.165
13140	0.178
13200	0.164
13260	0.149
13320	0.15
13380	0.136
13440	0.134
13500	0.132
13560	0.127
13620	0.125
13680	0.129
13740	0.114
13800	0.113
13860	0.106
13920	0.104
13980	0.102
14040	0.099
14100	0.097
14160	0.104
14220	0.104
14280	0.103
14340	0.105
14400	0.101
14460	0.111
14520	0.11
14580	0.093
14640	0.09
14700	0.084
14760	0.093
14820	0.081
14880	0.083
14940	0.078
15000	0.075
15060	0.073
15120	0.076
15180	0.074
15240	0.073
15300	0.074
15360	0.069
15420	0.07
15480	0.068
15540	0.072
15600	0.075
15660	0.184
15720	0.106

15780	0.105
15840	0.11
15900	0.103
15960	0.11
16020	0.098
16080	0.101
16140	0.102
16200	0.096
16260	0.097
16320	0.1
16380	0.211
16440	0.31
16500	0.251
16560	0.256
16620	0.251
16680	0.212
16740	0.217
16800	0.199
16860	0.198
16920	0.189
16980	0.164
17040	0.147
17100	0.139
17160	0.147
17220	0.147
17280	0.134
17340	0.122
17400	0.116
17460	0.118
17520	0.113
17580	0.109
17640	0.099
17700	0.098
17760	0.096
17820	0.095
17880	0.094
17940	0.091
18000	0.109
18060	0.197
18120	0.279
18180	0.276
18240	0.244
18300	0.234
18360	0.226
18420	0.195
18480	0.197
18540	0.189

18600	0.195
18660	0.191
18720	0.185
18780	0.182
18840	0.168
18900	0.16
18960	0.155
19020	0.144
19080	0.143
19140	0.132
19200	0.133
19260	0.121
19320	0.114
19380	0.111
19440	0.107
19500	0.103
19560	0.112
19620	0.099
19680	0.101
19740	0.104
19800	0.098
19860	0.103
19920	0.093
19980	0.089
20040	0.09
20100	0.089
20160	0.079
20220	0.078
20280	0.077
20340	0.083
20400	0.075
20460	0.074
20520	0.077
20580	0.085
20640	0.152
20700	0.139
20760	0.12
20820	0.122
20880	0.126
20940	0.128
21000	0.115
21060	0.106
21120	0.114
21180	0.108
21240	0.093
21300	0.091
21360	0.094

21420	0.1
21480	0.092
21540	0.09
21600	0.089
21660	0.081
21720	0.085
21780	0.09
21840	0.075
21900	0.076
21960	0.076
22020	0.093
22080	0.185
22140	0.241
22200	0.19
22260	0.153
22320	0.161
22380	0.147
22440	0.139
22500	0.155
22560	0.141
22620	0.146
22680	0.133
22740	0.121
22800	0.116
22860	0.113
22920	0.121
22980	0.109
23040	0.122
23100	0.112
23160	0.106
23220	0.109
23280	0.102
23340	0.101
23400	0.097
23460	0.102
23520	0.104
23580	0.102
23640	0.103
23700	0.097
23760	0.105
23820	0.1
23880	0.107
23940	0.096
24000	0.107
24060	0.1
24120	0.1
24180	0.097

24240	0.097
24300	0.096
24360	0.095
24420	0.095
24480	0.1
24540	0.093
24600	0.096
24660	0.098
24720	0.096
24780	0.096
24840	0.093
24900	0.114
24960	0.101
25020	0.093
25080	0.095
25140	0.087
25200	0.092
25260	0.093
25320	0.095

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-908437	9/23/2022 3:51:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:50:34 PM	Readings		PID		SC23030239N5	Normal	1.4	1.4	1.4	1.4	1.4	0.4																					
592-908437	9/23/2022 3:49:34 PM	Readings		PID		SC23030239N5	Normal	1.4	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:48:34 PM	Readings		PID		SC23030239N5	Normal	1.4	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:47:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:46:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:45:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:44:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:43:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:42:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:41:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:40:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:39:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:38:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:37:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:36:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.4	0.4																					
592-908437	9/23/2022 3:35:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:34:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:33:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:32:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:31:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:30:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:29:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:28:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:27:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:26:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.4																					
592-908437	9/23/2022 3:25:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.3																					
592-908437	9/23/2022 3:24:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.4	0.3																					
592-908437	9/23/2022 3:23:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.3	0.3																					
592-908437	9/23/2022 3:22:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.3	0.3																					
592-908437	9/23/2022 3:21:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.3	0.3																					
592-908437	9/23/2022 3:20:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.3	0.3																					
592-908437	9/23/2022 3:19:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.3	0.3																					
592-908437	9/23/2022 3:18:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.4	1.3	1.2	0.3																					
592-908437	9/23/2022 3:17:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.3	1.2	0.3																					
592-908437	9/23/2022 3:16:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.2	1.2	0.3																					
592-908437	9/23/2022 3:15:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.3	1.3	1.2	1.1	0.3																					
592-908437	9/23/2022 3:14:34 PM	Readings		PID		SC23030239N5	Normal	1.3	1.2	1.3	1.2	1.1	0.3																					
592-908437	9/23/2022 3:13:34 PM	Readings		PID		SC23030239N5	Normal	1.2	1.2	1.2	1.2	1.1	0.3																					
592-908437	9/23/2022 3:12:34 PM	Readings		PID		SC23030239N5	Normal	1.2	1.2	1.2	1.2	1.0	0.3																					
592-908437	9/23/2022 3:11:34 PM	Readings		PID		SC23030239N5	Normal	1.2	1.2	1.3	1.2	1.0	0.3																					
592-908437	9/23/2022 3:10:34 PM	Readings		PID		SC23030239N5	Normal	1.2	1.2	1.2	1.2	0.9	0.3																					
592-908437	9/23/2022 3:09:34 PM	Readings		PID		SC23030239N5	Normal	1.2	1.2	1.2	1.1	0.9	0.3																					
592-908437	9/23/2022 3:08:34 PM	Readings		PID		SC23030239N5	Normal	1.1	1.1	1.1	1.1	0.8	0.3																					
592-908437	9/23/2022 3:07:34 PM	Readings		PID		SC23030239N5	Normal	1.1	1.1	1.1	1.0	0.8	0.3																					
592-908437	9/23/2022 3:06:34 PM	Readings		PID		SC23030239N5	Normal	1.0	1.0	1.0	1.0	0.8	0.3																					
592-908437	9/23/2022 3:05:34 PM	Readings		PID		SC23030239N5	Normal	1.0	1.0	1.0	0.9	0.7	0.3																					
592-908437	9/23/2022 3:04:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	0.7	0.3																					
592-908437	9/23/2022 3:03:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	0.7	0.3																					
592-908437	9/23/2022 3:02:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.8	0.7	0.3																					
592-908437	9/23/2022 3:01:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.8	0.9	0.8	0.6	0.3																					
592-908437	9/23/2022 3:00:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.7	0.8	0.7	0.6	0.3																					
592-908437	9/23/2022 2:59:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.6	0.6	0.3																					
592-908437	9/23/2022 2:58:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.3																					
592-908437	9/23/2022 2:57:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.3																					
592-908437	9/23/2022 2:56:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:55:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:54:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:53:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:52:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:51:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:50:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:49:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.6	0.3																					
592-908437	9/23/2022 2:48:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.7	0.3																					
592-908437	9/23/2022 2:47:34 PM	Readings		PID		SC23030239N5	Normal	0.5	0.6	0.6	0.5	0.7	0.3																					
592-908437	9/23/2022 2:46:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.7	0.3																					
592-908437	9/23/2022 2:45:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:44:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:43:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:42:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:41:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:40:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	9/23/2022 2:39:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.7	0.6	0.7	0.3																					
592-908437	9/23/2022 2:38:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.7	0.7	0.6	0.7	0.3																					
592-908437	9/23/2022 2:37:34 PM	Readings		PID		SC23030239N5	Normal	0.6	0.7	0.7	0.6	0.7	0.3																					
592-908437	9/23/2022 2:36:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:35:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:34:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:33:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:32:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:31:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.7	0.3																					
592-908437	9/23/2022 2:30:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.3																					
592-908437	9/23/2022 2:29:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:28:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:27:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:26:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:25:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:24:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:23:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:22:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:21:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:20:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.8	0.2																					
592-908437	9/23/2022 2:19:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.9	0.2																					
592-908437	9/23/2022 2:18:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.9	0.2																					
592-908437	9/23/2022 2:17:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.9	0.2																					
592-908437	9/23/2022 2:16:34 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.7	0.9	0.2																					
592-908437	9/23/2022 2:15:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.7	0.9	0.2																					
592-908437	9/23/2022 2:14:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.8	0.9	0.2																					
592-908437	9/23/2022 2:13:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.8	0.9	0.2																					
592-908437	9/23/2022 2:12:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.8	0.9	0.2																					
592-908437	9/23/2022 2:11:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.8	0.9	0.2																					
592-908437	9/23/2022 2:10:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.9	0.8	1.0	0.2																					
592-908437	9/23/2022 2:09:34 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.9	0.8	1.0	0.2																					
592-908437	9/23/2022 2:08:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:07:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:06:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:05:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:04:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	1.0	0.9	1.0	0.2																					
592-908437	9/23/2022 2:03:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	1.0	0.9	1.0	0.2																					
592-908437	9/23/2022 2:02:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:01:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 2:00:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 1:59:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	1.0	0.2																					
592-908437	9/23/2022 1:58:34 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	1.0	0.9	1.0	0.2																					
592-908437	9/23/2022 1:57:34 PM	Readings		PID		SC23030239N5	Normal	1.0	1.0	1.0	0.9	1.0	0.2																					

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592-908437	9/23/2022 11:58:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:57:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:56:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:55:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:54:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:53:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:52:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:51:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:50:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:49:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:48:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:47:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:46:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:45:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:44:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.1
592-908437	9/23/2022 11:43:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:42:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:41:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:40:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:39:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:38:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:37:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:36:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:35:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:34:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.4	0.1
592-908437	9/23/2022 11:33:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:32:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:31:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:30:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:29:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.4	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:28:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:27:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.4	0.4	0.1
592-908437	9/23/2022 11:26:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.3	0.4	0.1
592-908437	9/23/2022 11:25:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.4	0.4	0.1
592-908437	9/23/2022 11:24:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.4	0.3	0.1
592-908437	9/23/2022 11:23:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.4	0.3	0.1
592-908437	9/23/2022 11:22:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.4	0.3	0.1
592-908437	9/23/2022 11:21:34 AM	Readings	PID		SC23030239N5	Normal	0.4	0.4	0.4	0.3	0.3	0.1
592-908437	9/23/2022 11:20:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:19:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:18:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:17:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:16:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:15:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:14:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:13:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:12:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:11:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1
592-908437	9/23/2022 11:10:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:09:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:08:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:07:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:06:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:05:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:04:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:03:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:02:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:01:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 11:00:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:59:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:58:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:57:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:56:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:55:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-908437	9/23/2022 10:54:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-908437	9/23/2022 10:53:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-908437	9/23/2022 10:52:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-908437	9/23/2022 10:51:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:50:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:49:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:48:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:47:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:46:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:45:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:44:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:43:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:42:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:41:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:40:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:39:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:38:34 AM	Readings	PID		SC23030239N5	Normal	0.1	0.1	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:37:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:36:34 AM	Readings	PID		SC23030239N5	Normal	0.1	0.1	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:35:34 AM	Readings	PID		SC23030239N5	Normal	0.1	0.1	0.1	0.1	0.2	0.0
592-908437	9/23/2022 10:34:34 AM	Readings	PID		SC23030239N5	Normal	0.1	0.1	0.2	0.1	0.2	0.0
592-908437	9/23/2022 10:33:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:32:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:31:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:30:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:29:34 AM	Readings	PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:28:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-908437	9/23/2022 10:27:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:26:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:25:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:24:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:23:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:22:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:21:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:20:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:19:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:18:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:17:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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592-908437	9/23/2022 10:15:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:14:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:13:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:12:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:11:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:10:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:09:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:08:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:07:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
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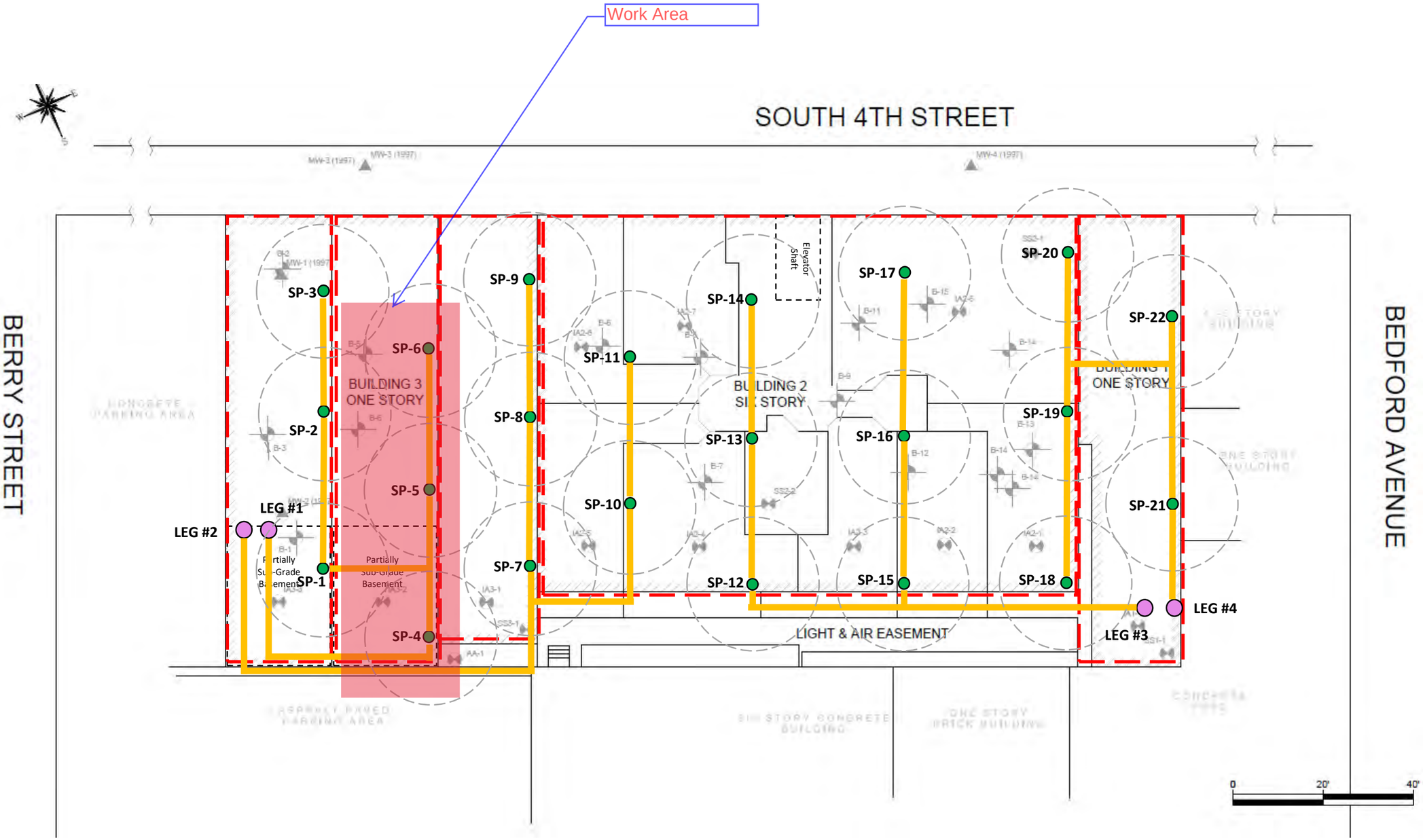
592-908437	9/23/2022 10:04:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:03:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:02:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-908437	9/23/2022 10:01:34 AM	Readings	PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0

| | | |



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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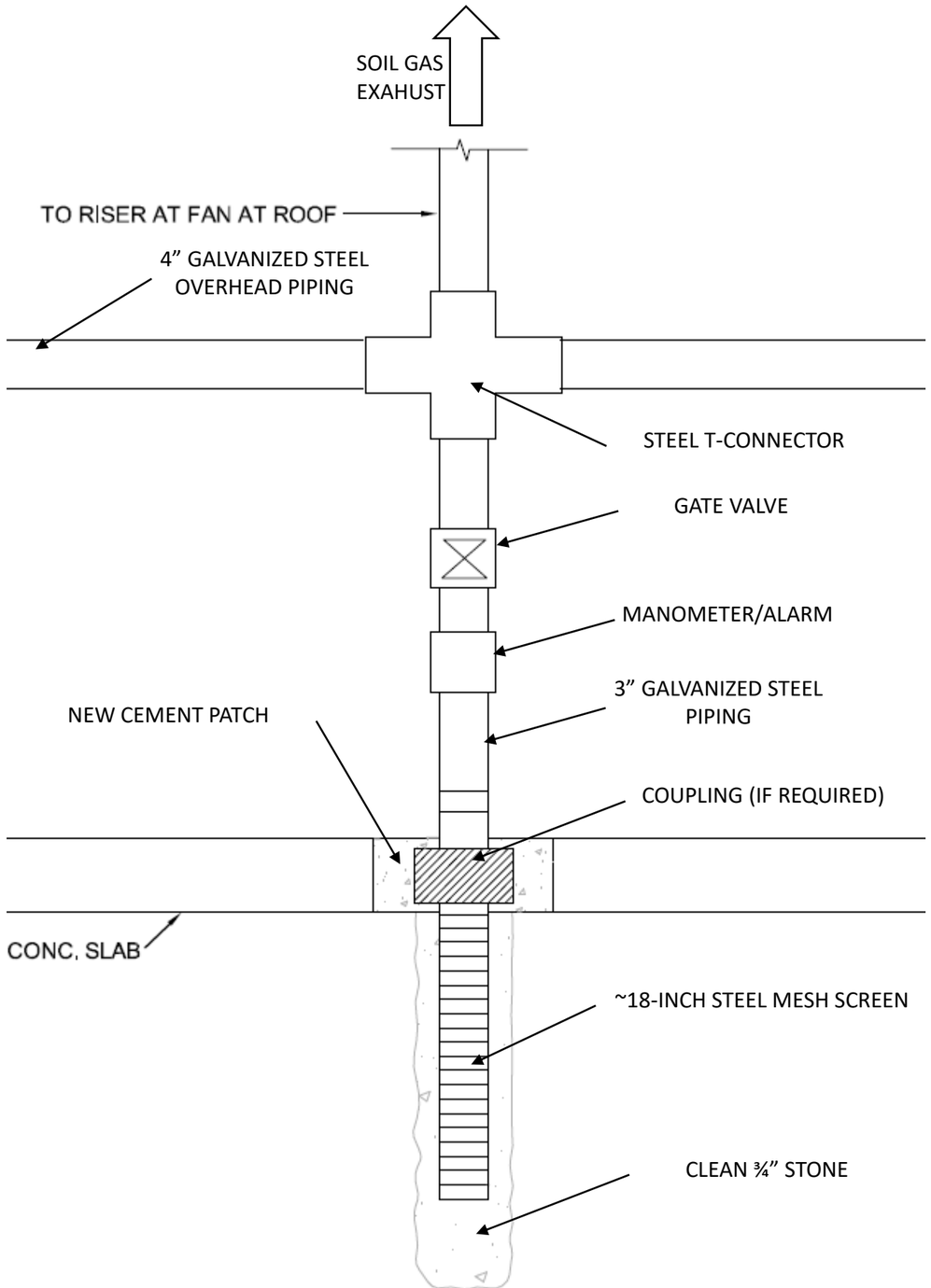
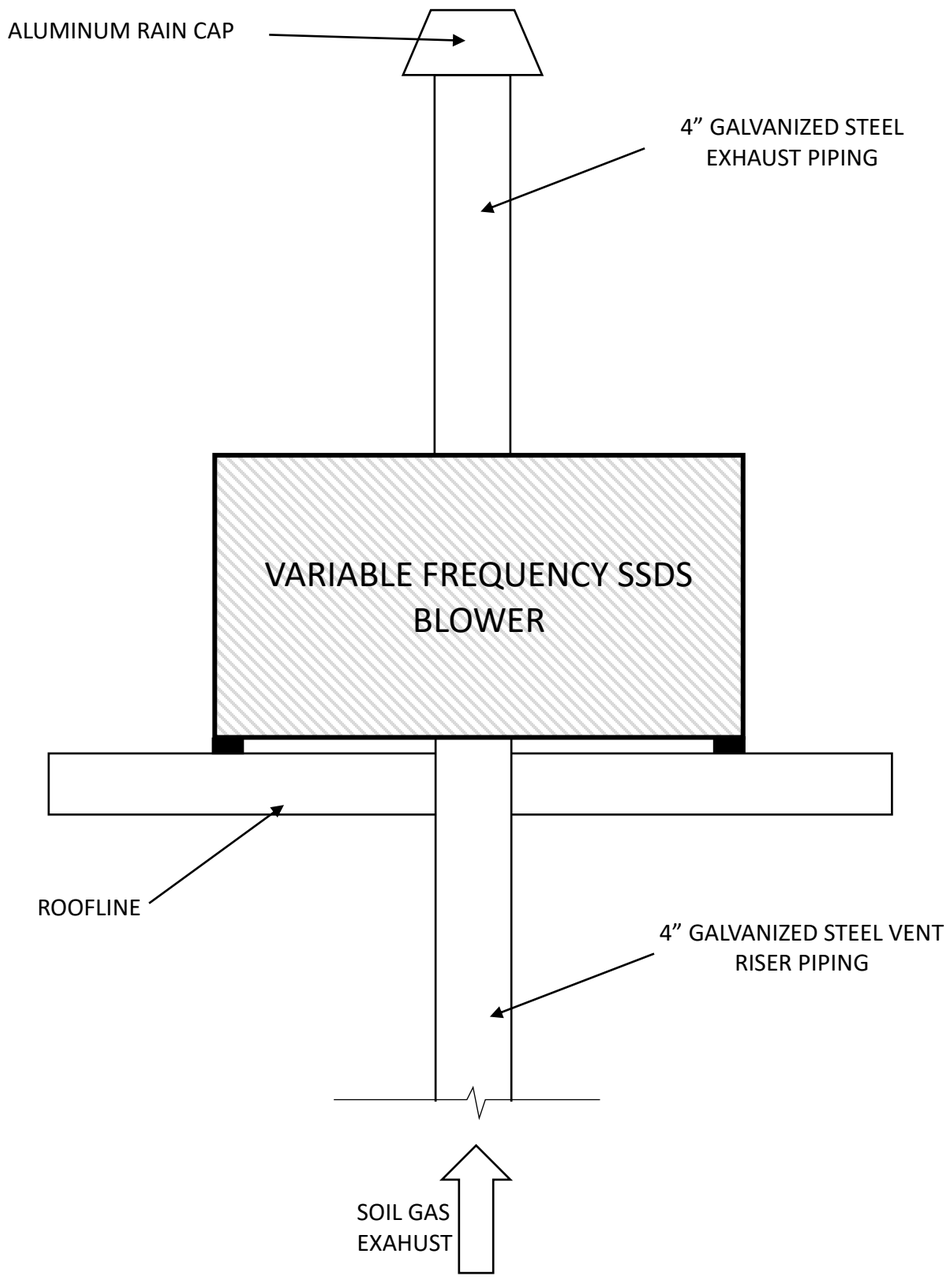
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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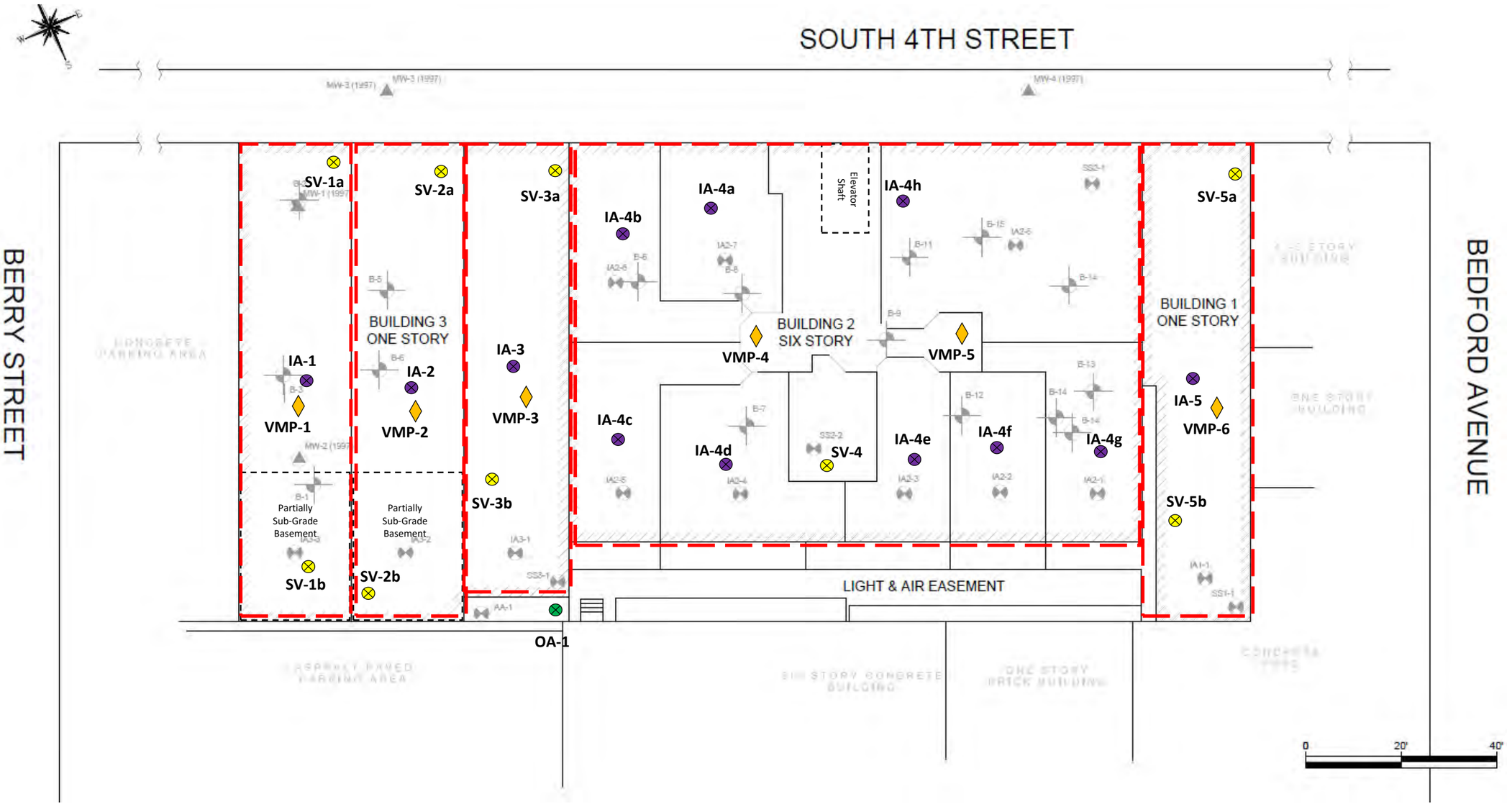

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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Revisions	

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welcome to solid ground… *www.impactenvironmental.com*

September 26, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#21 - Interim Remedial Measures Progress Report (9/24/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

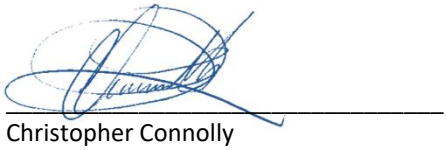
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 24, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 24, 2022

- CG continued installing horizontal piping between suction points SP-4, SP-5, and SP-6. Piping was installed up the stairwell to the second-floor office space, and the pipe penetrated the office wall to route to the roof.
- No ground intrusive activities were conducted; thus, CAMP was not required.

Planned work for the following day (Monday September 26, 2022) includes installing suction points SP-18 and SP-19 in apartment 1-G.

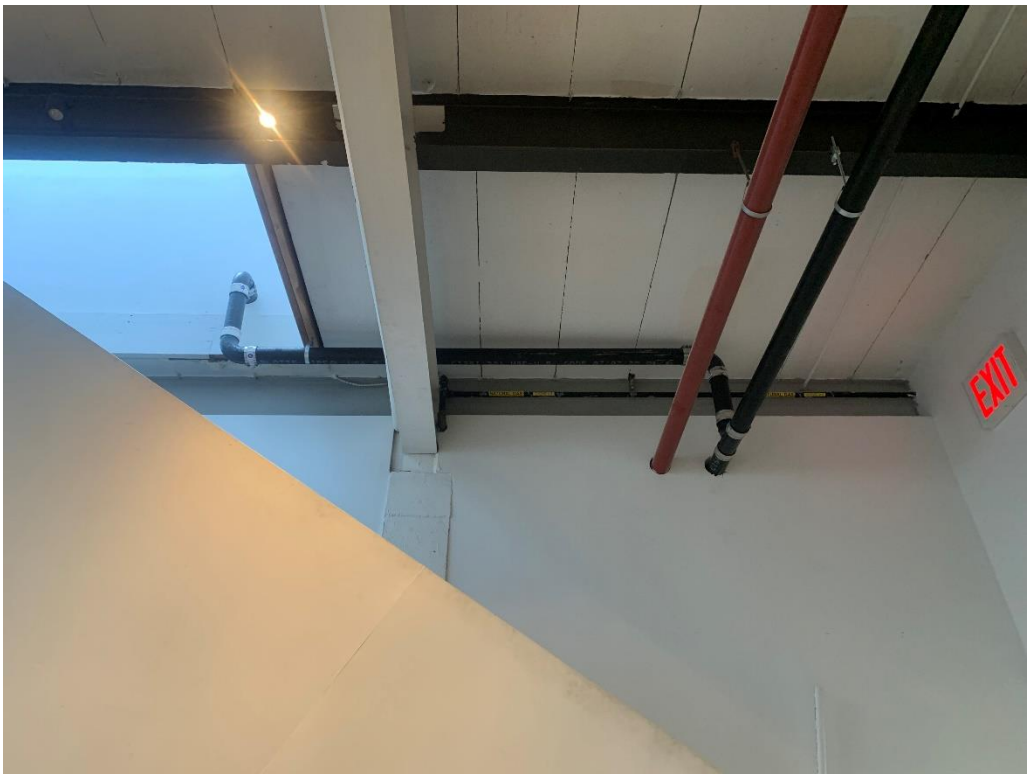
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

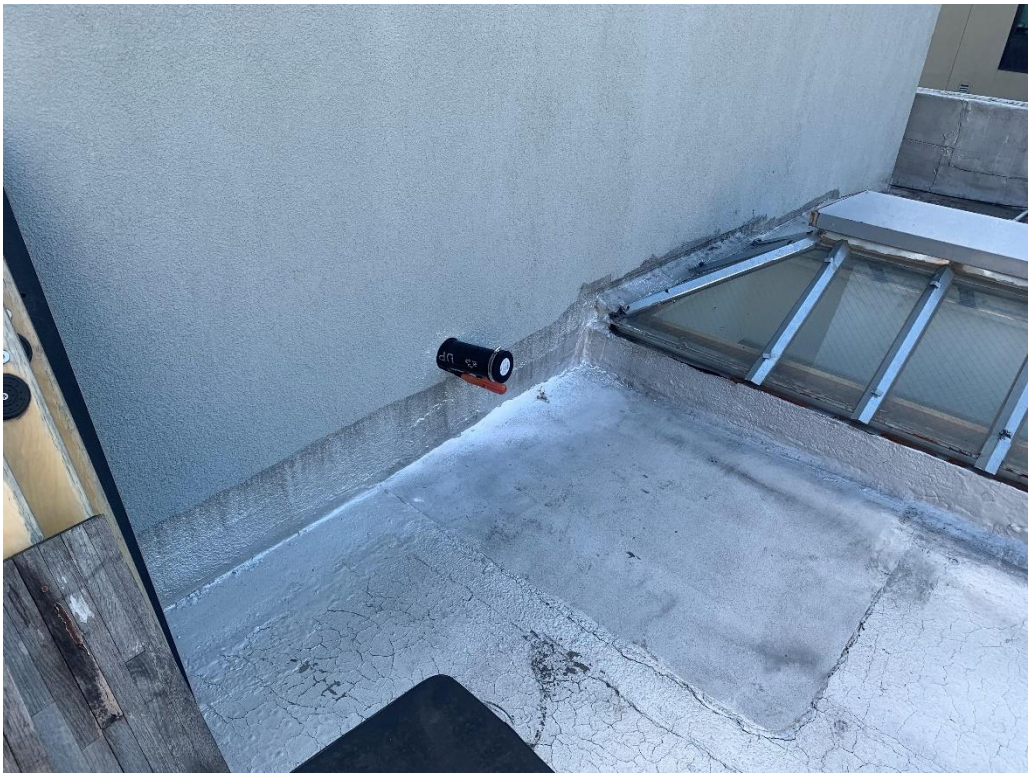
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map



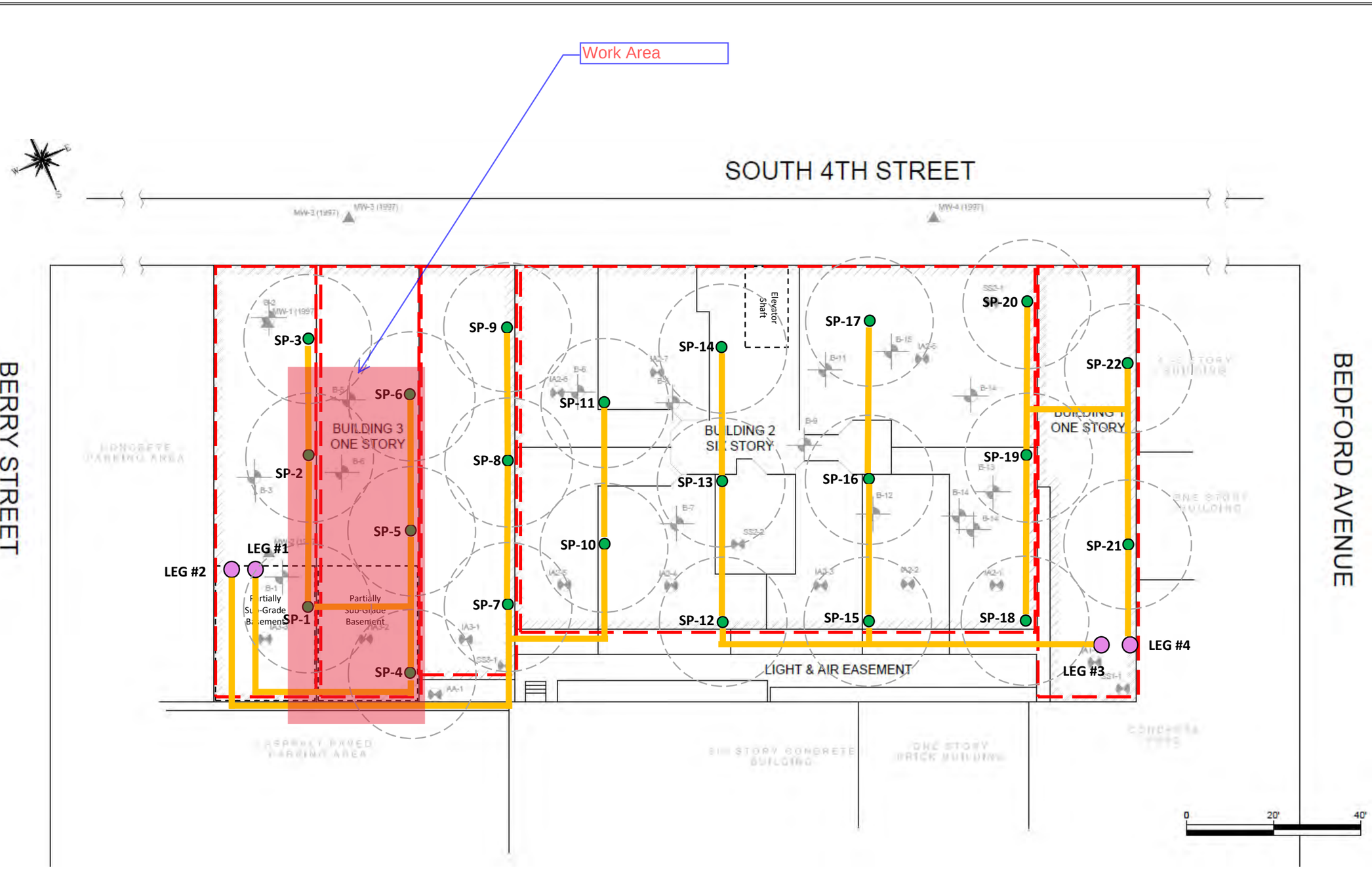
Photograph No. 1: View of piping coming into 98b South 4th Street from 98c South 4th Street

Photograph No. 2: View of overhead piping in Unit 98b South 4th Street

Photograph No. 3: View piing exiting 98b South 4th Street second floor office to exterior roof



Photograph No. 4: View of piping exiting second floor office to roof



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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BOHEMIA, NEW YORK 11716
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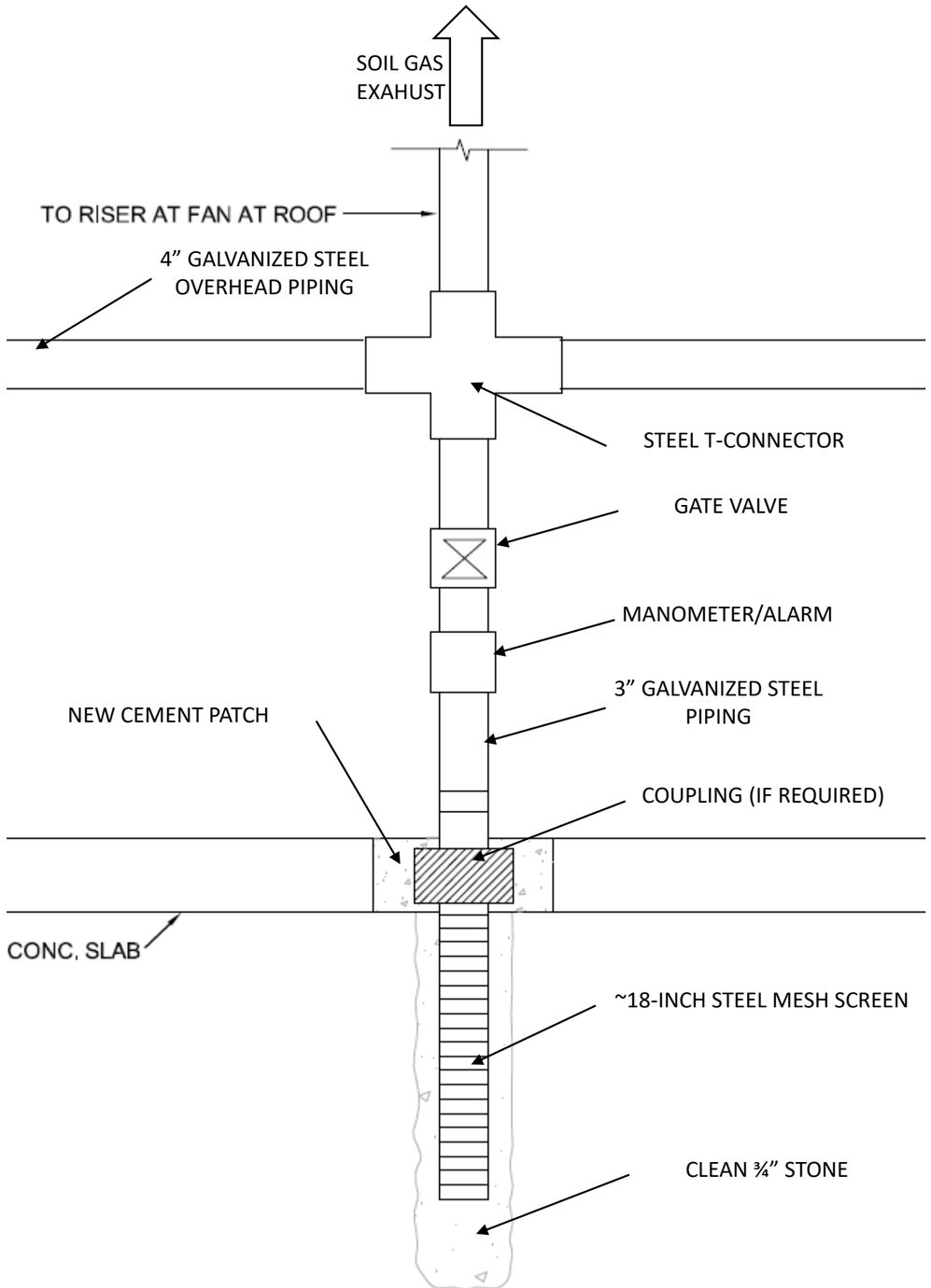
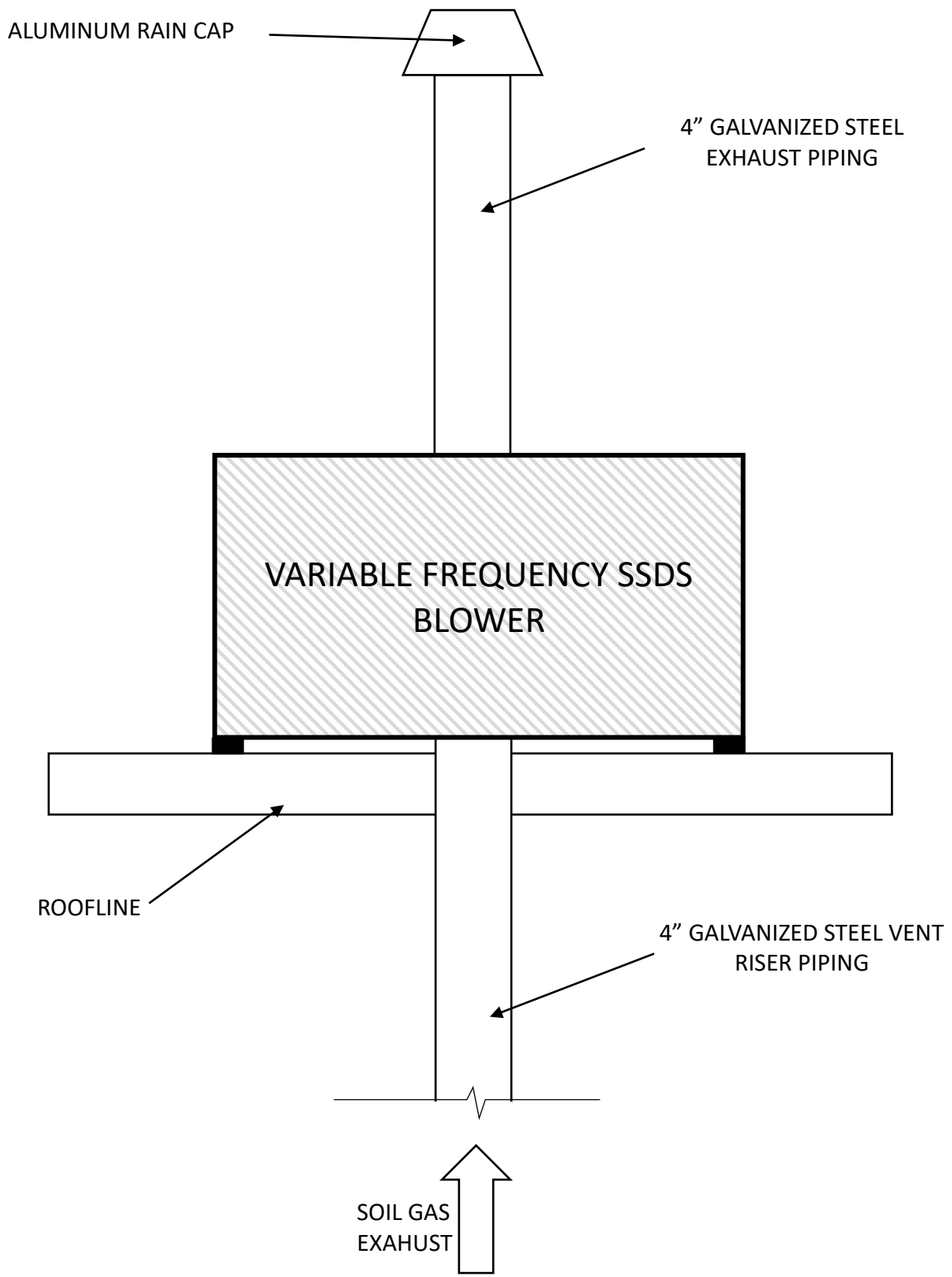


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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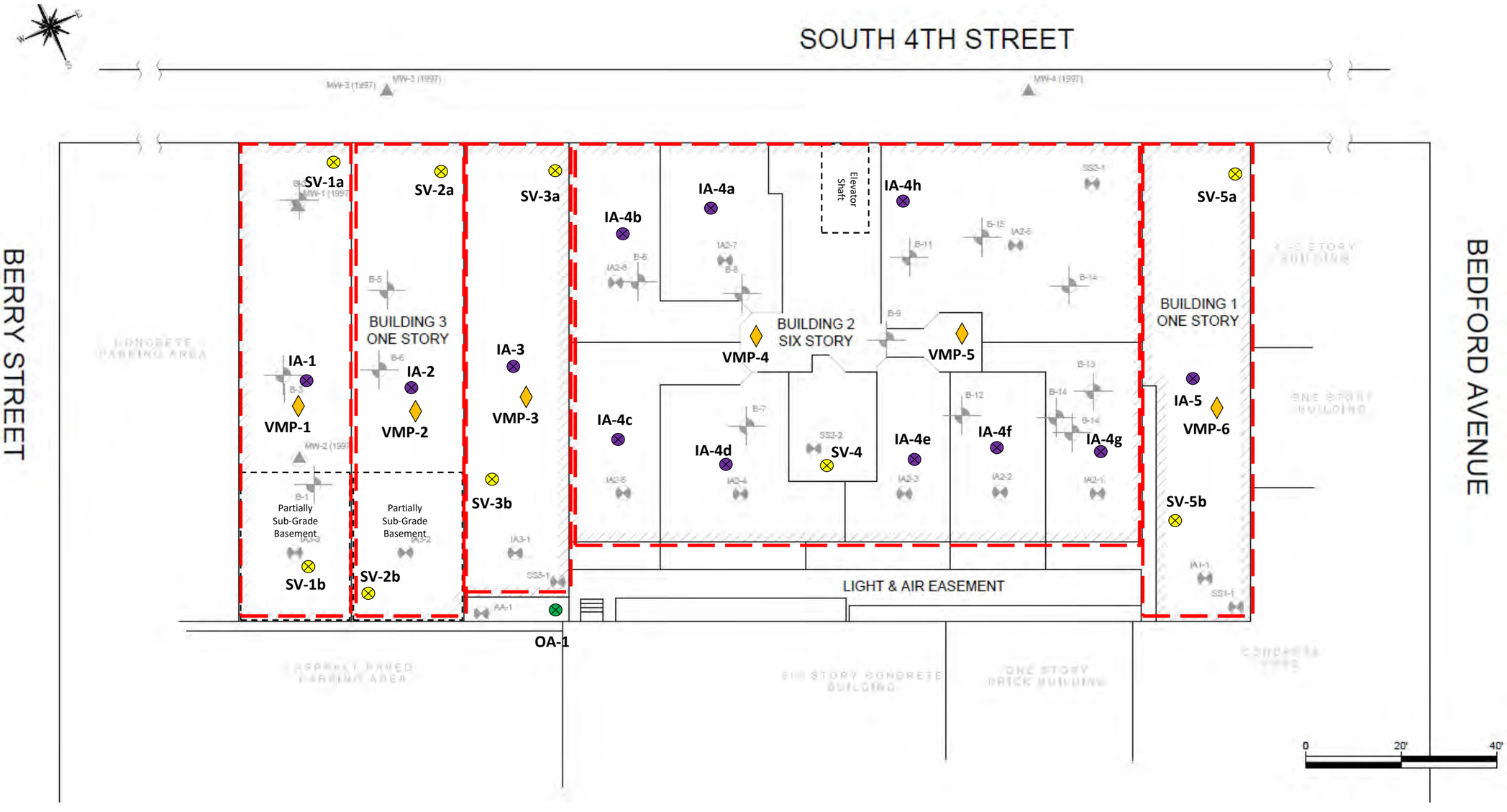

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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September 27, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#22 - Interim Remedial Measures Progress Report (9/26/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

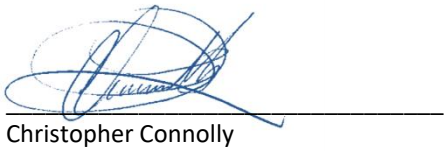
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 26, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 26, 2022

- CG installed suction points SP-18 and SP-19 in apartment 1-G of 100 South 4th Street.
- CG began installing suction point screens and riser piping for both SP-18 and SP-19.
- Suction points were sealed.
- CAMP was performed during all ground intrusive activities. CAMP logs can be found attached to this report.

Planned work for the following day (Tuesday September 27, 2022) includes installing additional vertical riser piping and horizontal piping in apartment 1-G between SP-18 and SP-19.

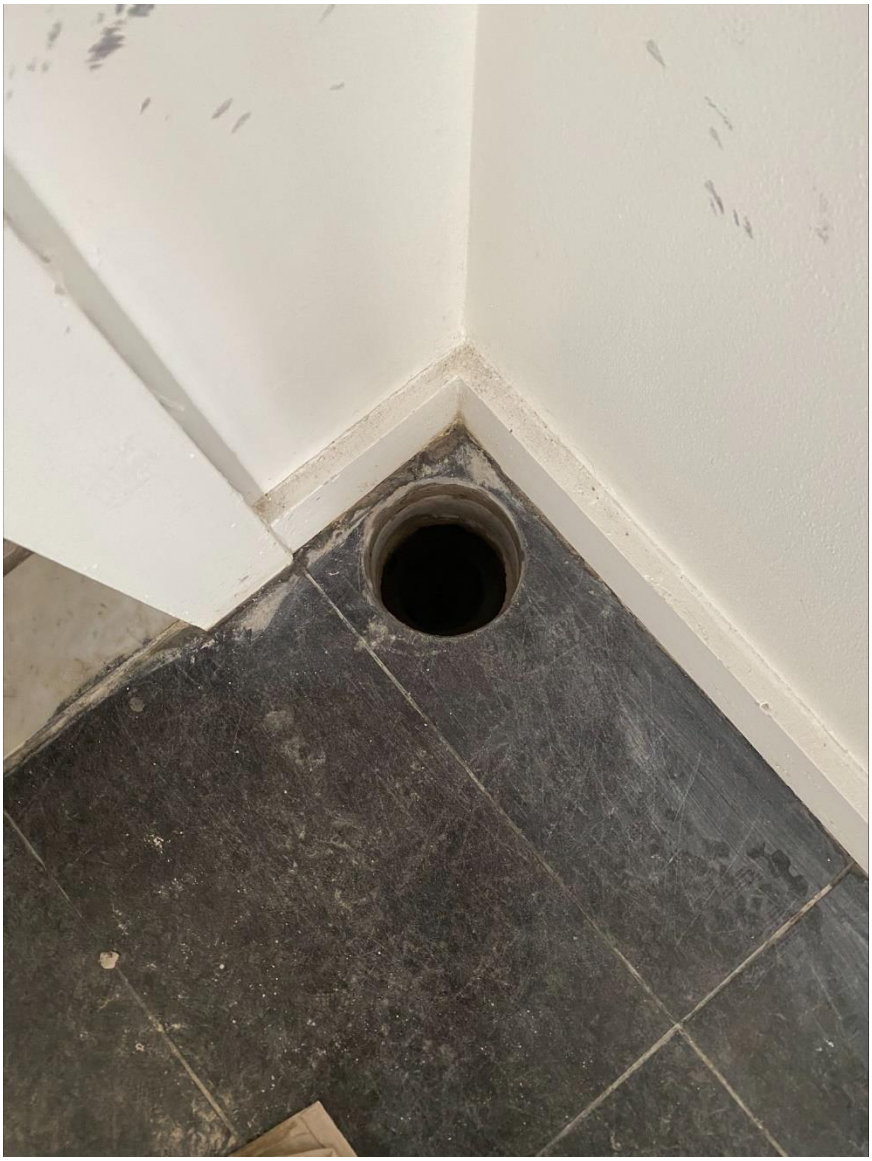
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

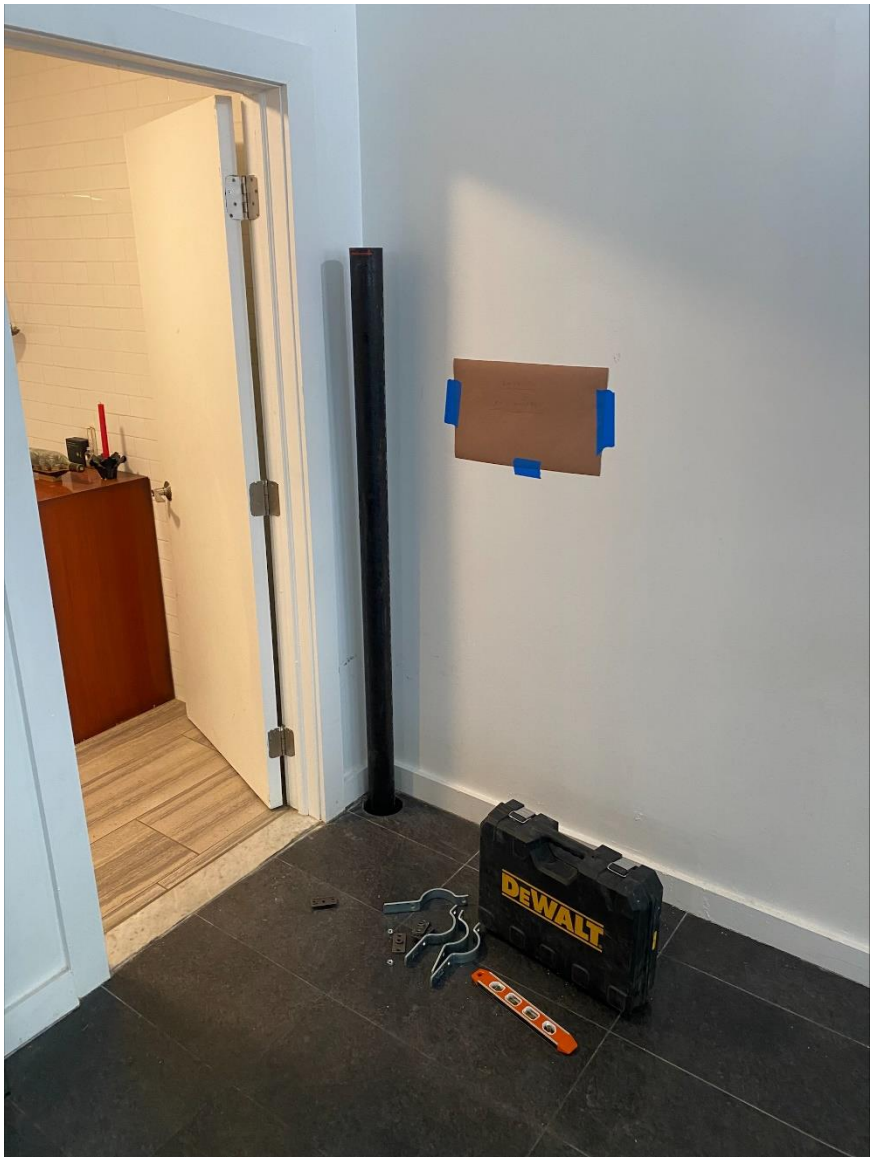
Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP Logs
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map



Photograph No. 1: View of SP-19 installed in apartment 1-G

Photograph No. 2: View of SP-18 installed in apartment 1-G

Photograph No. 3: View riser piping installed for SP-19



Photograph No. 4: View of piping for SP-18

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530153015
Firmware Version		3.1
Calibration Date		2/22/2022
Test Name	MANUAL_018	
Test Start Time		10:15:10 AM
Test Start Date		9/26/2022
Test Length [D:H:M]		0:04:09
Test Interval [M:S]		1:00
Mass Average [mg/m3]		0.117
Mass Minimum [mg/m3]		0.032
Mass Maximum [mg/m3]		1.21
Mass TWA [mg/m3]		0.061
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		249

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.231		
120	0.036		
180	0.036		
240	0.035		
300	0.038		
360	0.04		
420	0.038		
480	0.037		
540	0.038		
600	0.035		
660	0.035		
720	0.034		
780	0.034		
840	0.032		
900	0.035		
960	0.033		
1020	0.032		
1080	0.035		
1140	0.036		
1200	0.037		
1260	0.045		
1320	0.051		
1380	0.053		
1440	0.049		
1500	0.042		
1560	0.04		
1620	0.036		

1680	0.036
1740	0.038
1800	0.039
1860	0.038
1920	0.038
1980	0.043
2040	0.043
2100	0.044
2160	0.053
2220	0.048
2280	0.059
2340	0.076
2400	0.07
2460	0.056
2520	0.093
2580	0.373
2640	0.508
2700	0.929
2760	0.693
2820	0.424
2880	0.295
2940	0.2
3000	0.177
3060	0.143
3120	0.081
3180	0.057
3240	0.055
3300	0.058
3360	0.063
3420	0.571
3480	0.374
3540	0.443
3600	0.195
3660	0.236
3720	0.166
3780	0.133
3840	0.103
3900	0.09
3960	0.086
4020	0.112
4080	0.156
4140	0.372
4200	0.843
4260	0.185
4320	0.299
4380	0.174
4440	0.149

4500	0.147
4560	0.323
4620	0.817
4680	1.21
4740	0.901
4800	0.499
4860	0.269
4920	0.209
4980	0.122
5040	0.251
5100	0.184
5160	0.114
5220	0.151
5280	0.222
5340	0.132
5400	0.313
5460	0.438
5520	0.188
5580	0.15
5640	0.135
5700	0.188
5760	0.28
5820	0.179
5880	0.16
5940	0.174
6000	0.221
6060	0.207
6120	0.147
6180	0.147
6240	0.164
6300	0.155
6360	0.151
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6480	0.145
6540	0.128
6600	0.117
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6720	0.109
6780	0.101
6840	0.105
6900	0.143
6960	0.128
7020	0.094
7080	0.092
7140	0.084
7200	0.076
7260	0.066

7320	0.083
7380	0.091
7440	0.094
7500	0.268
7560	0.213
7620	0.083
7680	0.073
7740	0.06
7800	0.059
7860	0.072
7920	0.092
7980	0.075
8040	0.065
8100	0.064
8160	0.054
8220	0.05
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8400	0.046
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8580	0.049
8640	0.053
8700	0.046
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8940	0.044
9000	0.043
9060	0.04
9120	0.056
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9480	0.041
9540	0.04
9600	0.044
9660	0.046
9720	0.043
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9900	0.04
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10080	0.039

10140	0.039
10200	0.041
10260	0.046
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10380	0.041
10440	0.039
10500	0.041
10560	0.039
10620	0.04
10680	0.041
10740	0.042
10800	0.043
10860	0.042
10920	0.04
10980	0.04
11040	0.04
11100	0.042
11160	0.041
11220	0.048
11280	0.073
11340	0.076
11400	0.067
11460	0.068
11520	0.073
11580	0.069
11640	0.068
11700	0.074
11760	0.065
11820	0.061
11880	0.058
11940	0.069
12000	0.049
12060	0.051
12120	0.064
12180	0.058
12240	0.063
12300	0.062
12360	0.066
12420	0.062
12480	0.064
12540	0.053
12600	0.058
12660	0.051
12720	0.054
12780	0.06
12840	0.062
12900	0.059

12960	0.06
13020	0.06
13080	0.065
13140	0.06
13200	0.059
13260	0.054
13320	0.056
13380	0.062
13440	0.055
13500	0.055
13560	0.057
13620	0.065
13680	0.071
13740	0.088
13800	0.07
13860	0.07
13920	0.072
13980	0.082
14040	0.069
14100	0.082
14160	0.08
14220	0.069
14280	0.084
14340	0.083
14400	0.072
14460	0.07
14520	0.068
14580	0.076
14640	0.074
14700	0.068
14760	0.094
14820	0.097
14880	0.095
14940	0.098

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-908437	9/26/2022 2:27:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:26:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:25:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:24:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:23:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:22:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:21:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:20:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:19:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.4	0.4	0.3	0.3	0.0																					
592-908437	9/26/2022 2:18:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.2	0.3	0.0																					
592-908437	9/26/2022 2:17:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:16:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:15:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:14:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:13:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 2:12:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 2:11:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 2:10:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:09:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:08:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 2:07:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0																					
592-908437	9/26/2022 2:06:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:05:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:04:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:03:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0																					
592-908437	9/26/2022 2:02:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 2:01:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 2:00:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:59:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.2	0.0																					
592-908437	9/26/2022 1:58:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.1	0.3	0.0																					
592-908437	9/26/2022 1:57:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:56:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:55:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:54:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:53:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:52:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:51:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:50:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0																					
592-908437	9/26/2022 1:49:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.2	0.0																					
592-908437	9/26/2022 1:48:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:47:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:46:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.3	0.0																					
592-908437	9/26/2022 1:45:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.0																					
592-908437	9/26/2022 1:44:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:43:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:42:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:41:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:40:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:39:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.2	0.0																					
592-908437	9/26/2022 1:38:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.1	0.2	0.1	0.2	0.0																					
592-908437	9/26/2022 1:37:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.2	0.3	0.1	0.2	0.0																					
592-908437	9/26/2022 1:36:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.2	0.0																					
592-908437	9/26/2022 1:35:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.1	0.2	0.0																					
592-908437	9/26/2022 1:34:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.1	0.0																					
592-908437	9/26/2022 1:33:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.1	0.0																					
592-908437	9/26/2022 1:32:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.1	0.0																					
592-908437	9/26/2022 1:31:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.1	0.1	0.0																					
592-908437	9/26/2022 1:30:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.1	0.0																					
592-908437	9/26/2022 1:29:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.2	0.3	0.1	0.1	0.0																					
592-908437	9/26/2022 1:28:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.1	0.0																					
592-908437	9/26/2022 1:27:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.1	0.0																					
592-908437	9/26/2022 1:26:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.1	0.0	0.0																					
592-908437	9/26/2022 1:25:55 PM	Readings		PID		SC23030239N5	Normal	0.2	0.1	0.2	0.0	0.0	0.0																					
592-908437	9/26/2022 1:24:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:23:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:22:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:21:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:20:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:19:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.1	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 1:18:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.1	0.1	0.1	0.0	0.0																					
592-908437	9/26/2022 1:17:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.1	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 1:16:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 1:15:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:14:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:13:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:12:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:11:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:10:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 1:09:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.1	0.2	0.0	0.0	0.0																					
592-908437	9/26/2022 1:08:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.1	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 1:07:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:06:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:05:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:04:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:03:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:02:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:01:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 1:00:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:59:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 12:58:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 12:57:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:56:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:55:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:54:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:53:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:52:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:51:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:50:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.1	0.3	0.0	0.0	0.0																					
592-908437	9/26/2022 12:49:55 PM	Readings		PID		SC23030239N5	Normal	0.3	0.1	0.4	0.0	0.0	0.0																					
592-908437	9/26/2022 12:48:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:47:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:46:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:45:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:44:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:43:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:42:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 12:41:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.1	0.2	0.0	0.0	0.0																					
592-908437	9/26/2022 12:40:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:39:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:38:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:37:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:36:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:35:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:34:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:33:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 12:32:55 PM	Readings		PID		SC23030239N5	Normal	0.1	0.0	0.1	0.0	0.0	0.0																					
592-908437	9/26/2022 12:31:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					
592-908437	9/26/2022 12:30:55 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																					

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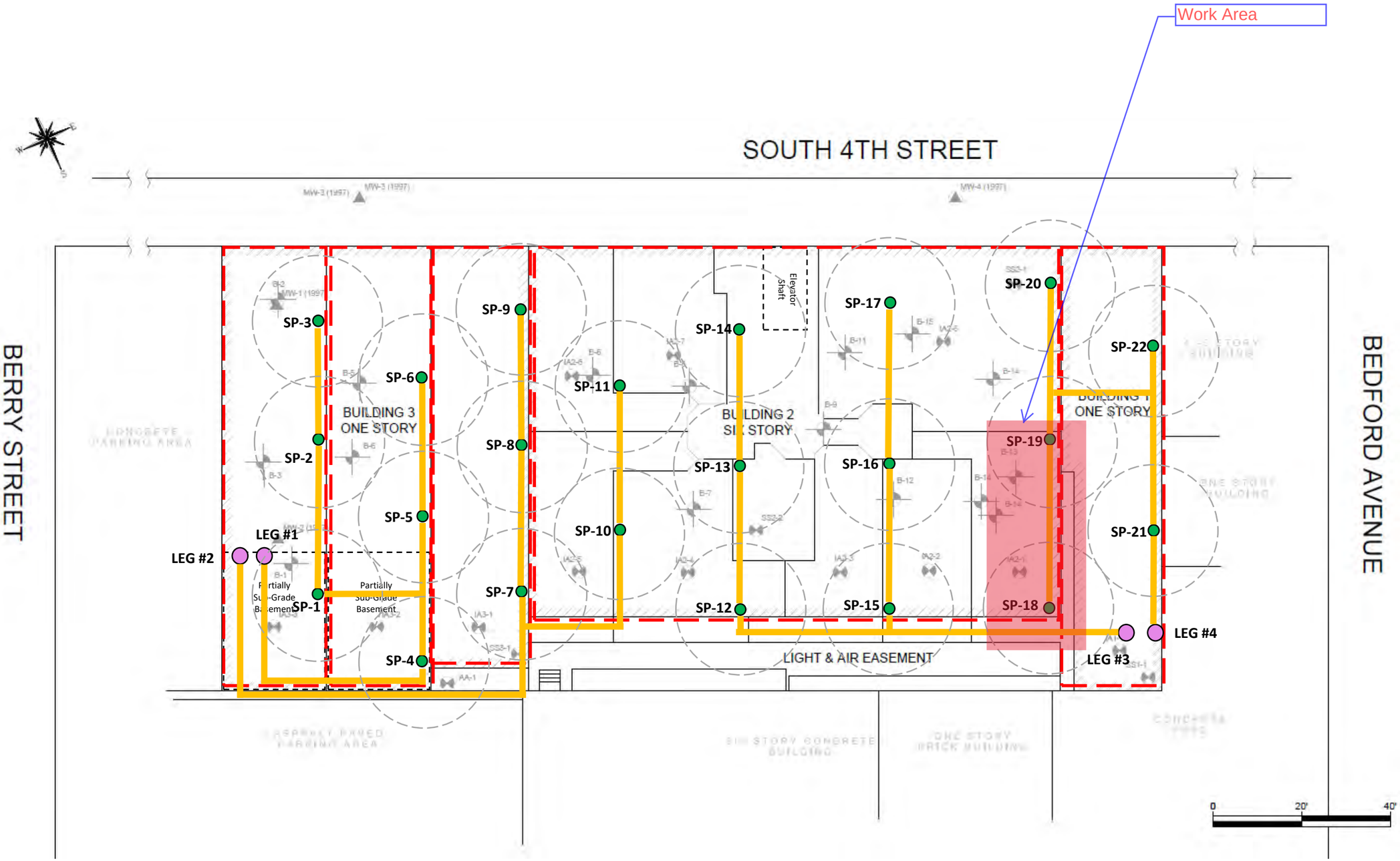

Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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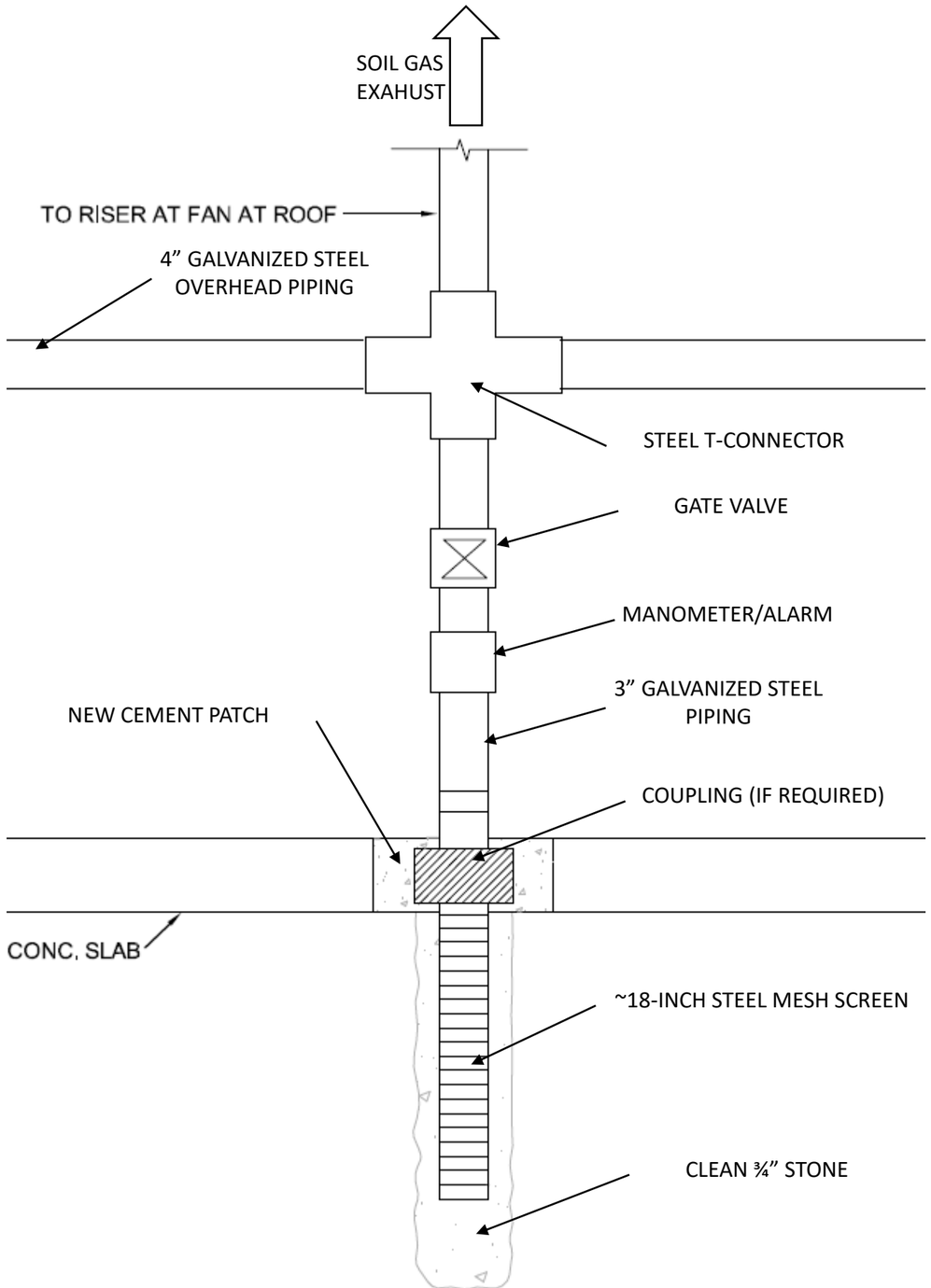
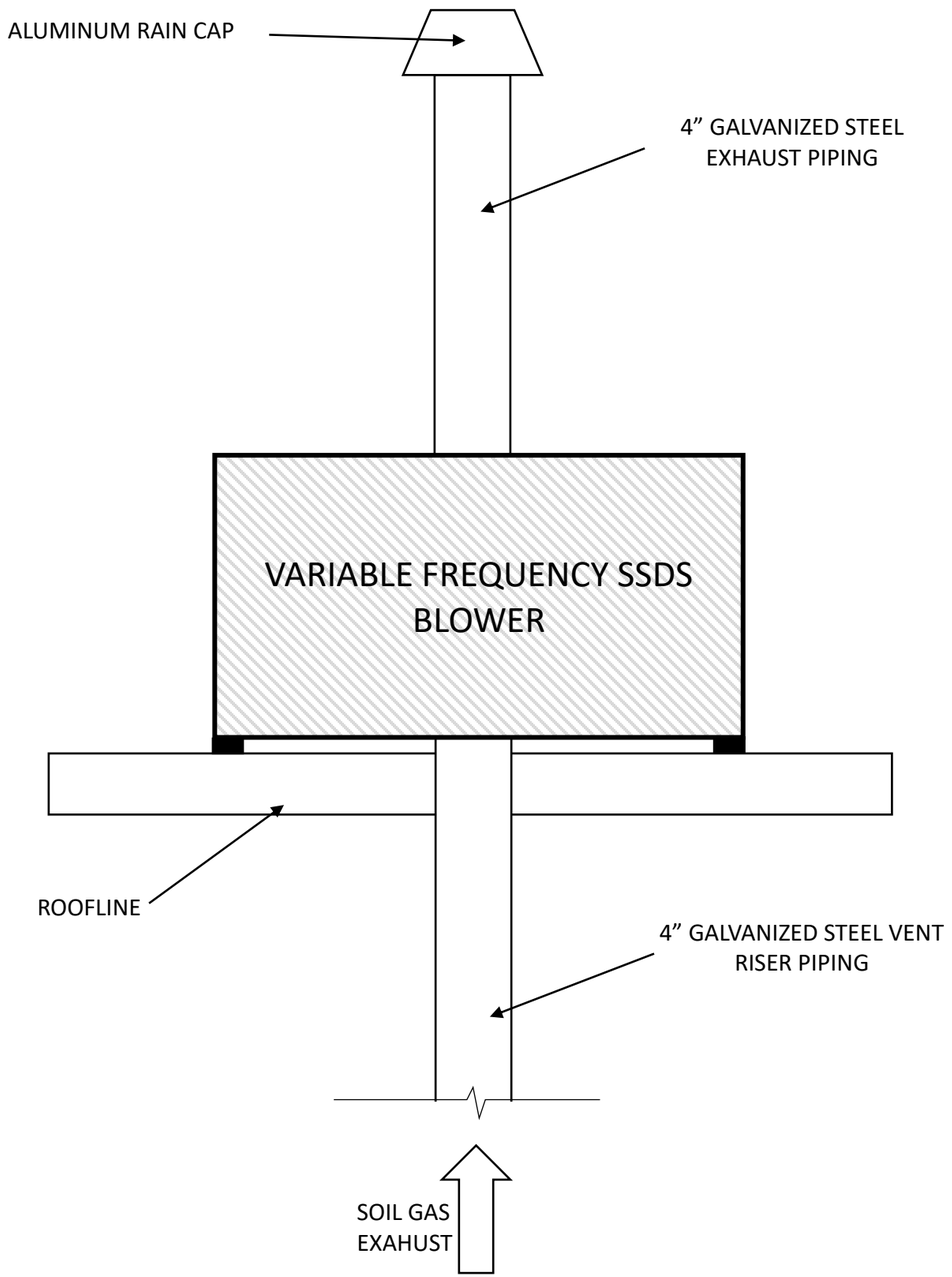
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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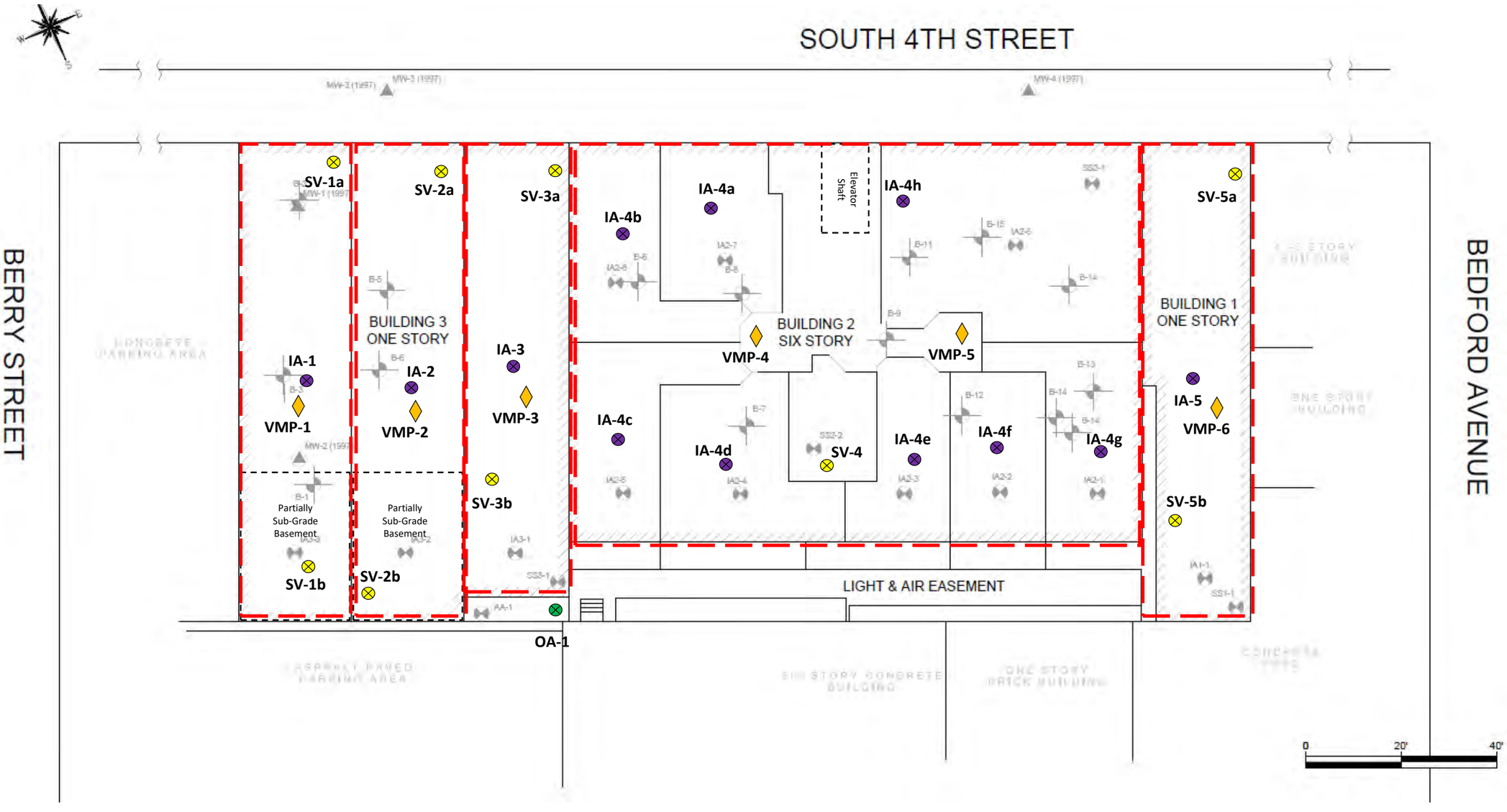

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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September 28, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#23 - Interim Remedial Measures Progress Report (9/27/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

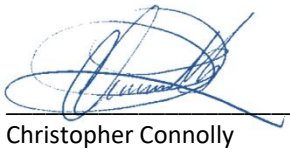
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 27, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 27, 2022

- CG installed vertical and horizontal piping between SP-18 and SP-19 in apartment 1-G of 100 South 4th Street.
- No ground intrusive work was performed; thus, CAMP was not required.

Planned work for the following day (Wednesday September 28, 2022) includes installing additional horizontal piping in apartment 1-G between SP-18 and SP-19, and routing SSDS leg to exterior easement in rear of property.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

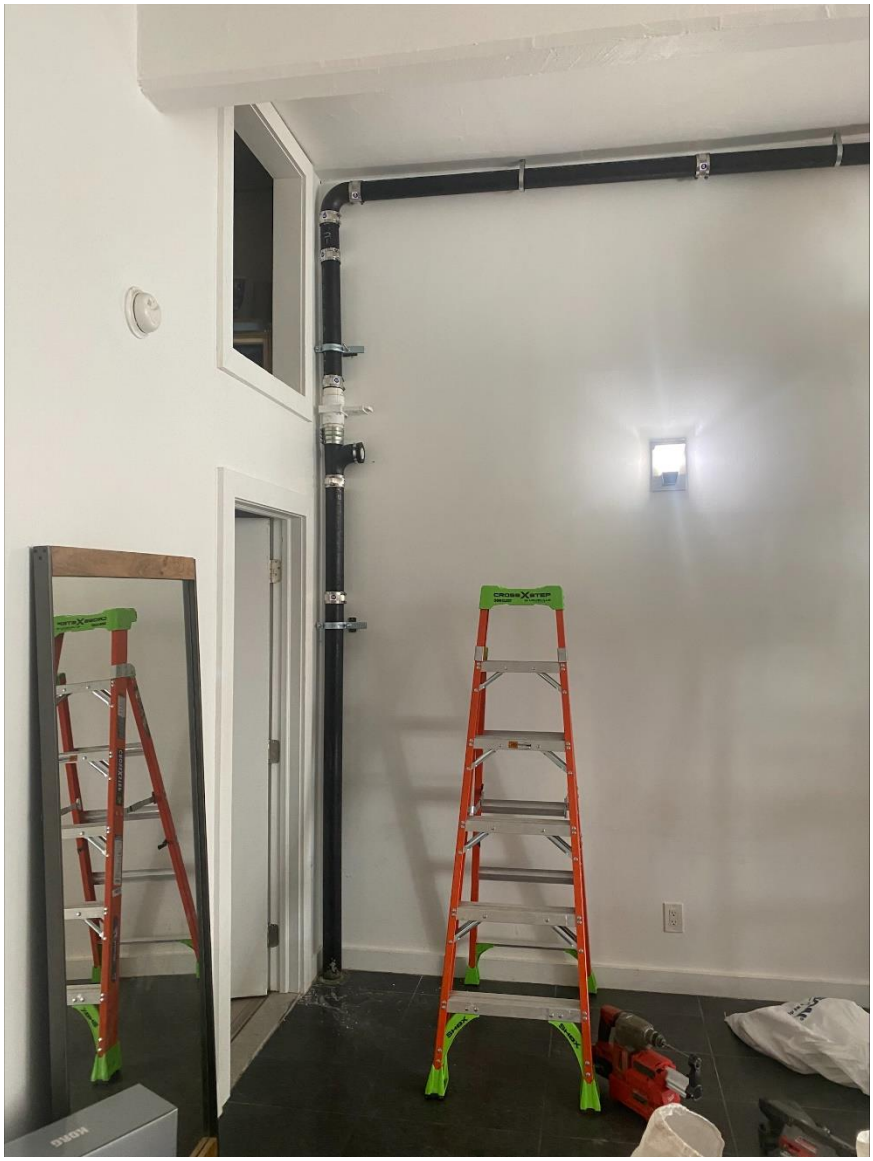


Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

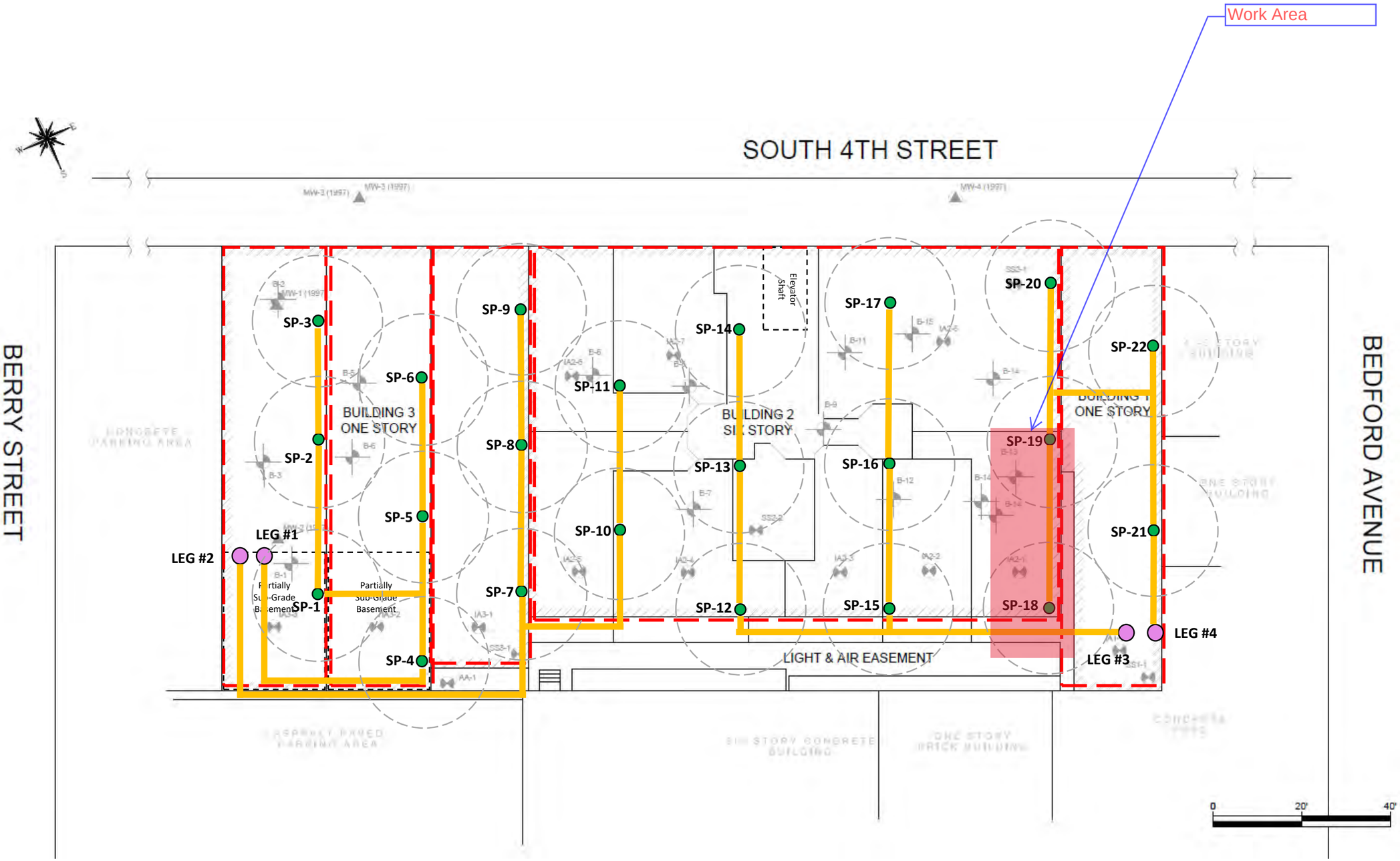
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of gate valve on SP-19



Photograph No. 2: View of gate valve and piping from SP-18

Photograph No. 3: View piping installation between SP-18 and SP-19



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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Revisions	

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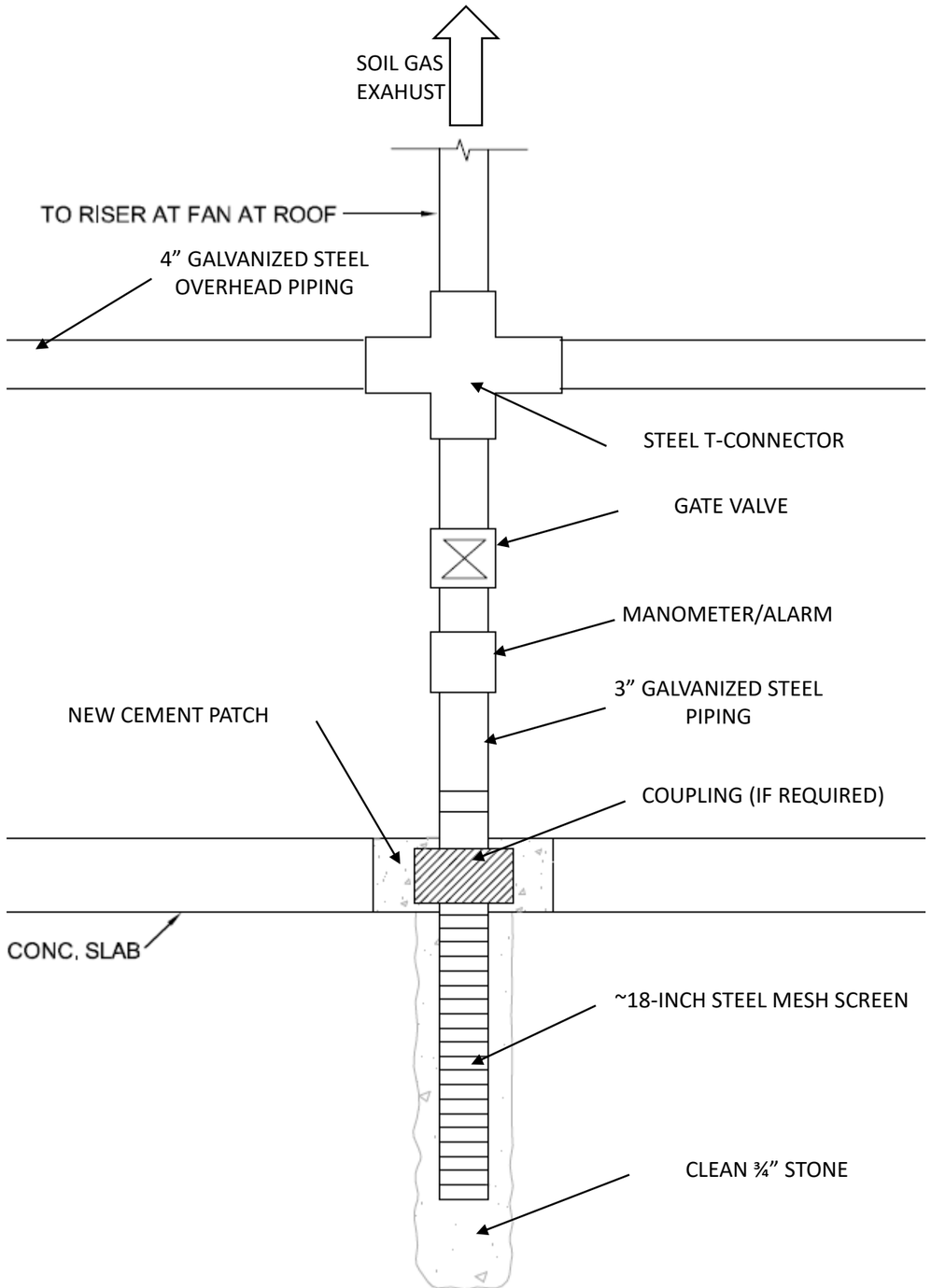
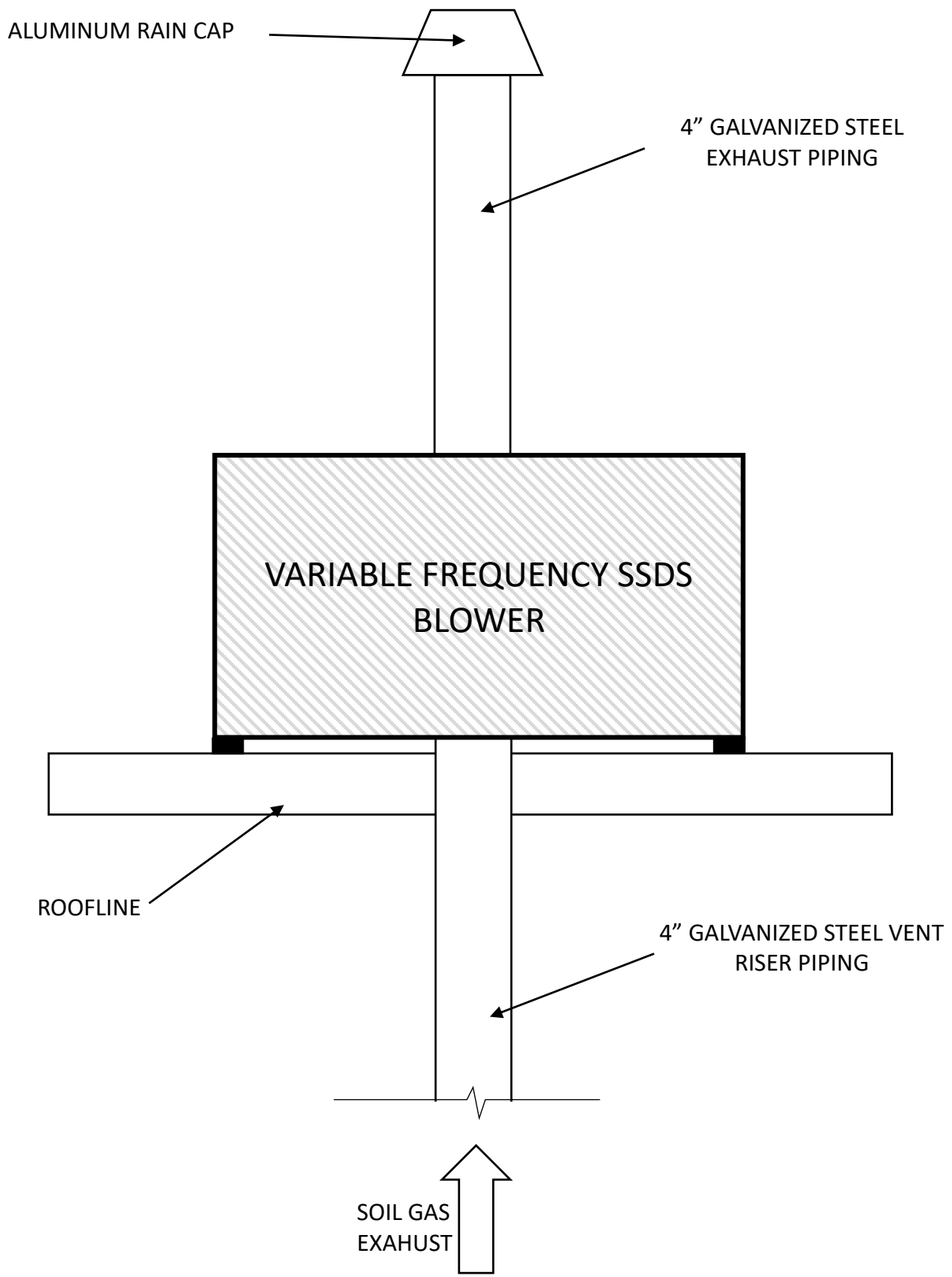


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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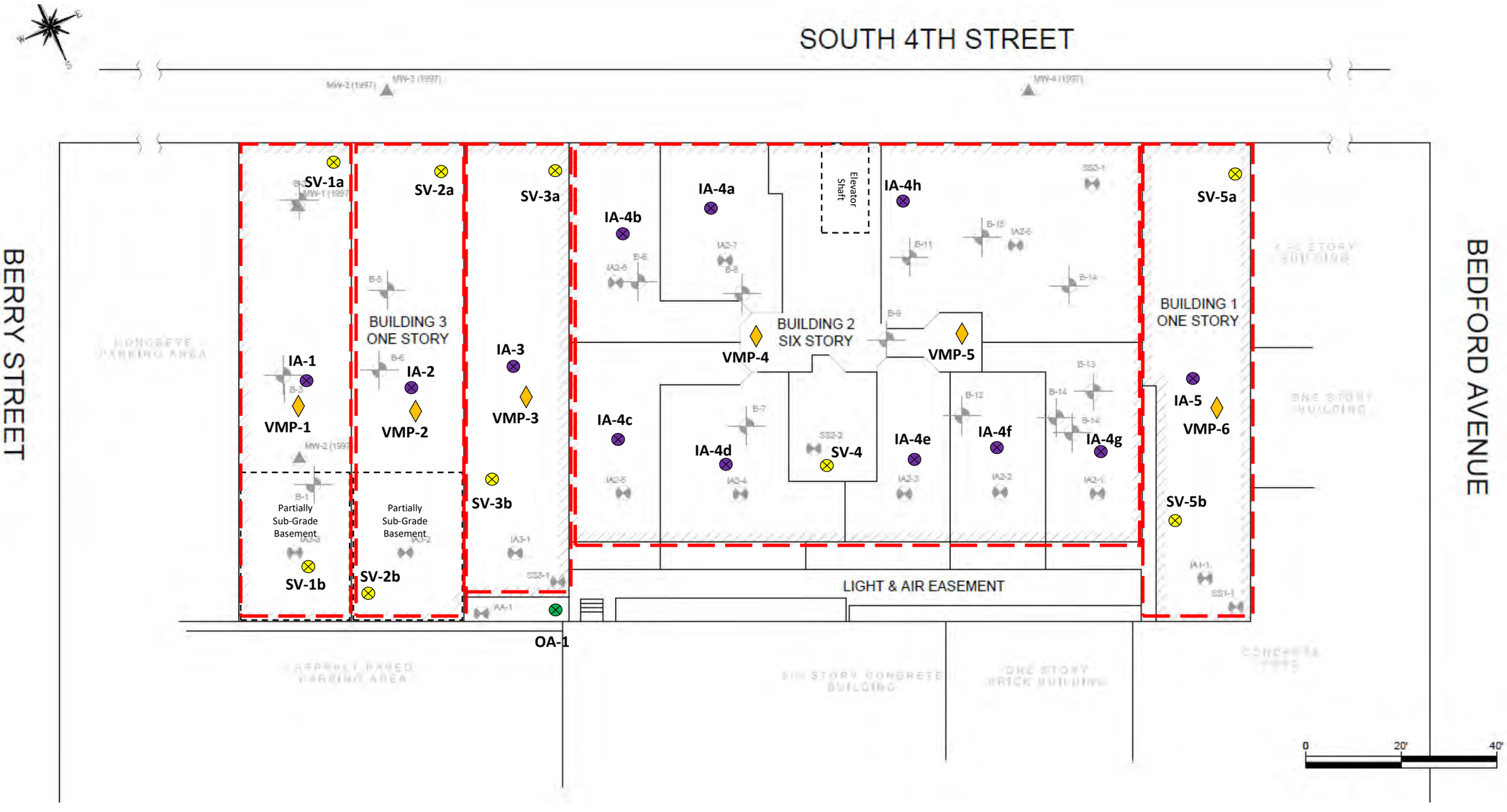

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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September 29, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#24 - Interim Remedial Measures Progress Report (9/28/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 28, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 28, 2022

- CG installed horizontal piping between SP-18 and SP-19 in apartment 1-G of 100 South 4th Street, and routed piping out the rear wall to the rear exterior egress.
- No ground intrusive work was performed; thus, CAMP was not required.

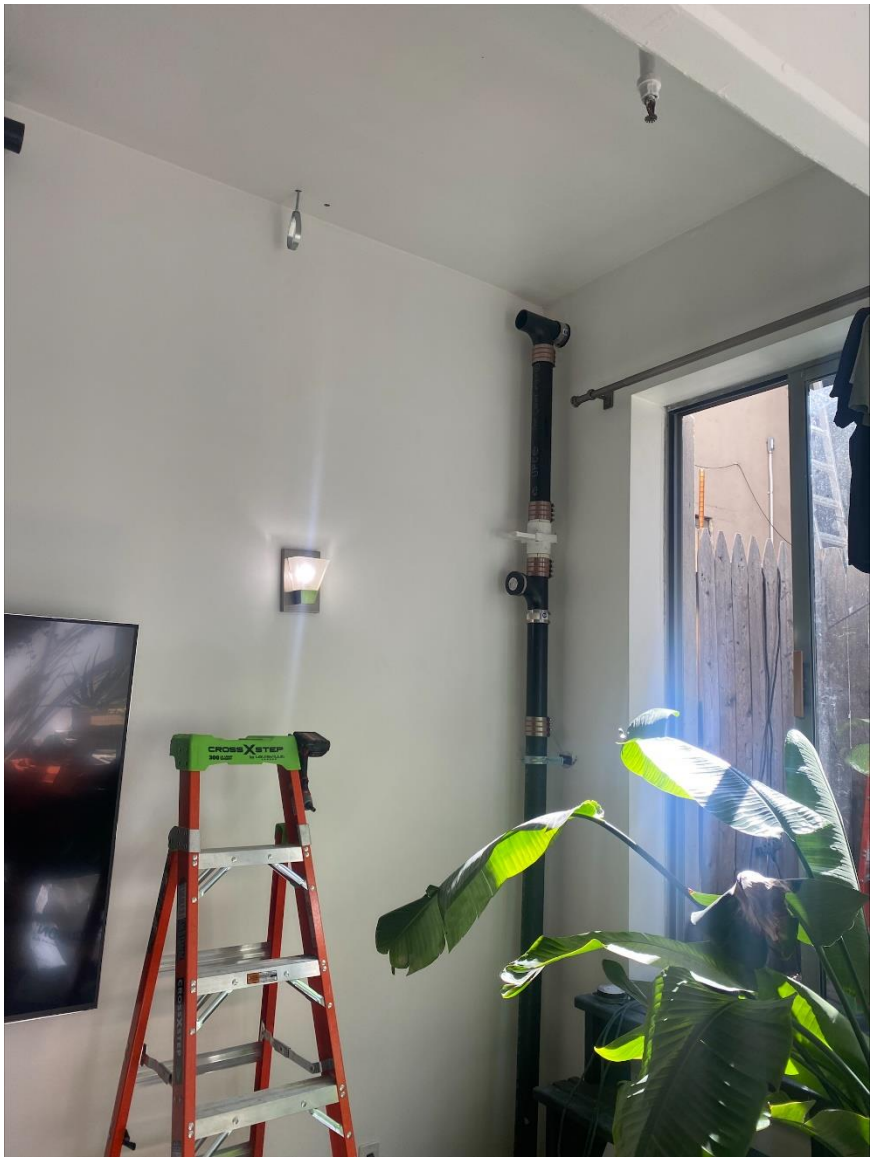
Planned work for the following day (Thursday September 29, 2022) includes routing SSDS suction points SP-15 and SP-16 in apartment 1-F leg to exterior easement in rear of property.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

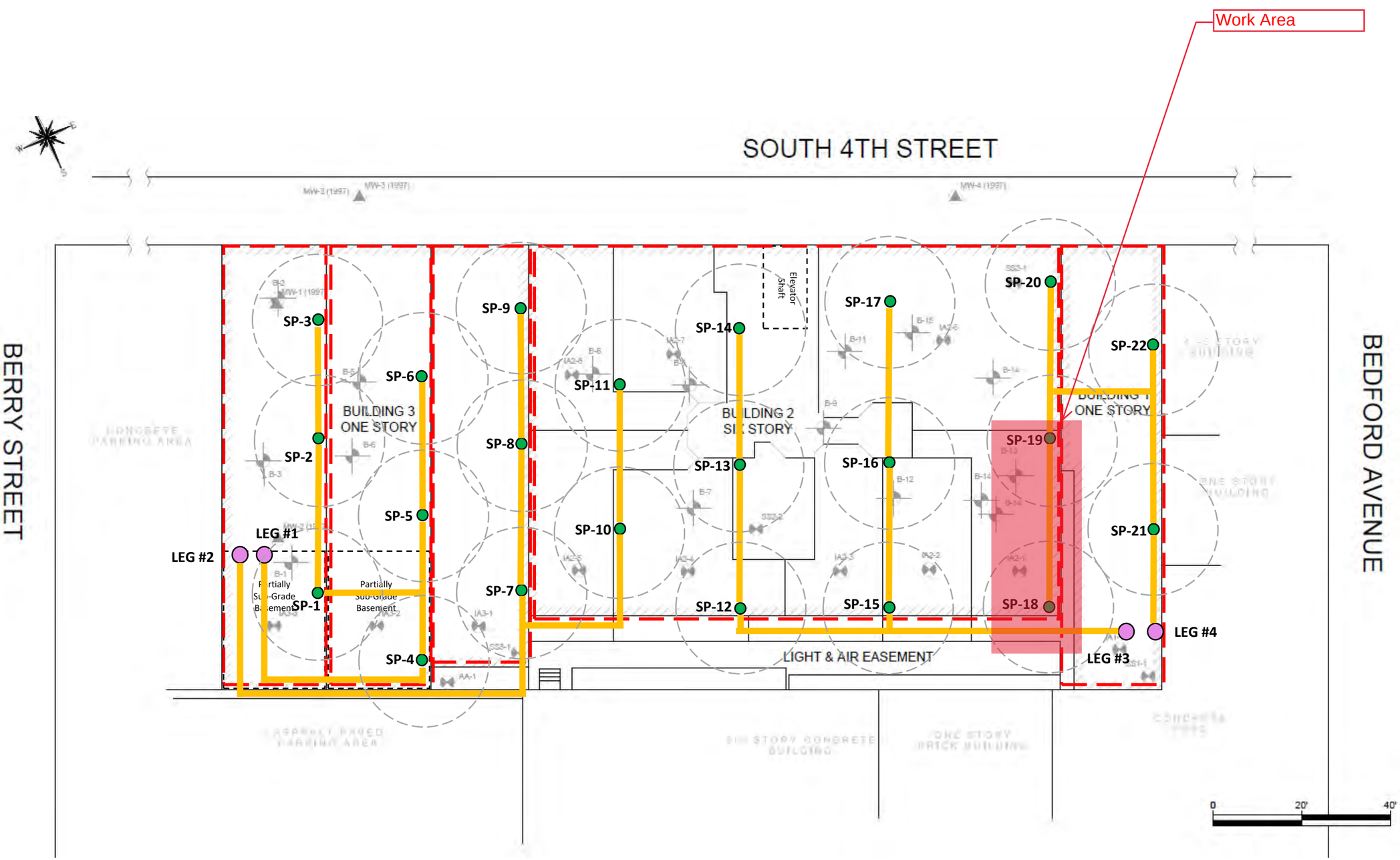
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map



Photograph No. 1: View of gate valve on and exterior routed piping for SP-19

Photograph No. 2: View of horizontal piping installation between SP-18 and SP-19

Photograph No. 3: View piping protruding from apartment 1-G to rear egress



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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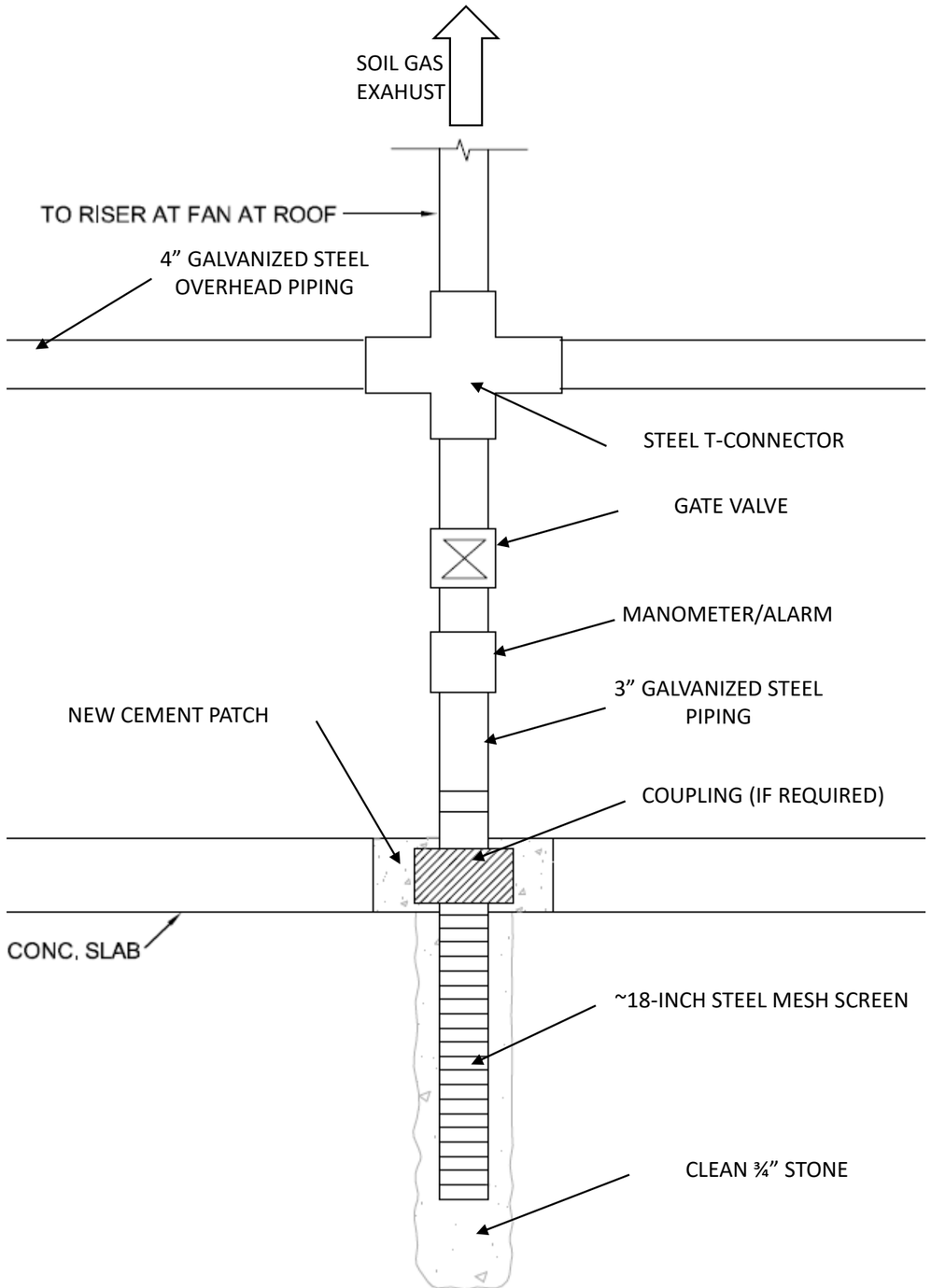
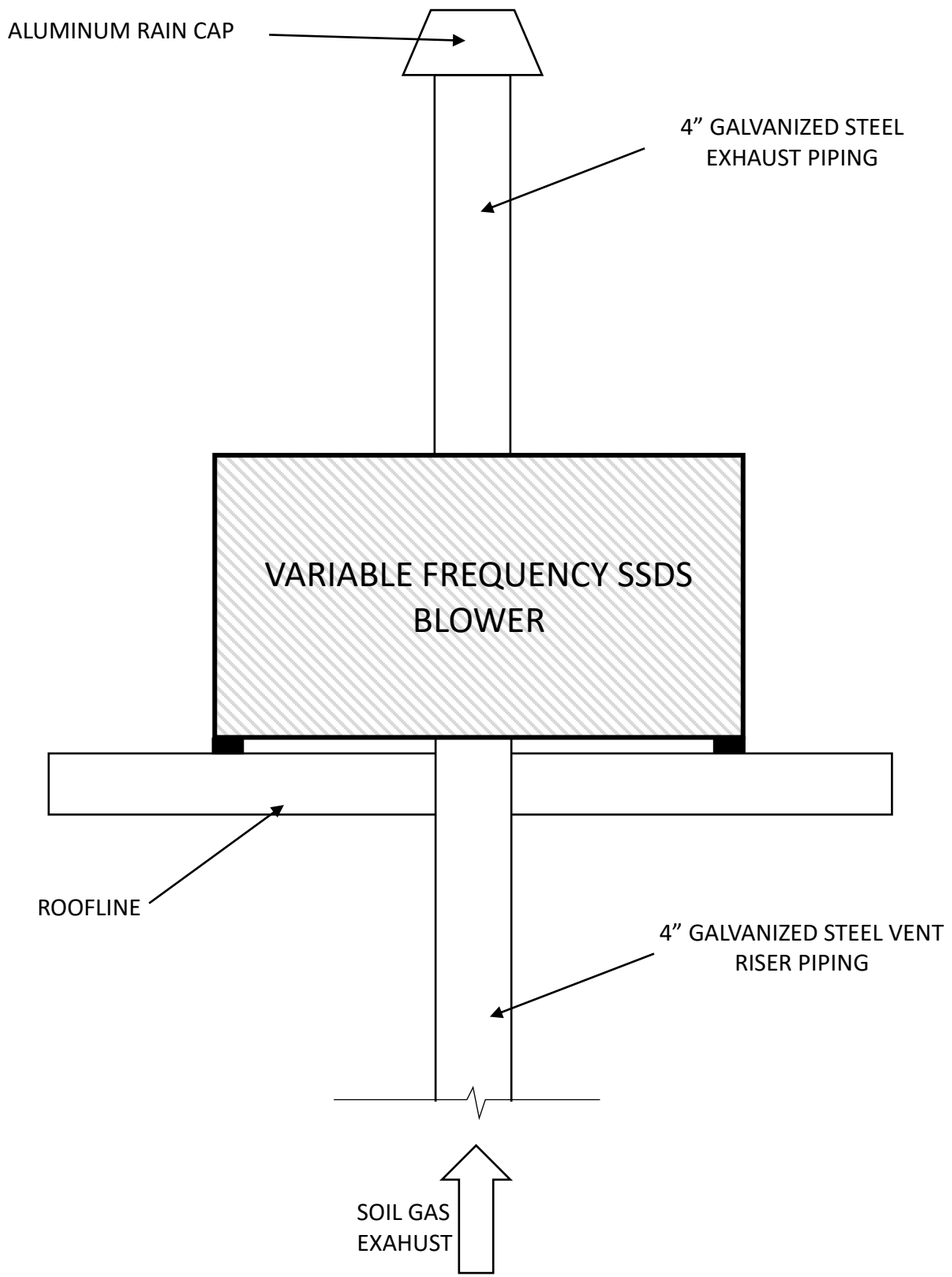
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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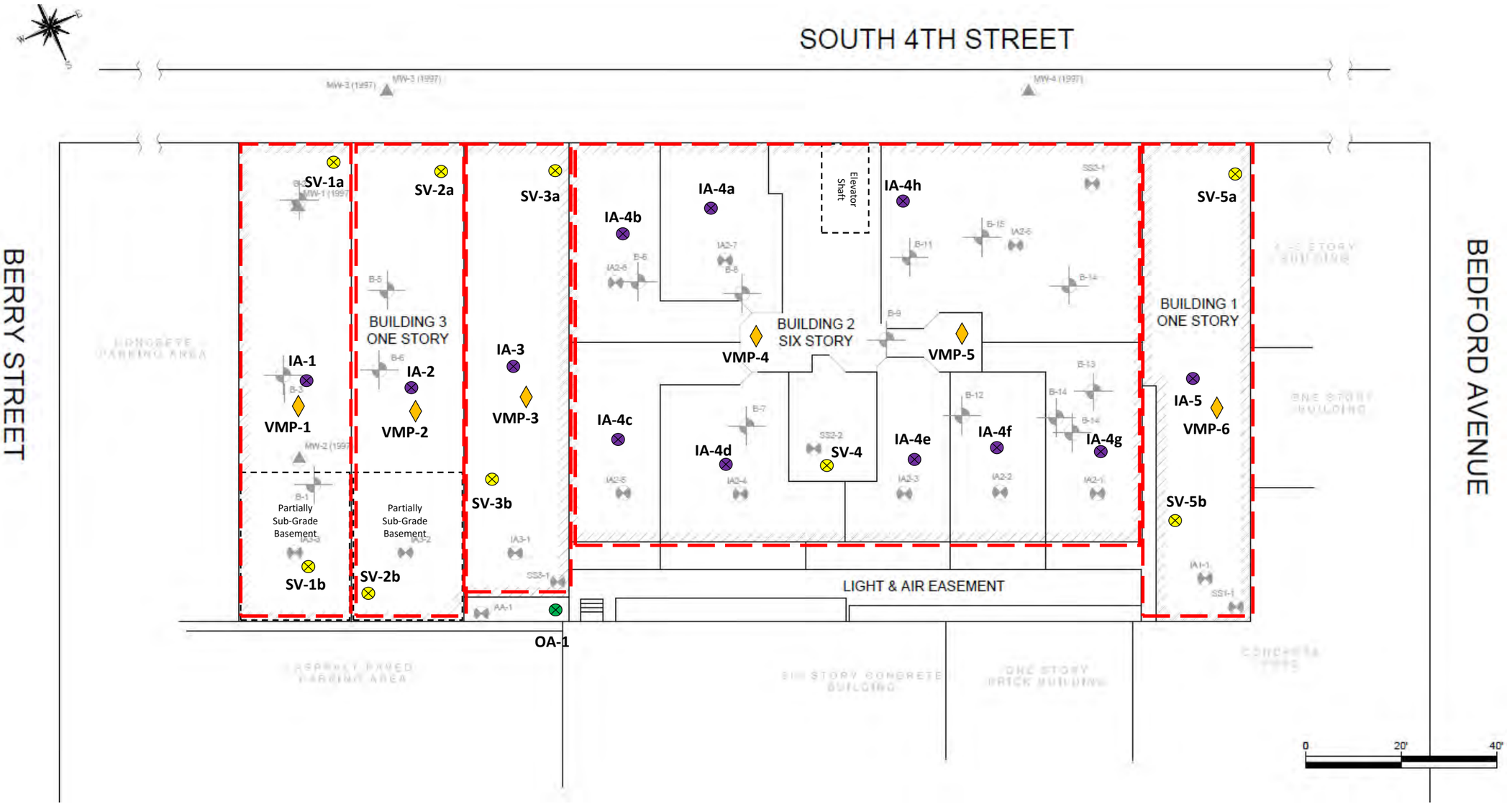

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
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September 30, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#25 - Interim Remedial Measures Progress Report (9/29/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

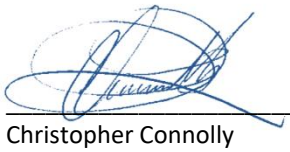
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on September 29, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

September 29, 2022

- CG routed SSDS suction points SP-15 and SP-16 in apartment 1-F leg to exterior easement in rear of property.
- No ground intrusive work was performed; thus, CAMP was not required.

No work is planned for the following day (Friday September 30, 2022). Work will recommence on Monday October 3, 2022, with installation of suction points SP-10 and SP-11 in units 1-D and 1-B, 100 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



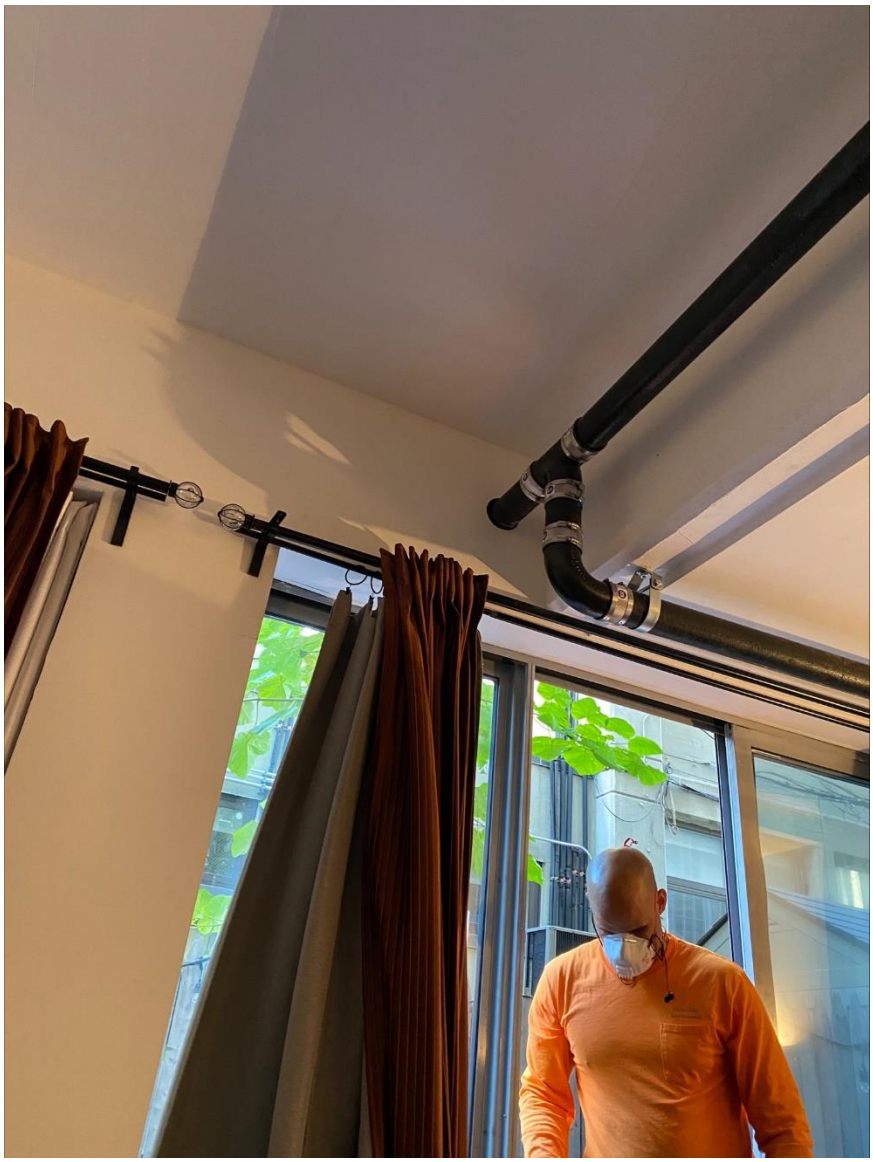
Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

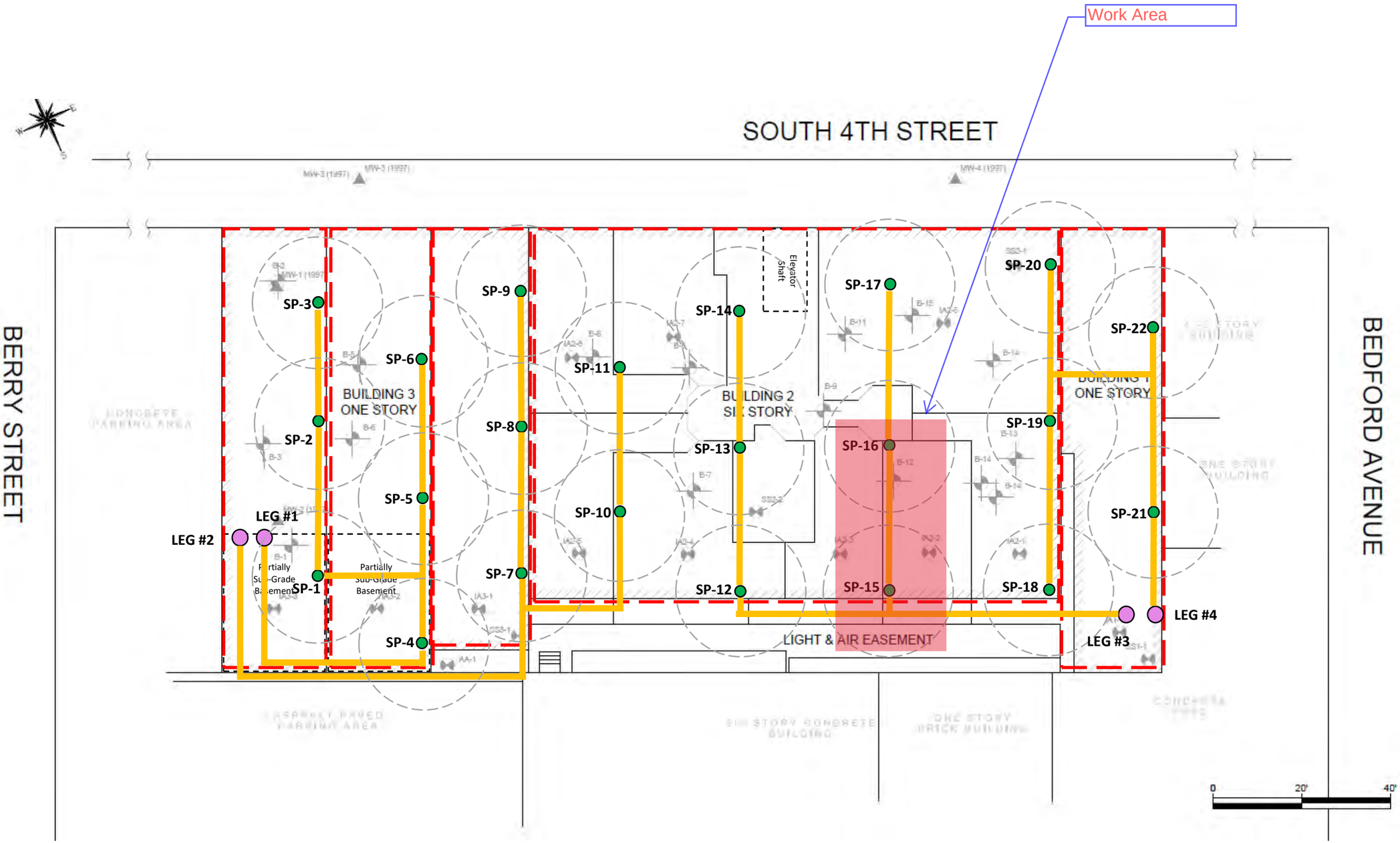
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of gate valve and riser piping from SP-16

Photograph No. 2: View of horizontal piping installation between SP-15 and SP-16



Photograph No. 3: View piping protruding from apartment 1-F to rear egress



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
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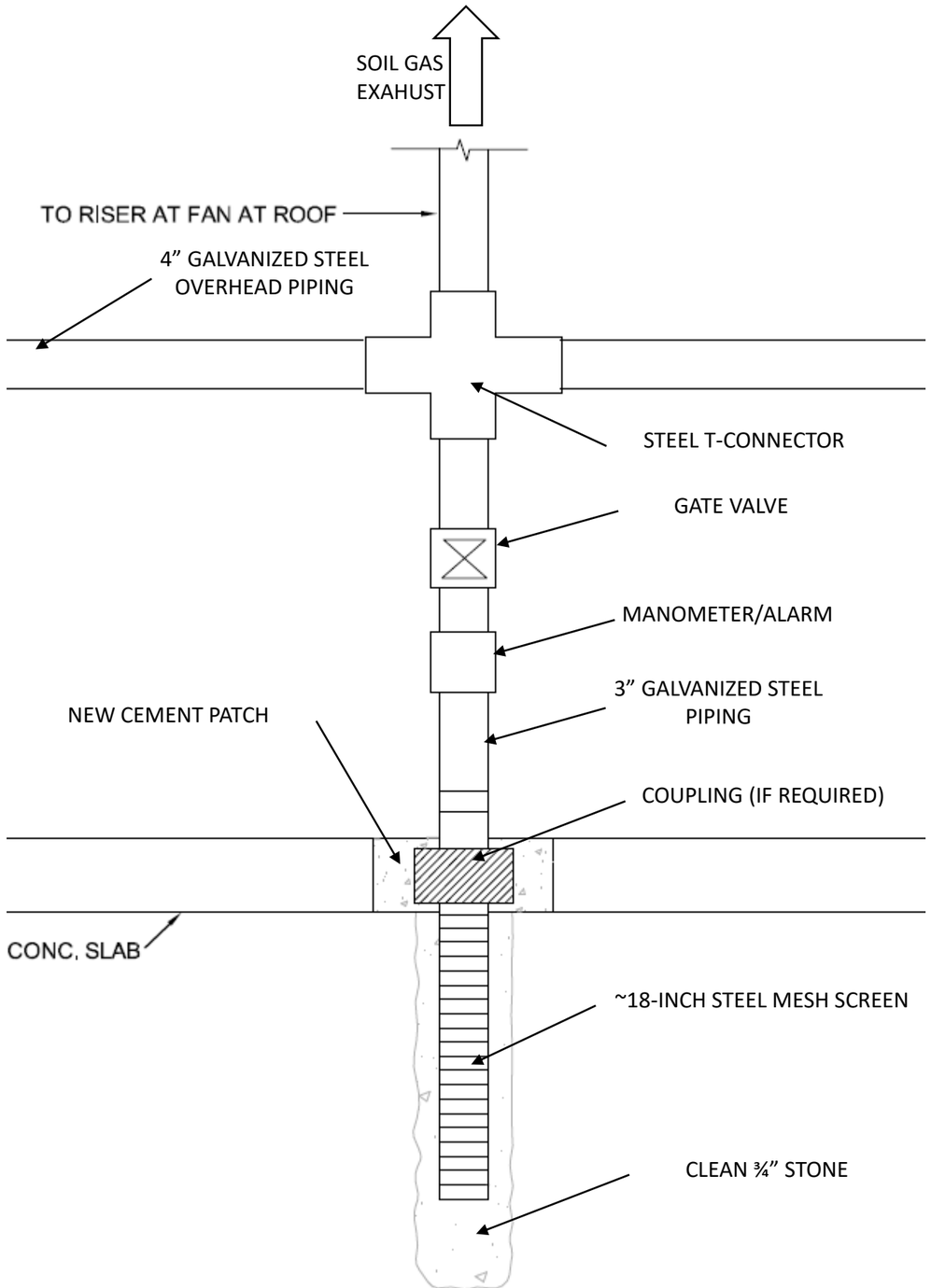
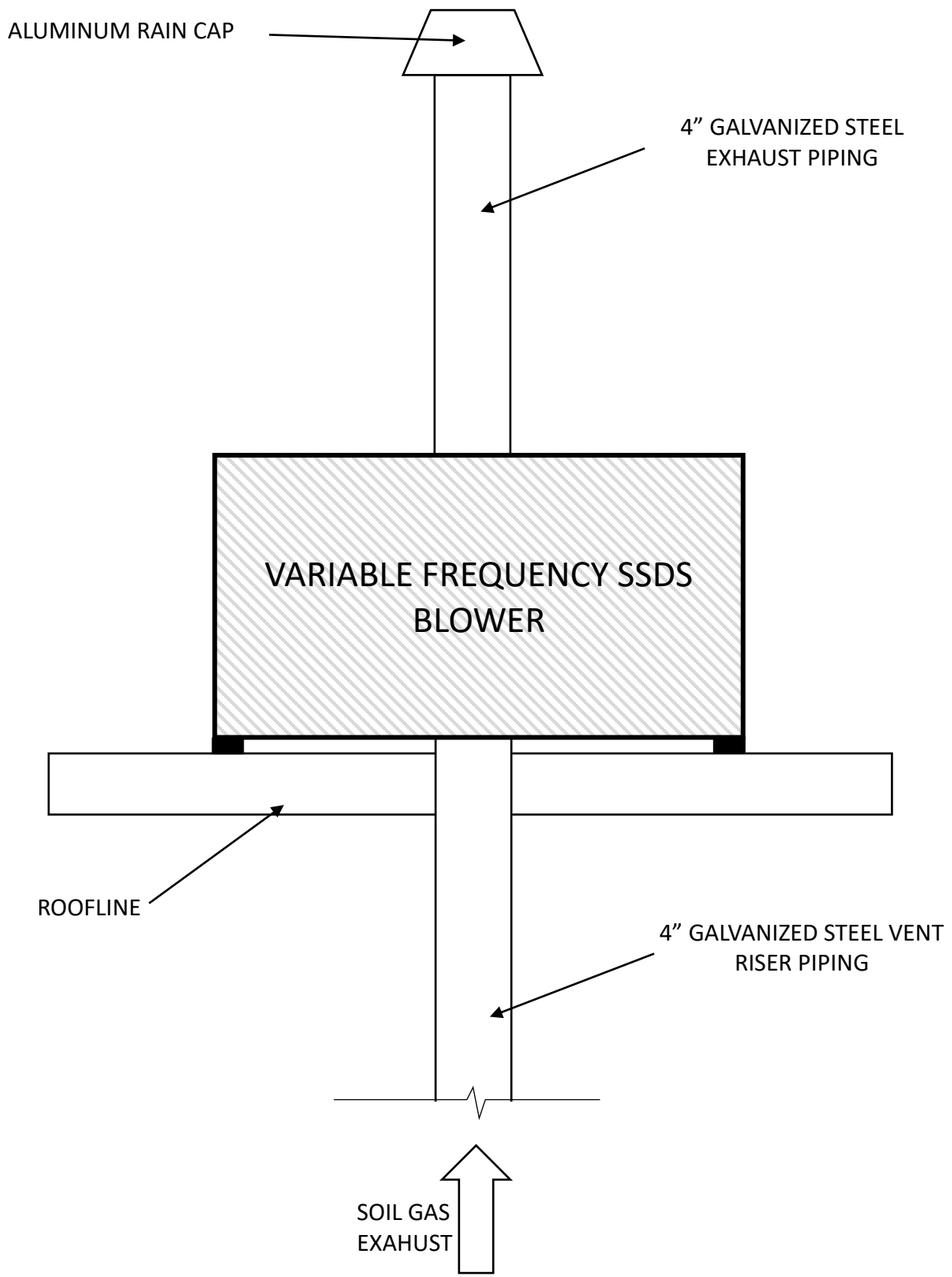


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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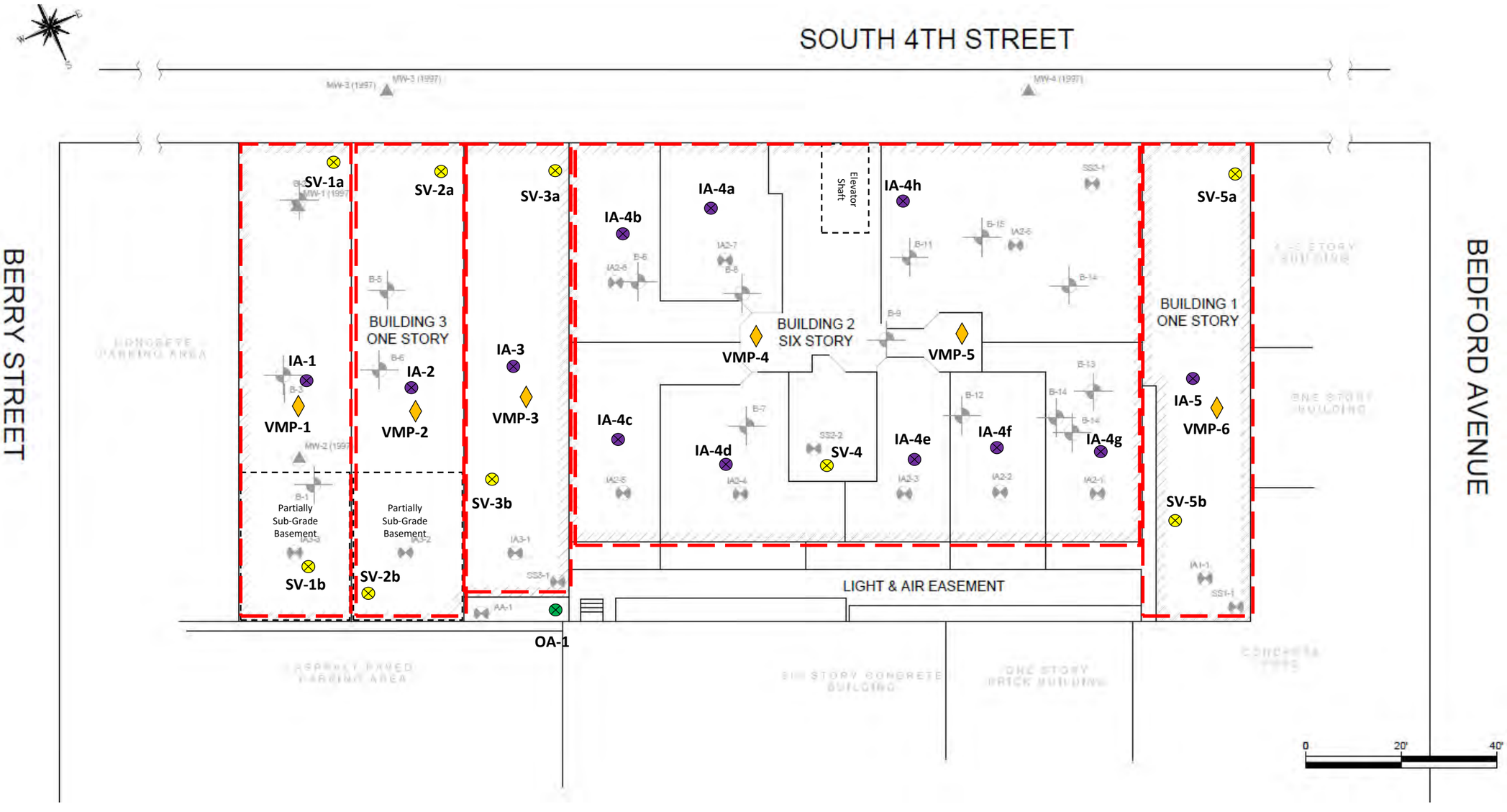

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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DATE	3/25/21
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October 4, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#26 - Interim Remedial Measures Progress Report (10/03/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 3, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 3, 2022

- CG began installation and core drilling of suction points SP-10/SP-12, and SP-11, located in apartments 1-D and 1-A respectively, 100 South 4th Street.
- CG installed screens and stub ups from SP-10, SP-11, and SP-12, and sealed suction points.
- CAMP was performed during all ground intrusive activities; CAMP logs can be found attached to this report.
- Please note, spikes in dust readings were observed to be due to malfunctioning dust monitoring equipment. Equipment was troubleshooted, zero calibrated, and levels thereon in remained below threshold values.

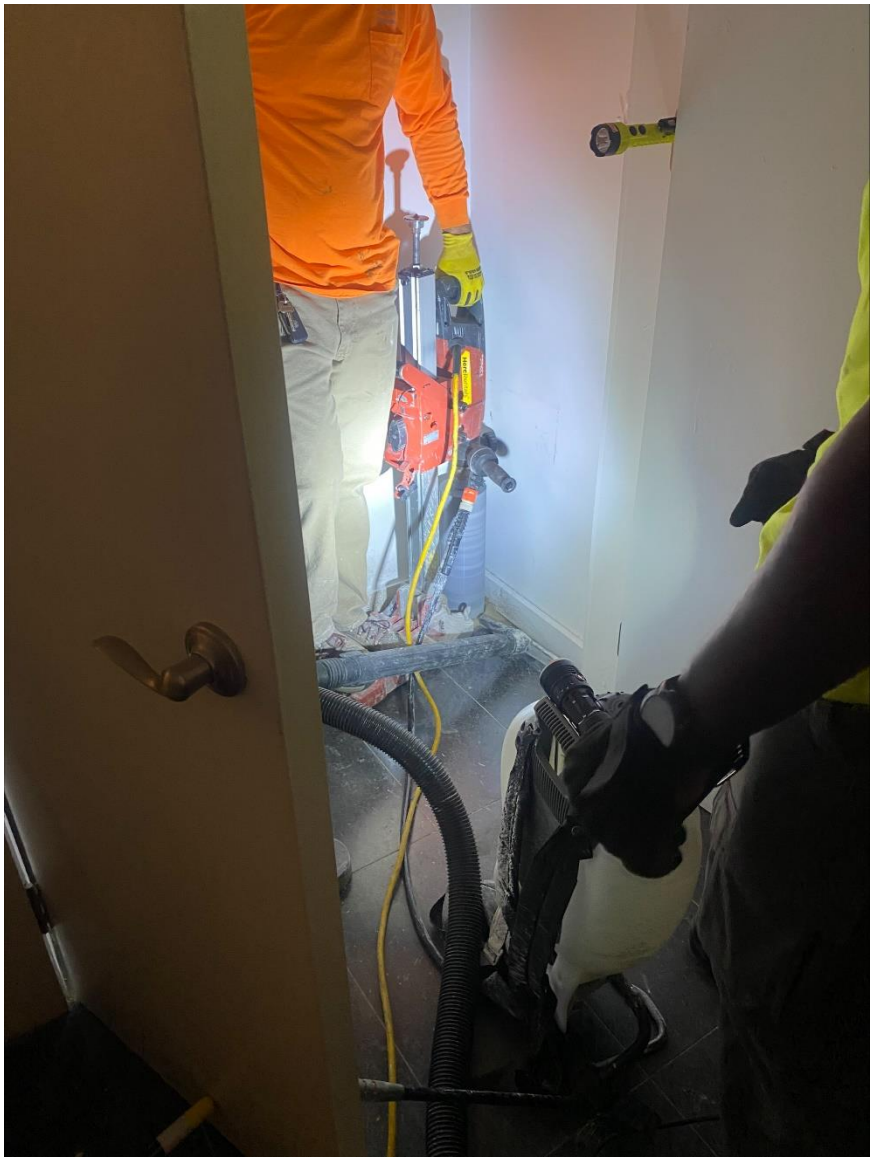
Work planned for the following day (Tuesday October 4, 2022) will include installation of vertical and horizontal piping between suction points SP-10 and SP-11, and between SP-13 and SP-12. No ground intrusive activities are anticipated for this day.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

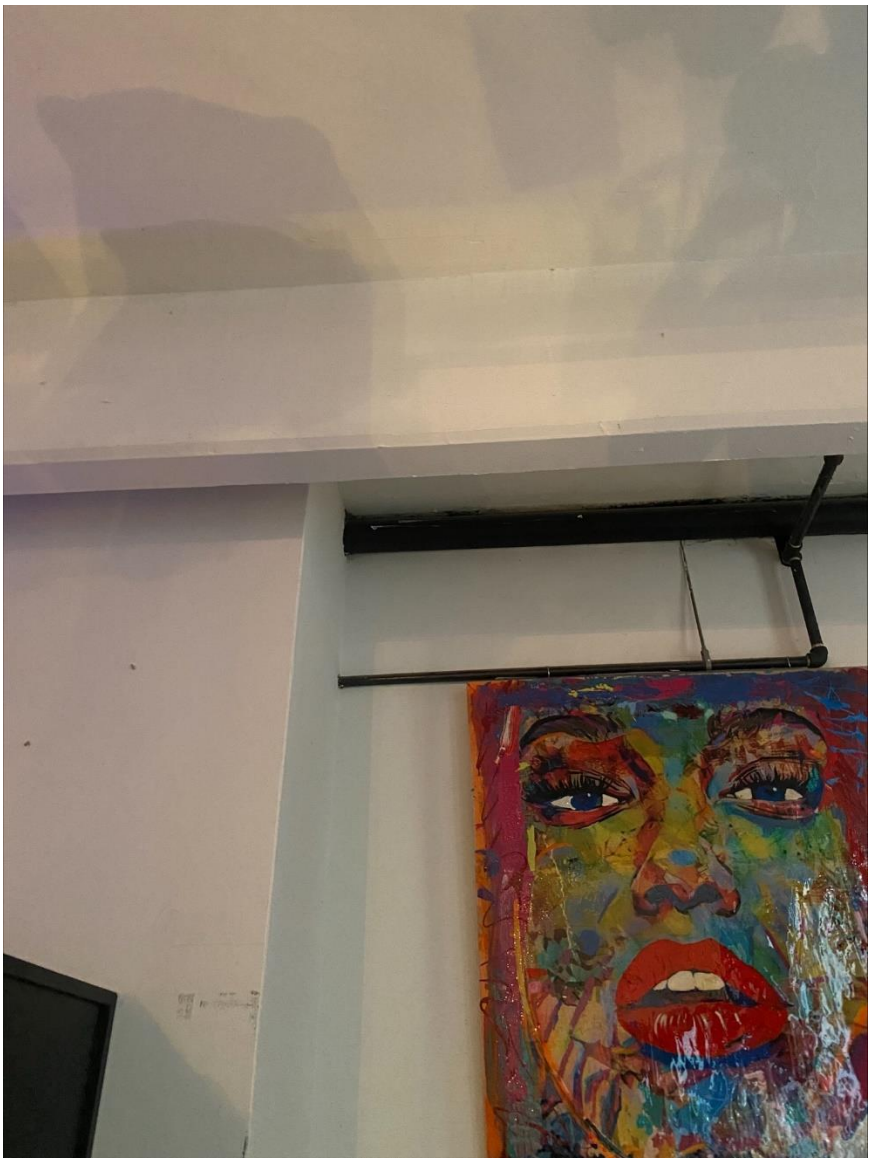
Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP Data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map



Photograph No. 1: View of typical installation of suction point in Apartment 1-D

Photograph No. 2: View of vertical riser piping and gate valve on suction point SP-10

Photograph No. 3: View of cored suction point SP-12



Photograph No. 4: View piping between suction point SP-12 and SP-13

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530153015
Firmware Version	3.1
Calibration Date	2/22/2022
Test Name	MANUAL_019
Test Start Time	8:49:13 AM
Test Start Date	10/3/2022
Test Length [D:H:M]	0:06:15
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.102
Mass Minimum [mg/m3]	0.026
Mass Maximum [mg/m3]	3.23
Mass TWA [mg/m3]	0.08
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	375

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.127		
120	0.079		
180	0.08		
240	0.059		
300	0.276		
360	0.363		
420	0.317		
480	0.394		
540	0.283		
600	0.347		
660	0.303		
720	0.204		
780	0.17		
840	0.299		
900	0.276		
960	0.131		
1020	0.184		
1080	0.209		
1140	0.168		
1200	0.307		
1260	0.251		
1320	0.227		
1380	0.188		
1440	0.26		
1500	0.243		
1560	0.208		
1620	0.225		

1680	0.201	
1740	0.134	
1800	0.123	
1860	0.128	
1920	3.23	1
1980	0.179	
2040	0.092	
2100	0.121	
2160	0.12	
2220	0.167	
2280	0.101	
2340	0.121	
2400	0.096	
2460	0.058	
2520	0.056	
2580	0.041	
2640	0.037	
2700	0.038	
2760	0.032	
2820	0.029	
2880	0.026	
2940	0.029	
3000	0.036	
3060	0.039	
3120	0.036	
3180	0.048	
3240	0.045	
3300	0.035	
3360	0.037	
3420	0.035	
3480	0.041	
3540	0.043	
3600	0.044	
3660	0.046	
3720	0.047	
3780	0.058	
3840	0.057	
3900	0.054	
3960	0.058	
4020	0.078	
4080	0.1	
4140	0.09	
4200	0.093	
4260	0.084	
4320	0.084	
4380	0.088	
4440	0.129	

4500	0.102
4560	0.097
4620	0.096
4680	0.095
4740	0.093
4800	0.098
4860	0.109
4920	0.111
4980	0.117
5040	0.133
5100	0.196
5160	0.175
5220	0.162
5280	0.175
5340	0.191
5400	0.173
5460	0.149
5520	0.217
5580	0.14
5640	0.125
5700	0.116
5760	0.135
5820	0.176
5880	0.172
5940	0.188
6000	0.163
6060	0.136
6120	0.142
6180	0.222
6240	0.183
6300	0.186
6360	0.212
6420	0.208
6480	0.18
6540	0.182
6600	0.174
6660	0.139
6720	0.131
6780	0.123
6840	0.158
6900	0.199
6960	0.199
7020	0.155
7080	0.151
7140	0.196
7200	0.168
7260	0.195

7320	0.205
7380	0.194
7440	0.175
7500	0.189
7560	0.205
7620	0.186
7680	0.21
7740	0.184
7800	0.199
7860	0.192
7920	0.214
7980	0.213
8040	0.191
8100	0.148
8160	0.156
8220	0.226
8280	0.158
8340	0.137
8400	0.195
8460	0.148
8520	0.126
8580	0.132
8640	0.17
8700	0.141
8760	0.104
8820	0.104
8880	0.068
8940	0.058
9000	0.07
9060	0.098
9120	0.087
9180	0.085
9240	0.084
9300	0.101
9360	0.105
9420	0.091
9480	0.085
9540	0.093
9600	0.089
9660	0.091
9720	0.091
9780	0.088
9840	0.107
9900	0.1
9960	0.111
10020	0.086
10080	0.104

10140	0.091
10200	0.107
10260	0.093
10320	0.093
10380	0.088
10440	0.098
10500	0.085
10560	0.078
10620	0.085
10680	0.082
10740	0.082
10800	0.086
10860	0.075
10920	0.096
10980	0.112
11040	0.081
11100	0.09
11160	0.089
11220	0.074
11280	0.089
11340	0.064
11400	0.049
11460	0.052
11520	0.054
11580	0.053
11640	0.069
11700	0.076
11760	0.074
11820	0.061
11880	0.066
11940	0.062
12000	0.071
12060	0.07
12120	0.068
12180	0.064
12240	0.066
12300	0.084
12360	0.068
12420	0.07
12480	0.061
12540	0.064
12600	0.063
12660	0.058
12720	0.055
12780	0.054
12840	0.058
12900	0.05

12960	0.053
13020	0.058
13080	0.057
13140	0.055
13200	0.056
13260	0.051
13320	0.051
13380	0.053
13440	0.051
13500	0.05
13560	0.038
13620	0.045
13680	0.041
13740	0.04
13800	0.03
13860	0.032
13920	0.035
13980	0.036
14040	0.034
14100	0.033
14160	0.037
14220	0.036
14280	0.035
14340	0.034
14400	0.033
14460	0.035
14520	0.039
14580	0.036
14640	0.033
14700	0.032
14760	0.031
14820	0.031
14880	0.035
14940	0.035
15000	0.039
15060	0.037
15120	0.031
15180	0.031
15240	0.038
15300	0.035
15360	0.042
15420	0.034
15480	0.042
15540	0.057
15600	0.047
15660	0.058
15720	0.063

15780	0.05
15840	0.066
15900	0.049
15960	0.039
16020	0.032
16080	0.033
16140	0.033
16200	0.03
16260	0.037
16320	0.04
16380	0.063
16440	0.048
16500	0.04
16560	0.049
16620	0.048
16680	0.06
16740	0.064
16800	0.063
16860	0.05
16920	0.059
16980	0.06
17040	0.055
17100	0.053
17160	0.048
17220	0.055
17280	0.034
17340	0.043
17400	0.043
17460	0.061
17520	0.09
17580	0.092
17640	0.07
17700	0.085
17760	0.095
17820	0.11
17880	0.088
17940	0.067
18000	0.07
18060	0.064
18120	0.067
18180	0.062
18240	0.063
18300	0.059
18360	0.071
18420	0.061
18480	0.054
18540	0.066

18600	0.097
18660	0.059
18720	0.051
18780	0.061
18840	0.069
18900	0.082
18960	0.117
19020	0.083
19080	0.049
19140	0.053
19200	0.056
19260	0.052
19320	0.049
19380	0.046
19440	0.058
19500	0.059
19560	0.063
19620	0.057
19680	0.058
19740	0.063
19800	0.065
19860	0.072
19920	0.068
19980	0.065
20040	0.063
20100	0.062
20160	0.063
20220	0.061
20280	0.057
20340	0.058
20400	0.065
20460	0.051
20520	0.05
20580	0.042
20640	0.047
20700	0.042
20760	0.049
20820	0.057
20880	0.053
20940	0.043
21000	0.039
21060	0.037
21120	0.04
21180	0.04
21240	0.037
21300	0.041
21360	0.041

21420	0.044
21480	0.043
21540	0.045
21600	0.049
21660	0.047
21720	0.046
21780	0.047
21840	0.046
21900	0.046
21960	0.047
22020	0.054
22080	0.051
22140	0.052
22200	0.05
22260	0.049
22320	0.049
22380	0.049
22440	0.046
22500	0.049

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-908437	10/3/2022 3:09:40 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	0.8	0.3																					
592-908437	10/3/2022 3:09:40 PM	Readings		PID		SC23030239N5	Normal	1.0	1.0	1.0	0.9	0.7	0.3																					
592-908437	10/3/2022 3:09:40 PM	Readings		PID		SC23030239N5	Normal	0.4	0.3	0.4	0.2	0.3	0.1																					
592-908437	10/3/2022 3:08:40 PM	Readings		PID		SC23030239N5	Normal	0.9	1.0	1.1	0.9	0.7	0.3																					
592-908437	10/3/2022 3:08:40 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	0.7	0.3																					
592-908437	10/3/2022 3:08:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.2	0.3	0.2	0.3	0.1																					
592-908437	10/3/2022 3:07:40 PM	Readings		PID		SC23030239N5	Normal	1.1	1.0	1.1	0.9	0.7	0.3																					
592-908437	10/3/2022 3:07:40 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.9	0.7	0.3																					
592-908437	10/3/2022 3:07:40 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.3	0.1																					
592-908437	10/3/2022 3:06:40 PM	Readings		PID		SC23030239N5	Normal	0.9	1.0	1.0	0.8	0.7	0.2																					
592-908437	10/3/2022 3:06:40 PM	Readings		PID		SC23030239N5	Normal	0.9	0.9	0.9	0.8	0.7	0.3																					
592-908437	10/3/2022 3:06:40 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.3	0.2	0.3	0.1																					
592-908437	10/3/2022 3:05:40 PM	Readings		PID		SC23030239N5	Normal	0.8	0.9	1.0	0.7	0.6	0.2																					
592-908437	10/3/2022 3:05:40 PM	Readings		PID		SC23030239N5	Normal	0.9	0.8	0.9	0.8	0.6	0.3																					
592-908437	10/3/2022 3:05:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 3:04:40 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.8	0.7	0.6	0.2																					
592-908437	10/3/2022 3:04:40 PM	Readings		PID		SC23030239N5	Normal	0.8	0.7	0.8	0.7	0.6	0.3																					
592-908437	10/3/2022 3:04:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 3:03:40 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.8	0.7	0.6	0.2																					
592-908437	10/3/2022 3:03:40 PM	Readings		PID		SC23030239N5	Normal	0.7	0.7	0.7	0.6	0.6	0.3																					
592-908437	10/3/2022 3:03:40 PM	Readings		PID		SC23030239N5	Normal	0.4	0.4	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 3:02:40 PM	Readings		PID		SC23030239N5	Normal	0.8	0.8	0.9	0.7	0.6	0.2																					
592-908437	10/3/2022 3:02:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.3																					
592-908437	10/3/2022 3:02:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 3:01:40 PM	Readings		PID		SC23030239N5	Normal	0.8	0.7	0.8	0.6	0.6	0.2																					
592-908437	10/3/2022 3:01:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.3																					
592-908437	10/3/2022 3:01:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 3:00:40 PM	Readings		PID		SC23030239N5	Normal	0.7	0.6	0.7	0.6	0.6	0.2																					
592-908437	10/3/2022 3:00:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 3:00:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 2:59:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.5	0.6	0.5	0.5	0.2																					
592-908437	10/3/2022 2:59:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:59:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 2:58:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	10/3/2022 2:58:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:58:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 2:57:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.5	0.2																					
592-908437	10/3/2022 2:57:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:57:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 2:56:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.5	0.2																					
592-908437	10/3/2022 2:56:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:56:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.3	0.1																					
592-908437	10/3/2022 2:55:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.2																					
592-908437	10/3/2022 2:55:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:55:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 2:54:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:54:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:54:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.3	0.3	0.1																					
592-908437	10/3/2022 2:53:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:53:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.6	0.6	0.5	0.6	0.3																					
592-908437	10/3/2022 2:53:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 2:52:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:52:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.7	0.3																					
592-908437	10/3/2022 2:52:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 2:51:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:51:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.6	0.6	0.5	0.7	0.3																					
592-908437	10/3/2022 2:51:40 PM	Readings		PID		SC23030239N5	Normal	0.4	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 2:50:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:50:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.5	0.7	0.3																					
592-908437	10/3/2022 2:50:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.3	0.1																					
592-908437	10/3/2022 2:49:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:49:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:49:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.4	0.1																					
592-908437	10/3/2022 2:48:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:48:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:48:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.4	0.4	0.3	0.4	0.1																					
592-908437	10/3/2022 2:47:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:47:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:47:40 PM	Readings		PID		SC23030239N5	Normal	0.4	0.3	0.4	0.2	0.4	0.1																					
592-908437	10/3/2022 2:46:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:46:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:46:40 PM	Readings		PID		SC23030239N5	Normal	0.2	0.2	0.2	0.2	0.4	0.1																					
592-908437	10/3/2022 2:45:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.5	0.5	0.6	0.2																					
592-908437	10/3/2022 2:45:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:45:40 PM	Readings		PID		SC23030239N5	Normal	0.2	0.3	0.3	0.2	0.4	0.1																					
592-908437	10/3/2022 2:44:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.5	0.6	0.5	0.6	0.2																					
592-908437	10/3/2022 2:44:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.7	0.3																					
592-908437	10/3/2022 2:44:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.3	0.2	0.4	0.1																					
592-908437	10/3/2022 2:43:40 PM	Readings		PID		SC23030239N5	Normal	0.5	0.6	0.6	0.5	0.6	0.2																					
592-908437	10/3/2022 2:43:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.7	0.6	0.7	0.3																					
592-908437	10/3/2022 2:43:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.4	0.3	0.5	0.1																					
592-908437	10/3/2022 2:42:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
592-908437	10/3/2022 2:42:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.7	0.7	0.6	0.7	0.3																					
592-908437	10/3/2022 2:42:40 PM	Readings		PID		SC23030239N5	Normal	0.4	0.3	0.4	0.3	0.5	0.1																					
592-908437	10/3/2022 2:41:40 PM	Readings		PID		SC23030239N5	Normal	0.6	0.6	0.6	0.6	0.6	0.2																					
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592-908437	10/3/2022 2:36:40 PM	Readings		PID		SC23030239N5	Normal	0.3	0.3	0.5	0.3	0.5	0.1																					
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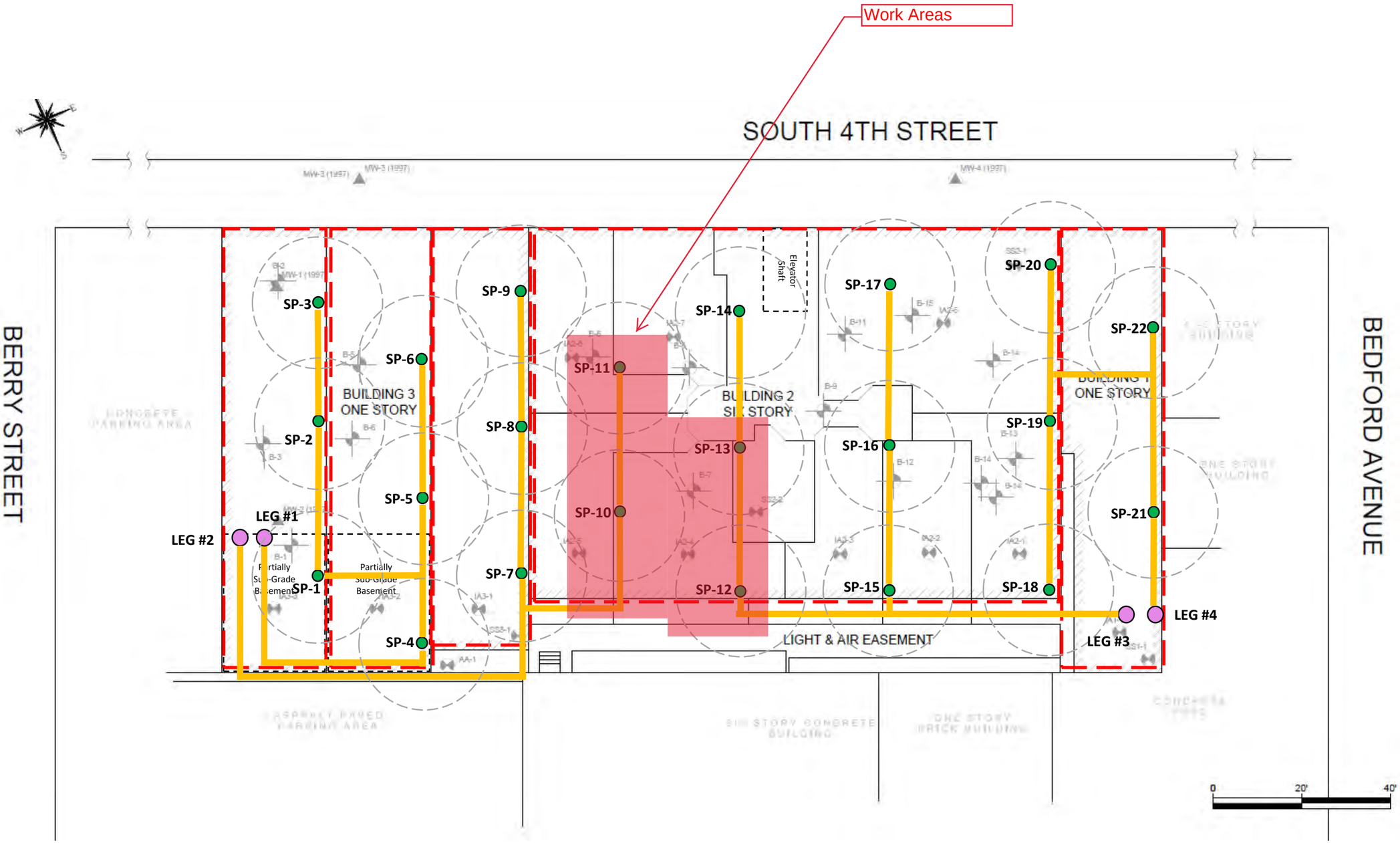

Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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DATE	3/25/21
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IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
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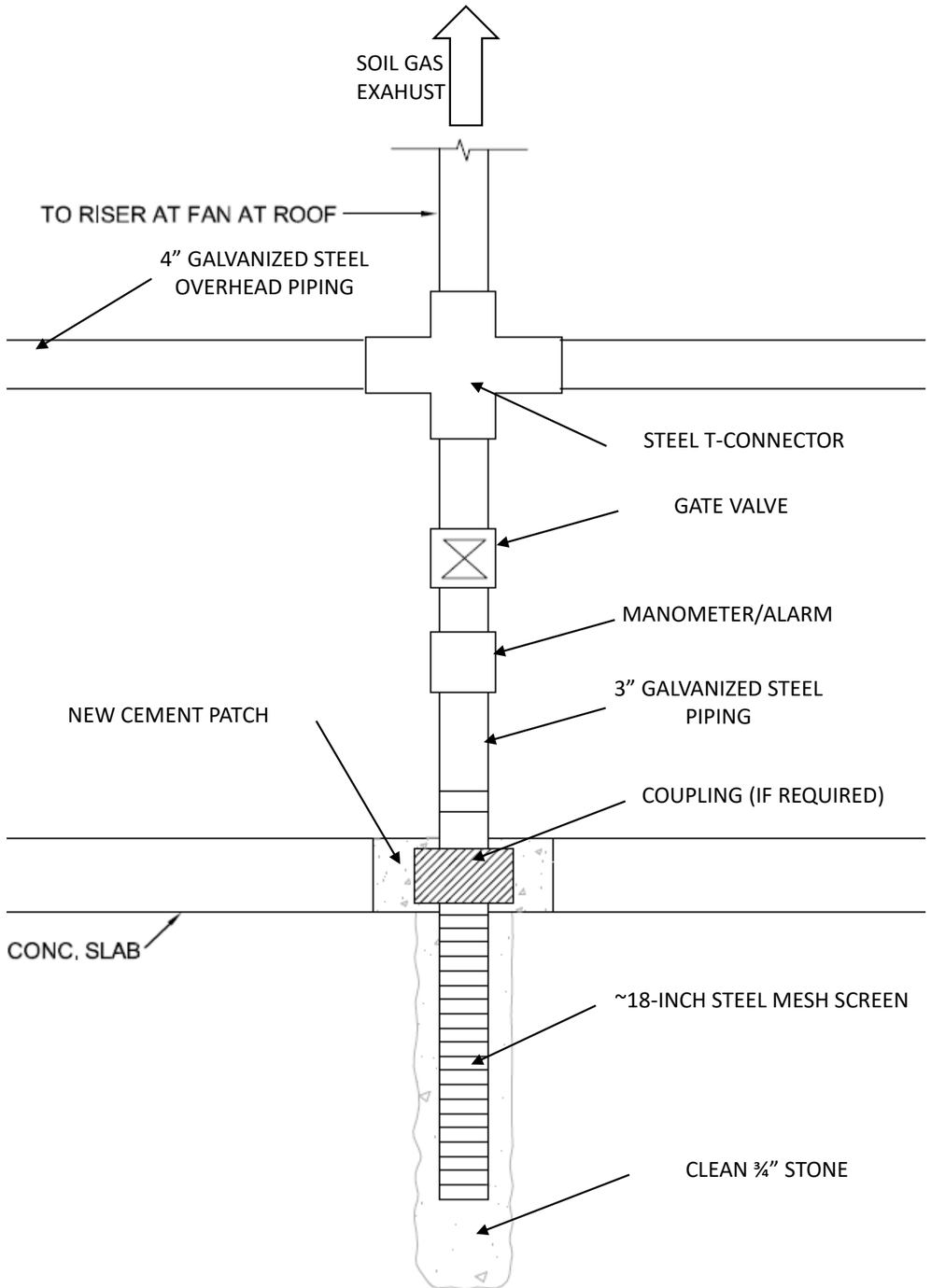
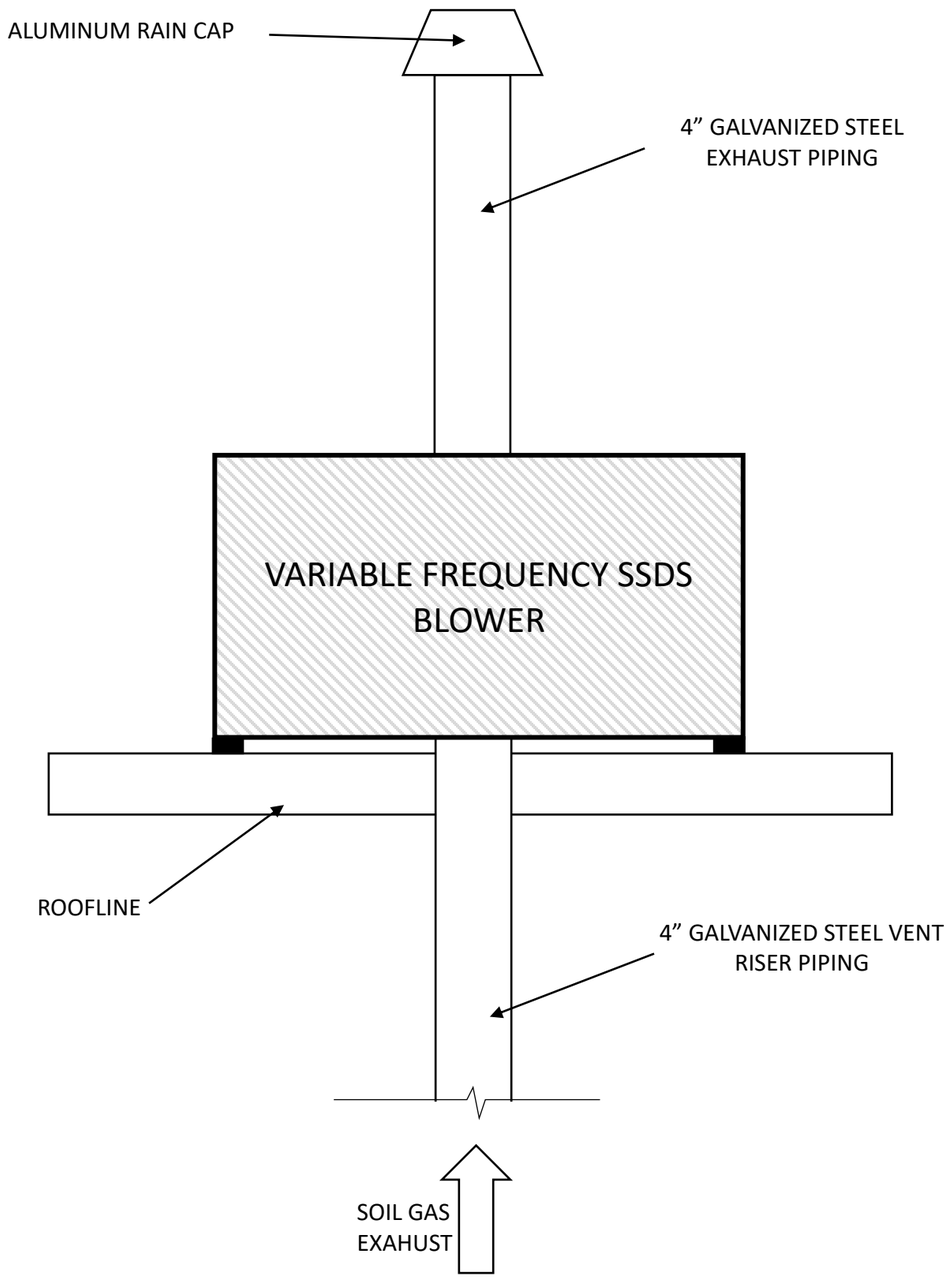
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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DATE	3/25/21
Revisions	

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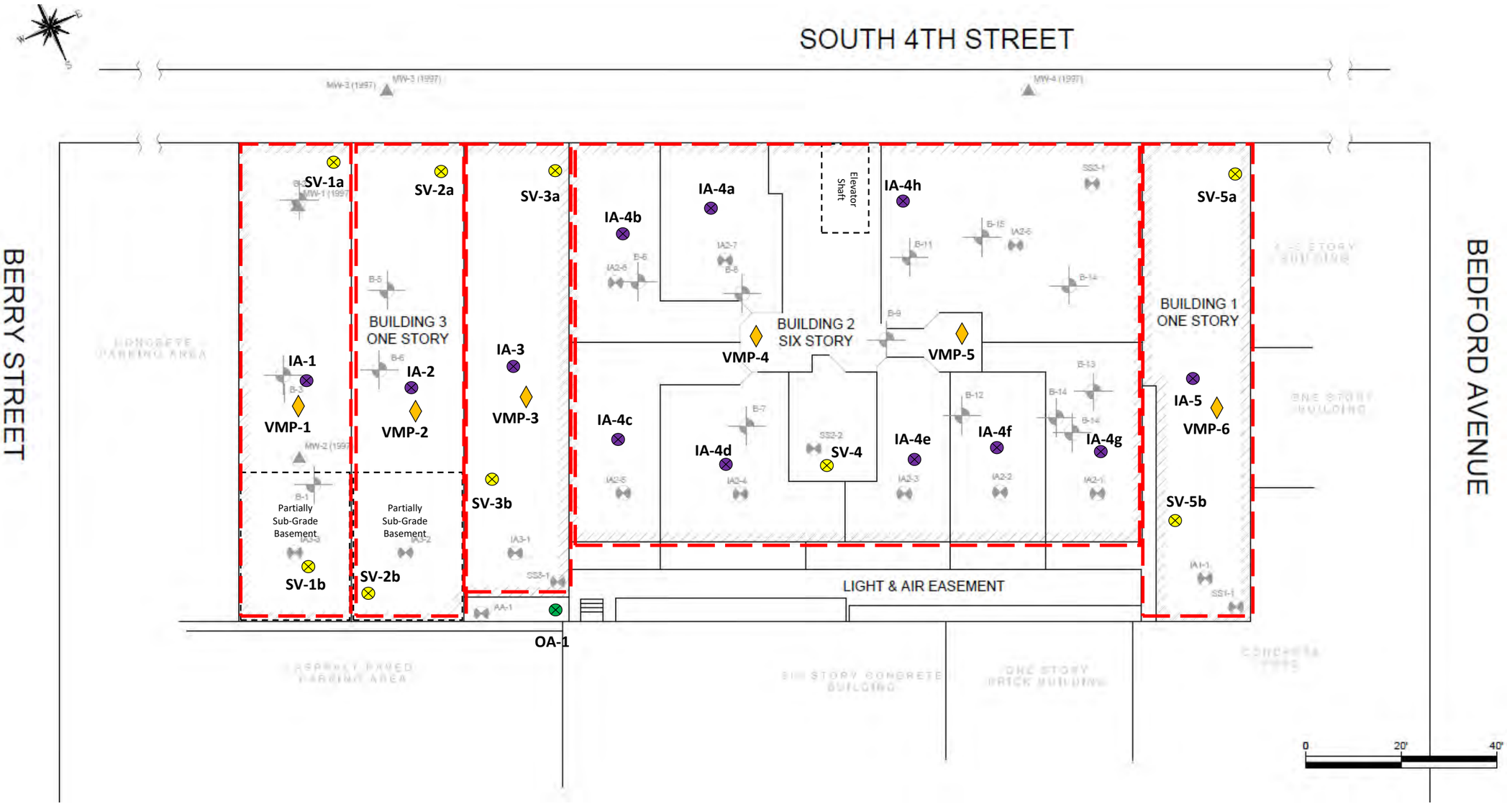

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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October 5, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#27 - Interim Remedial Measures Progress Report (10/04/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

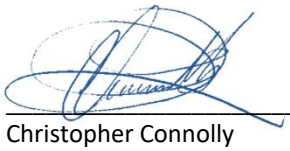
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 4, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 4, 2022

- CG began installation of horizontal piping between SP-10 and SP-11.
- No ground intrusive activities were performed; thus, CAMP was not required.

Work planned for the following day (Wednesday October 5, 2022) will include installation of vertical and horizontal piping between suction points SP-10 and SP-11, and between SP-13 and SP-12. No ground intrusive activities are anticipated for this day.

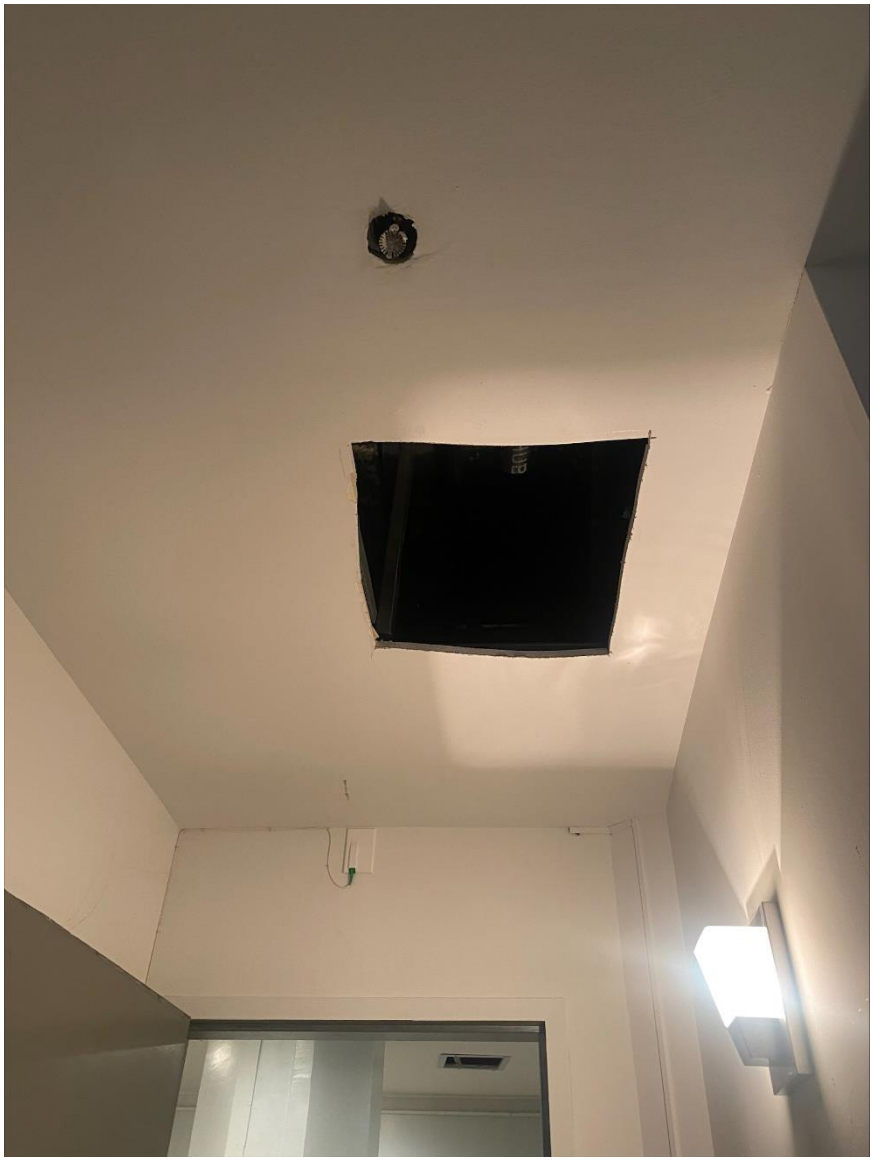
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

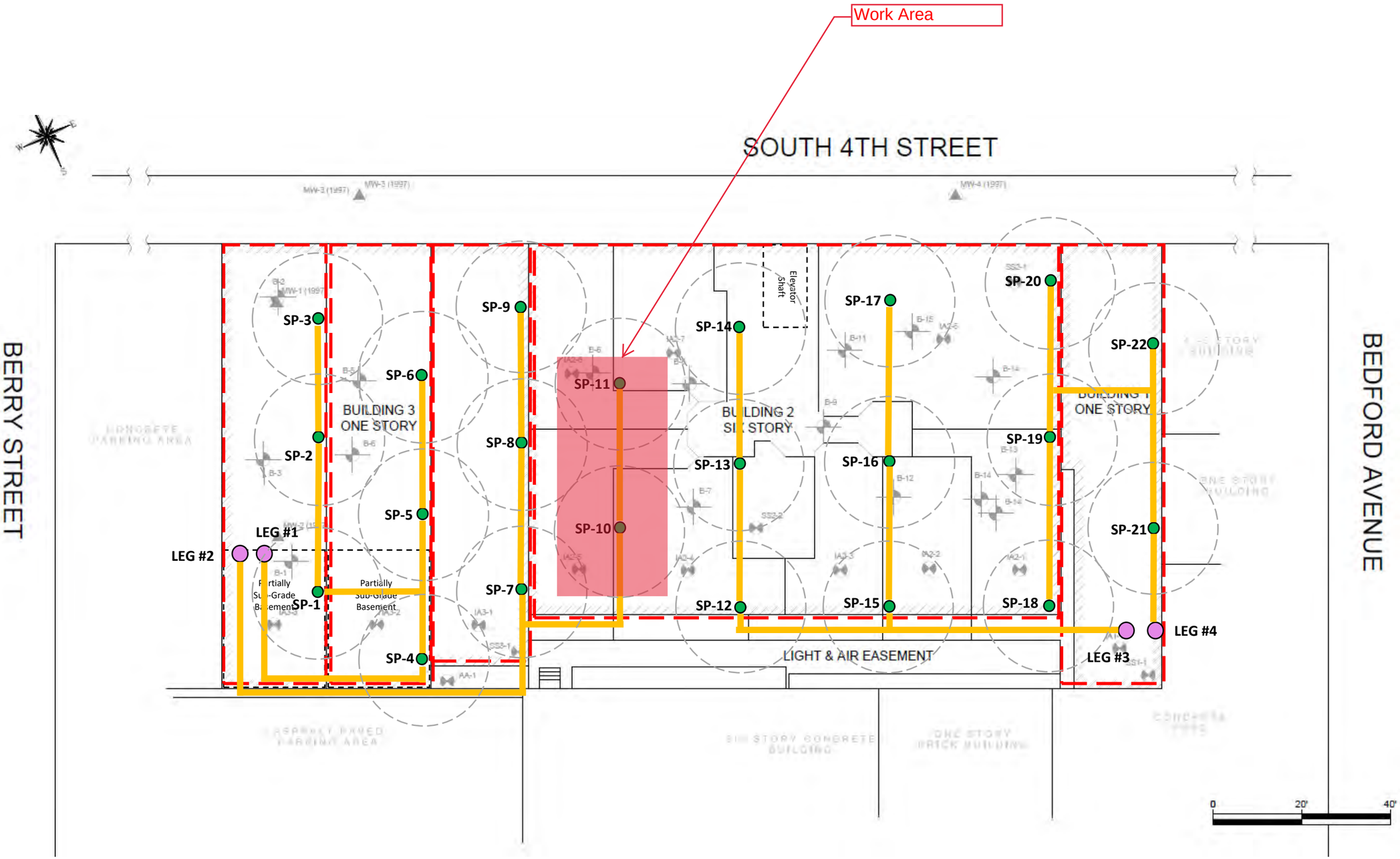
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map



Photograph No. 1: View of typical ceiling cut to route piping from SP-10 to SP-11

Photograph No. 2: View of piping routed through ceiling cavity

Photograph No. 3: View ceiling cuts for routing horizontal piping between SP-10 and SP-11



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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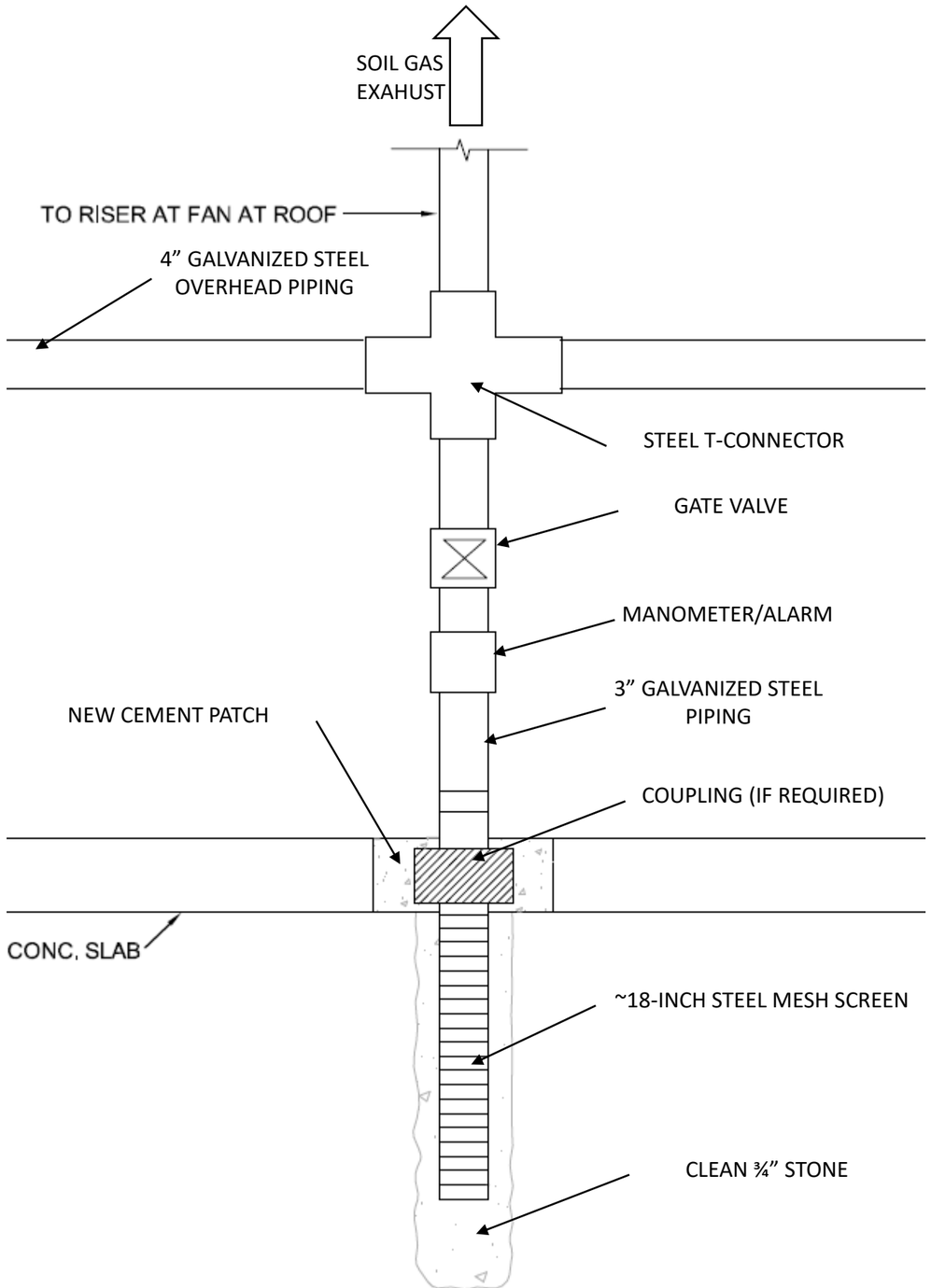
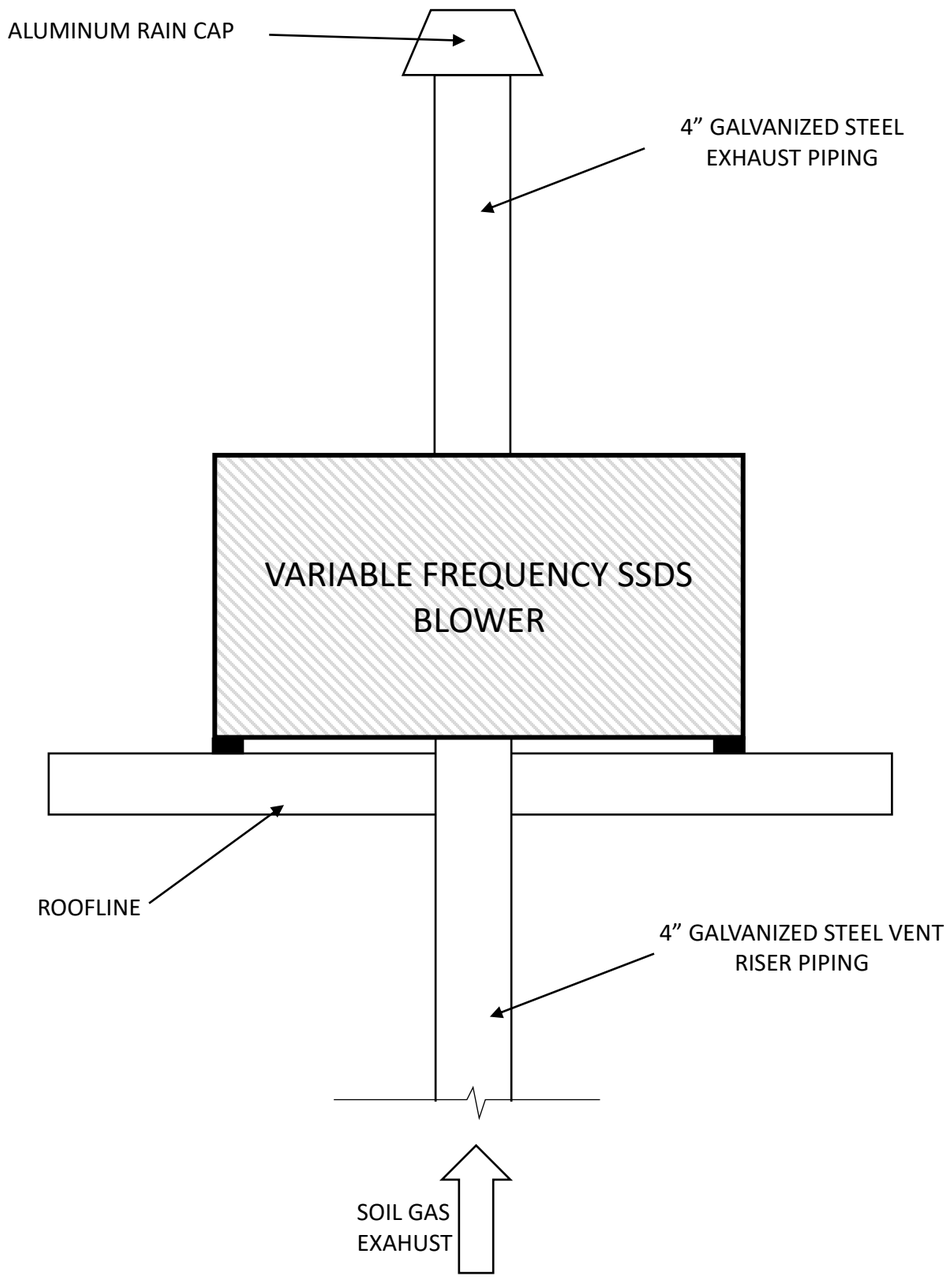


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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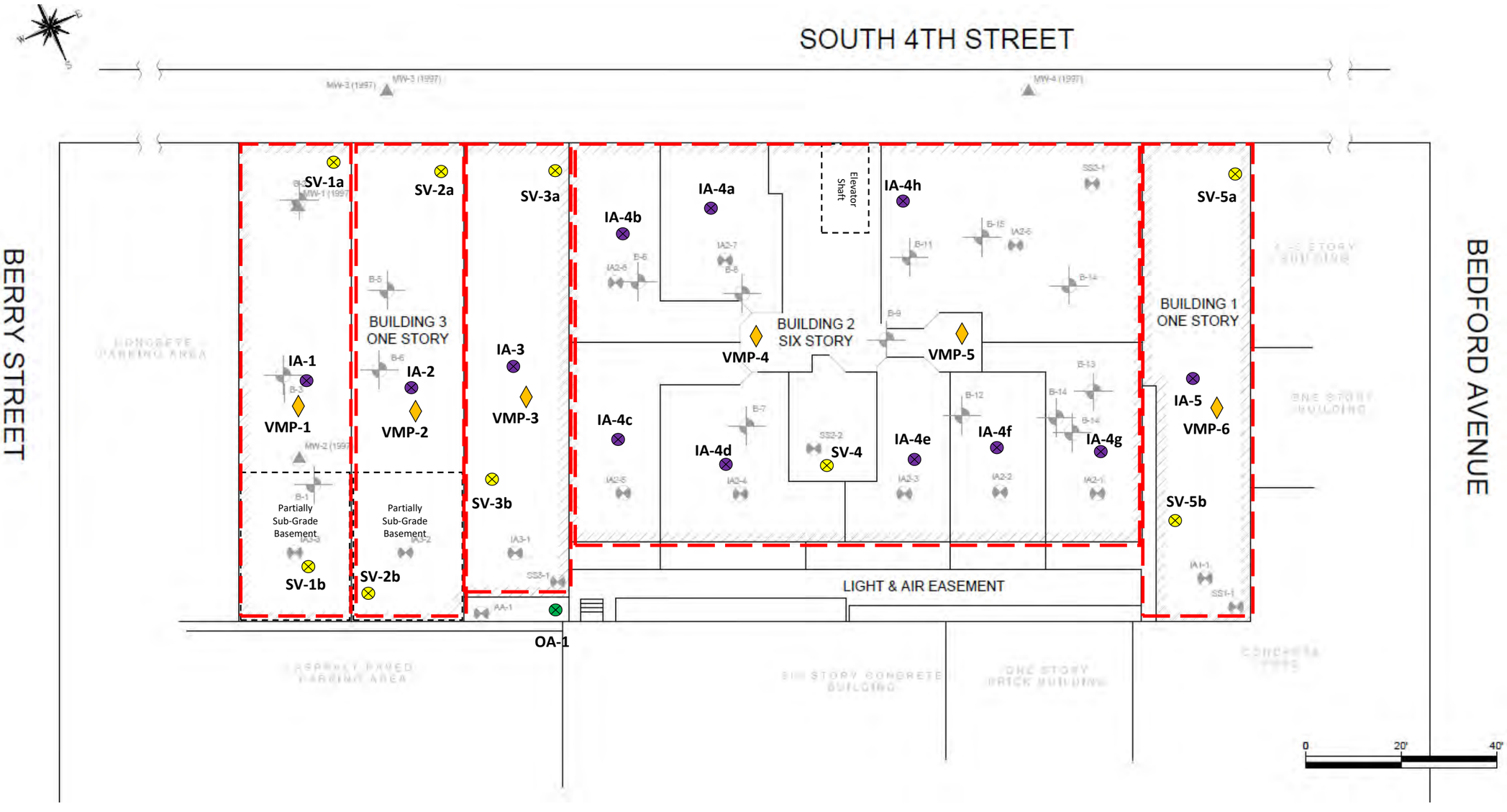

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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October 6, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#28 - Interim Remedial Measures Progress Report (10/05/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

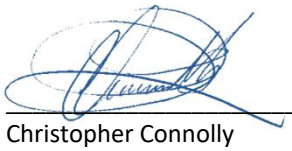
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 5, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 5, 2022

- CG continued installation of horizontal piping between SP-10 and SP-11 and between SP-12 and SP-13.
- No ground intrusive activities were performed; thus, CAMP was not required.

Work planned for the following day (Thursday October 6, 2022) will include core drilling through exterior partition wall to route interior piping outside to rear easement. No ground intrusive activities are anticipated for this day.

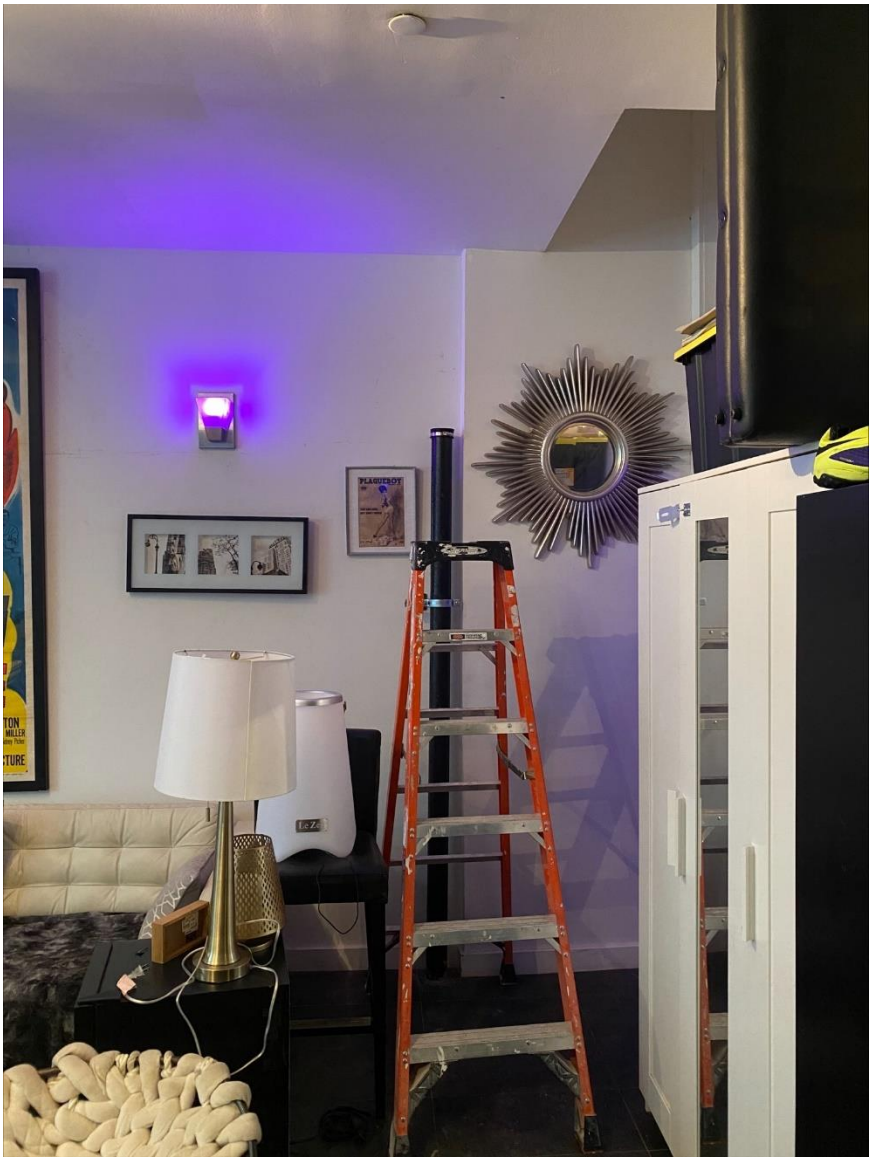
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



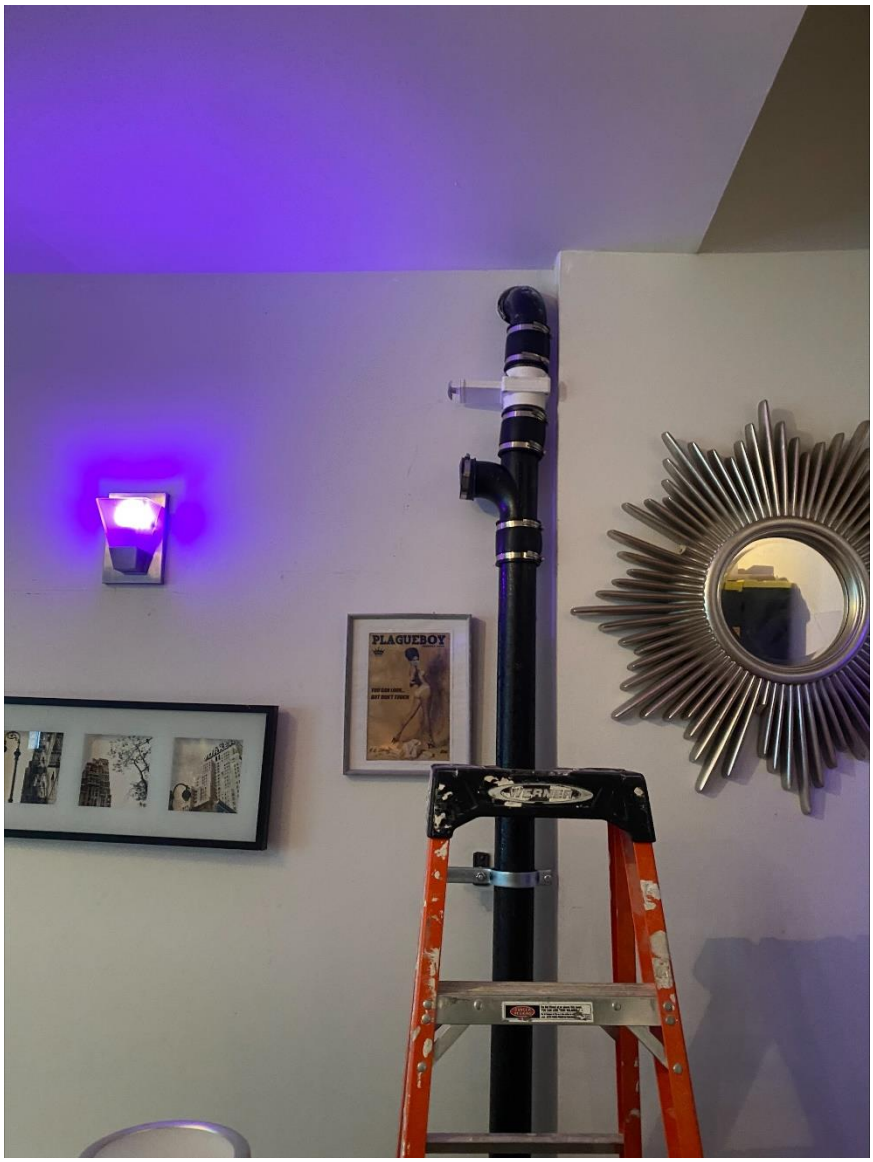
Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

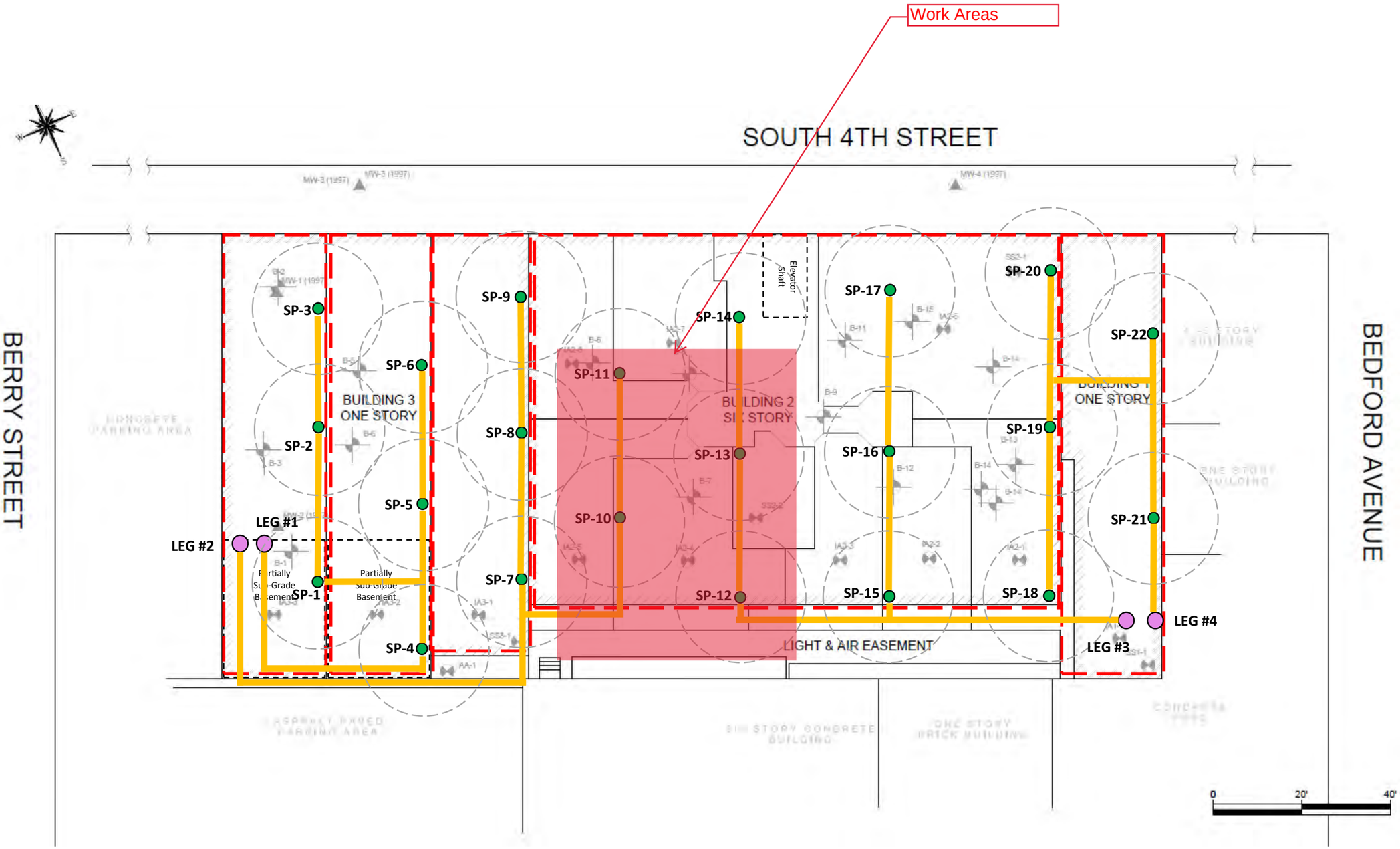


Photograph No. 1: View of riser pipe from SP-10



Photograph No. 2: View of piping and gate valve on SP-10

Photograph No. 3: View of horizontal piping between SP-10 and SP-11



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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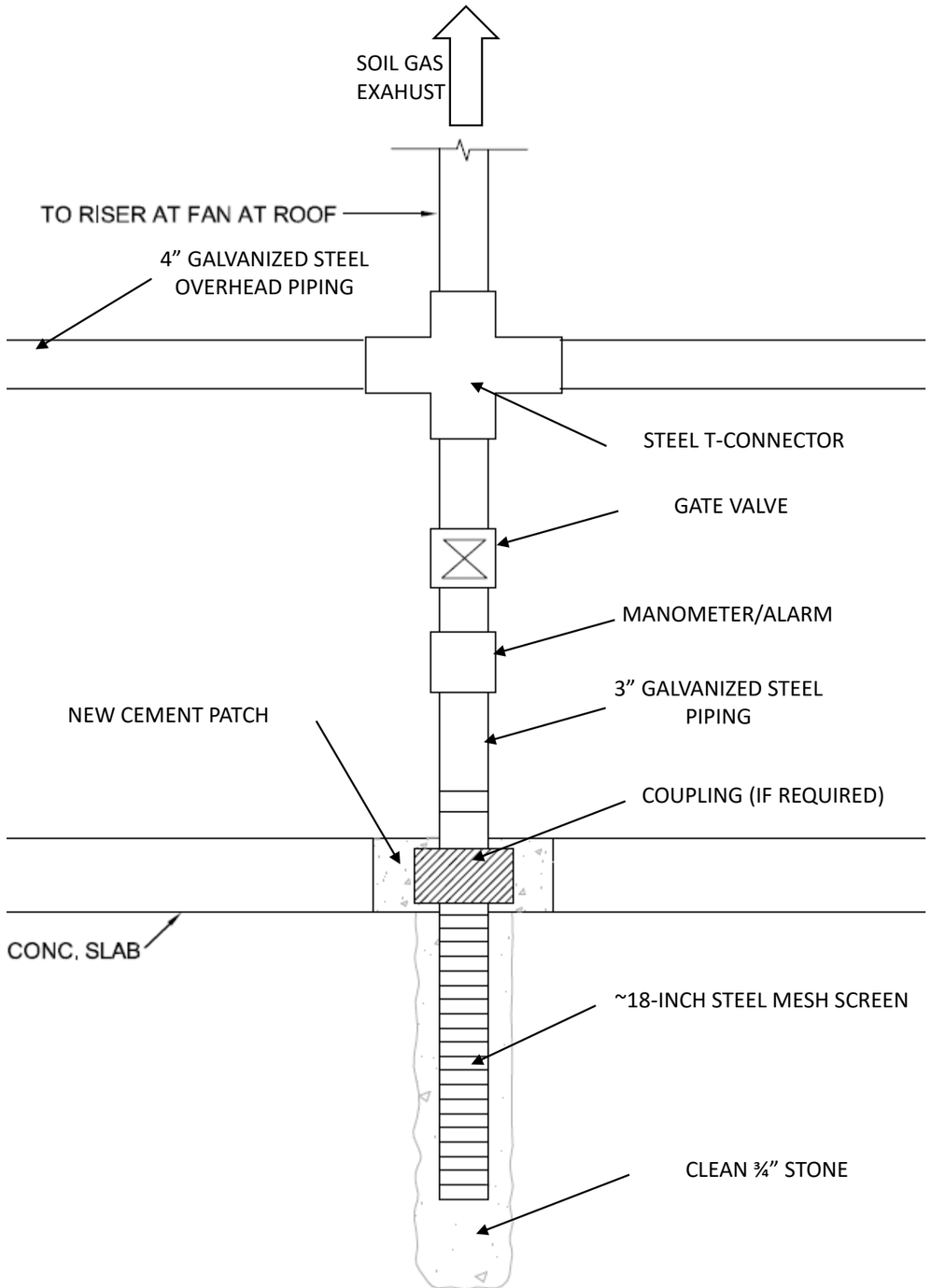
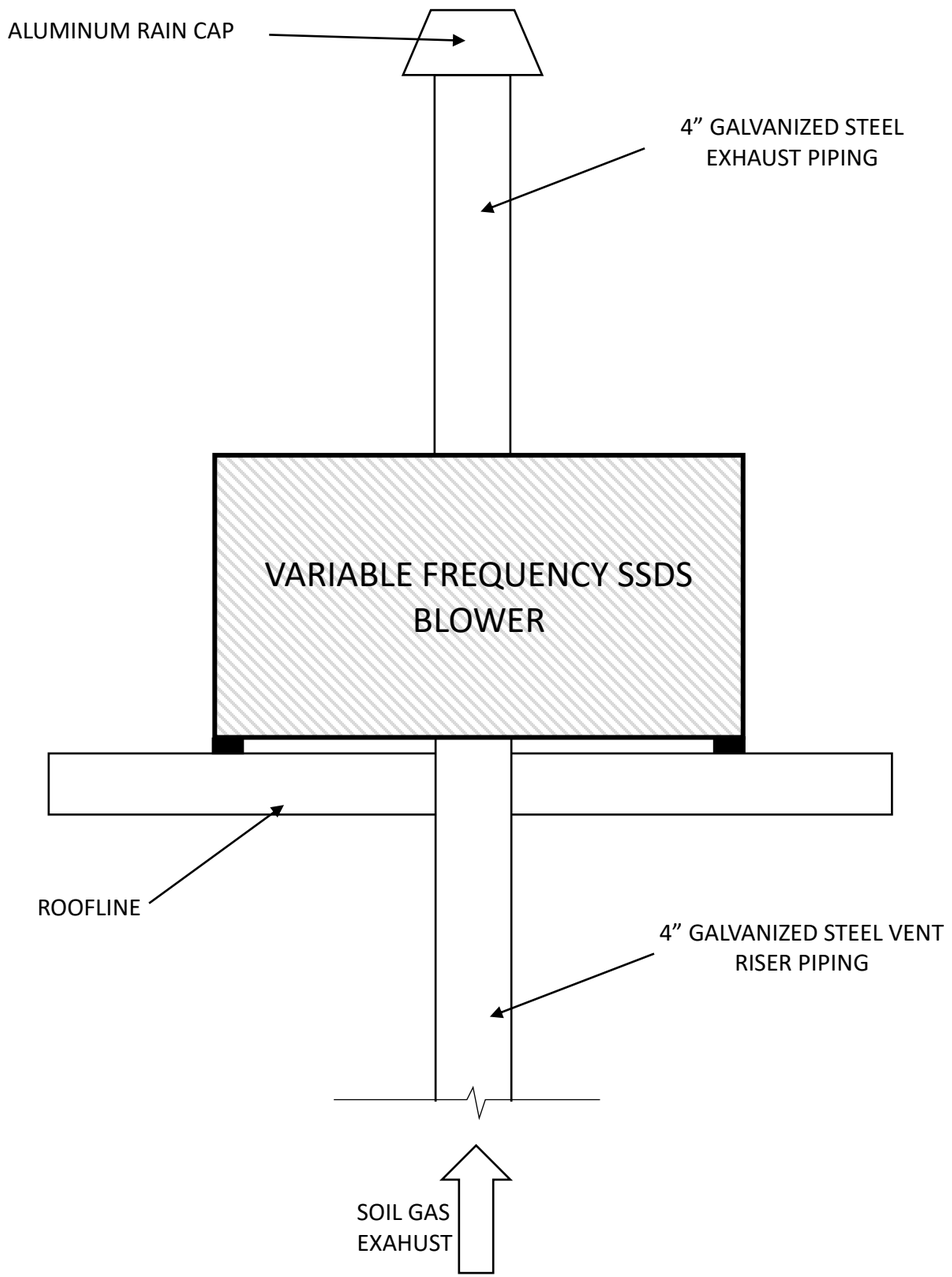


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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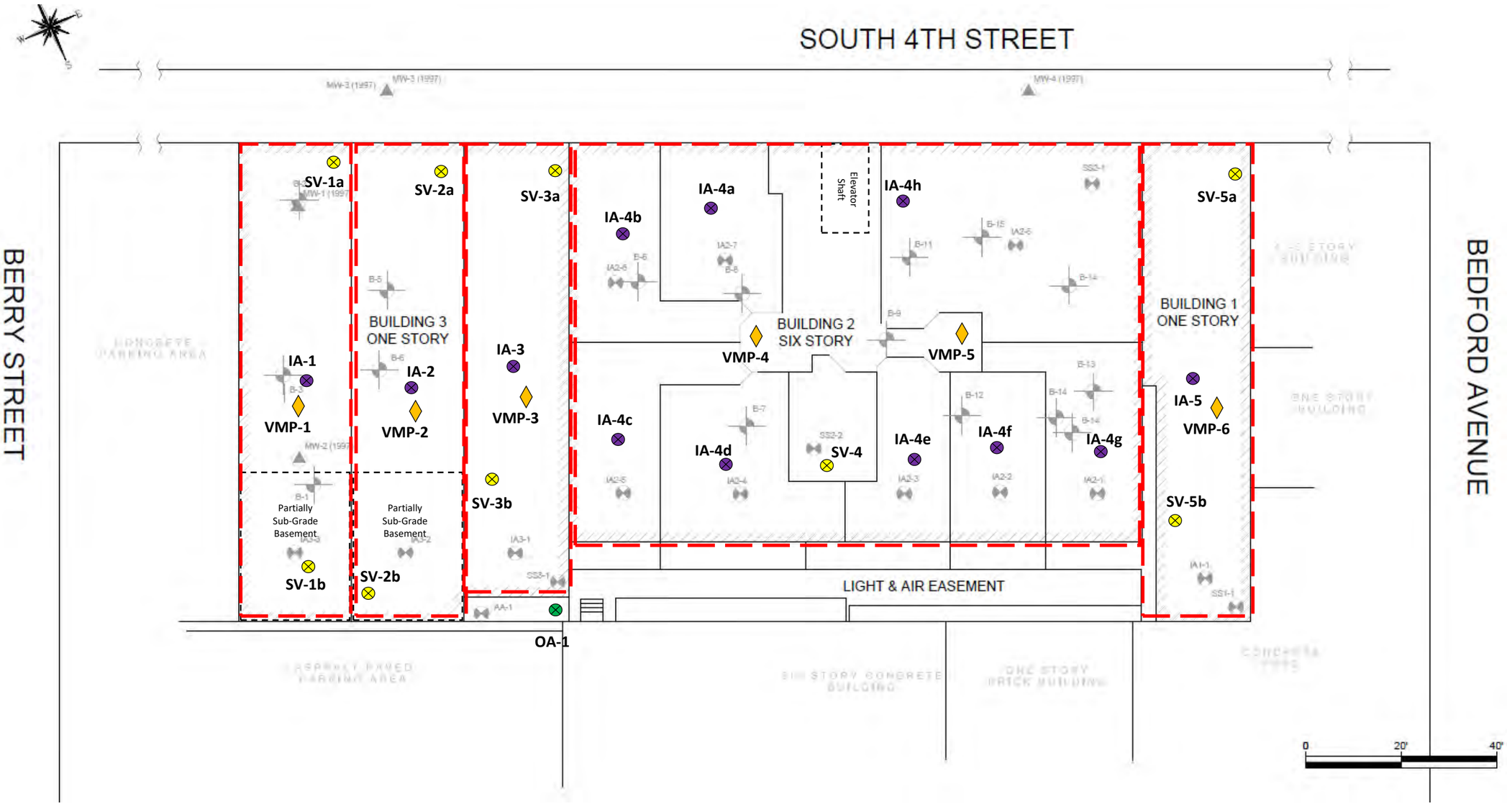

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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October 7, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#29 - Interim Remedial Measures Progress Report (10/06/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 6, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 6, 2022

- CG continued installation of horizontal piping between SP-12 and SP-13, and routed piping out the rear wall of apartment 1-D to rear easement.
- No ground intrusive activities were performed; thus, CAMP was not required.

No work is planned for the following day (Friday October 7, 2022). The next day's activities will be performed on Tuesday October 11, 2022, and will include core drilling suction points SP-7, SP-8, and SP-9, in 98b South 4th Street (Lemons and Olives).

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
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Attachments: Attachment 1 – Photo Log
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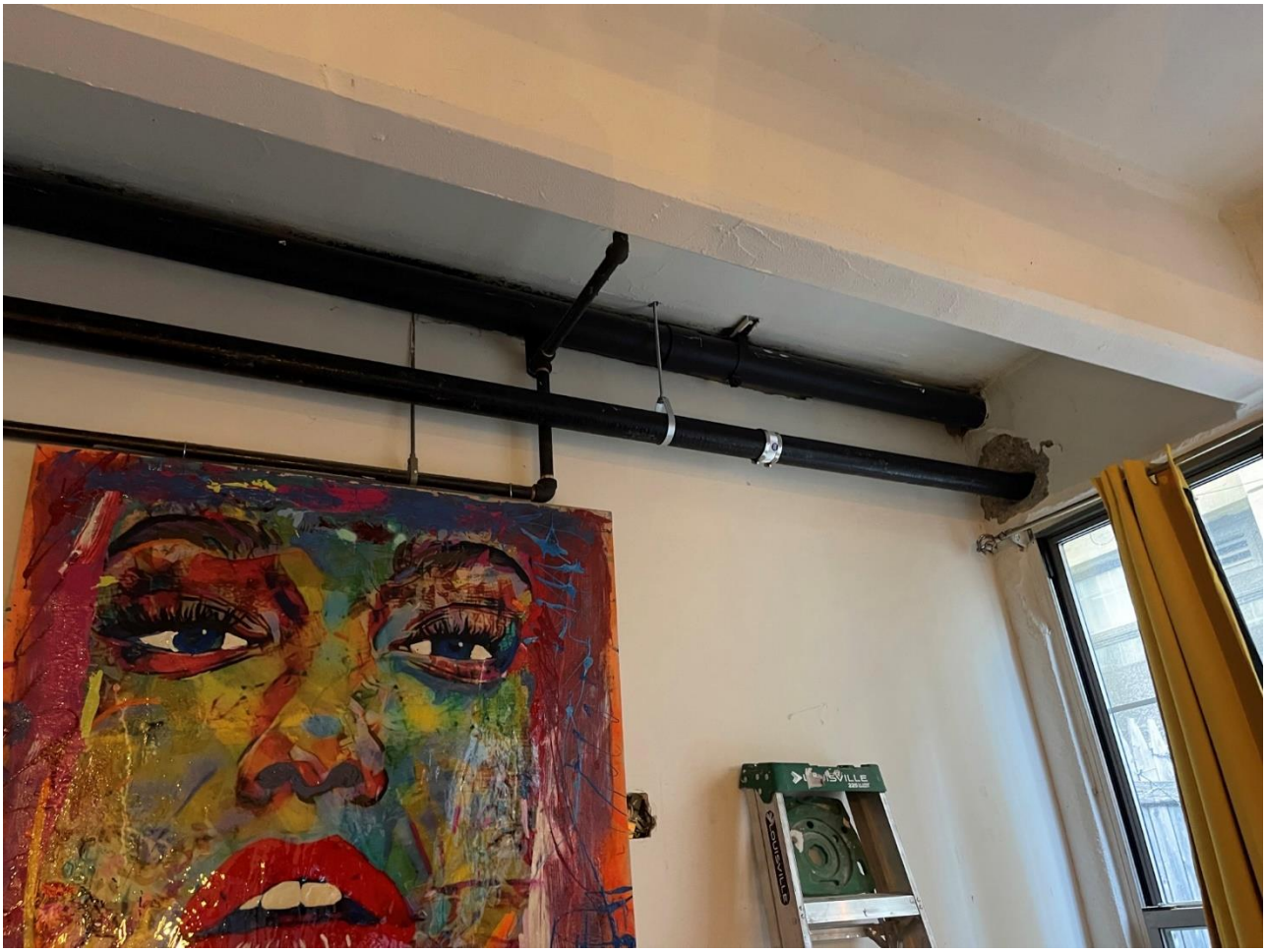
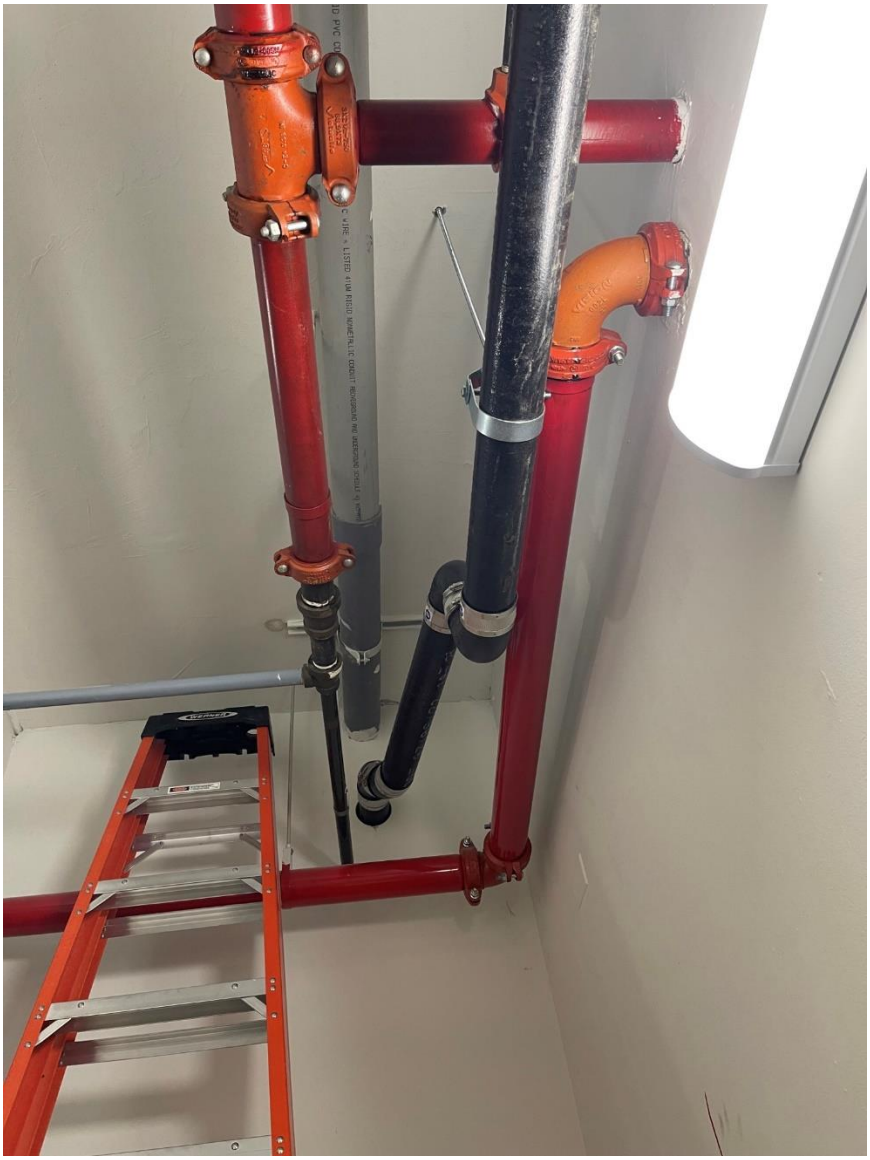
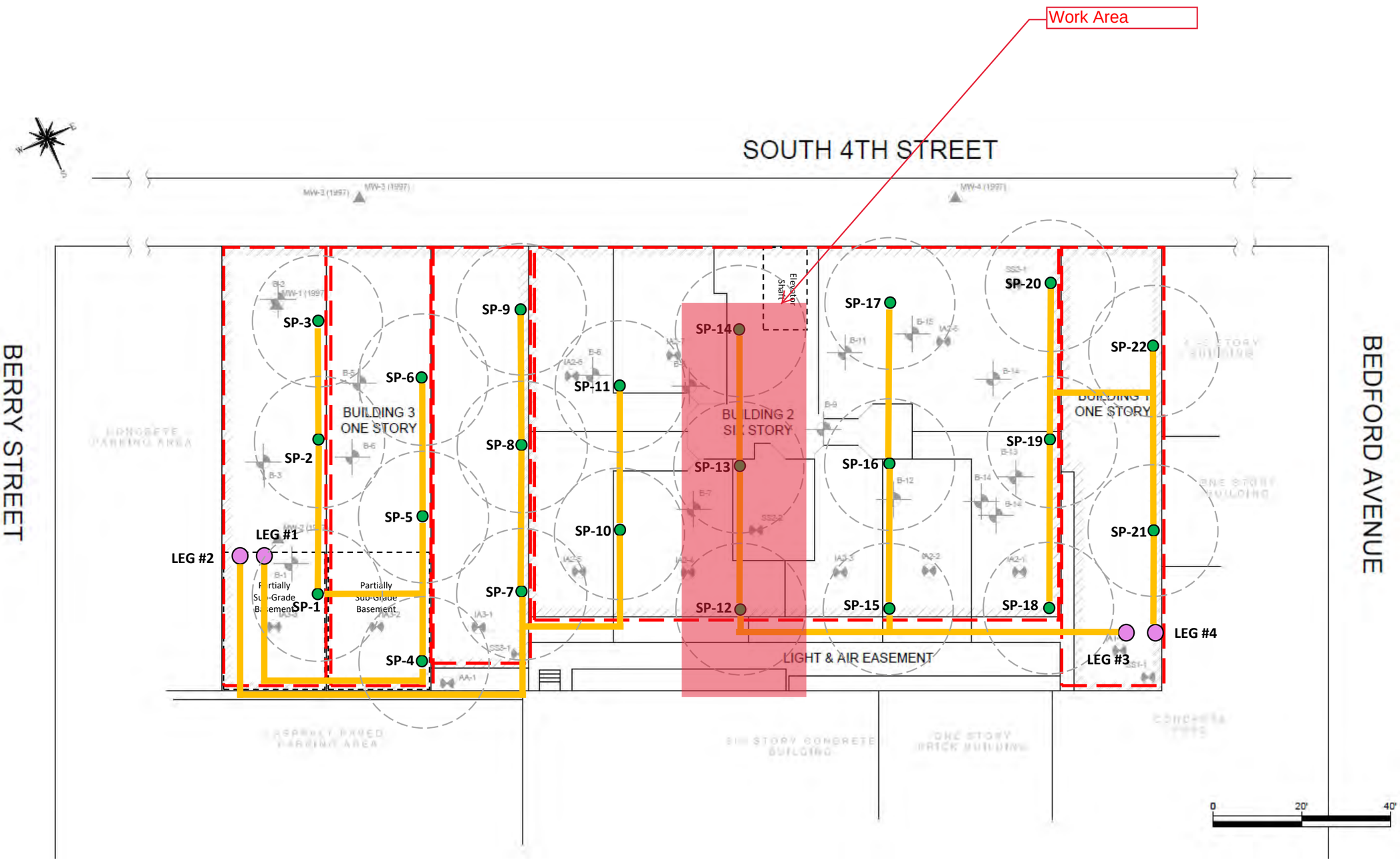


Photograph No. 1: View of horizontal piping exiting rear wall into easement

Photograph No. 2: View of piping in rear easement



Photograph No. 3: View of horizontal piping between SP-12 and SP-13



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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BOHEMIA, NEW YORK 11716
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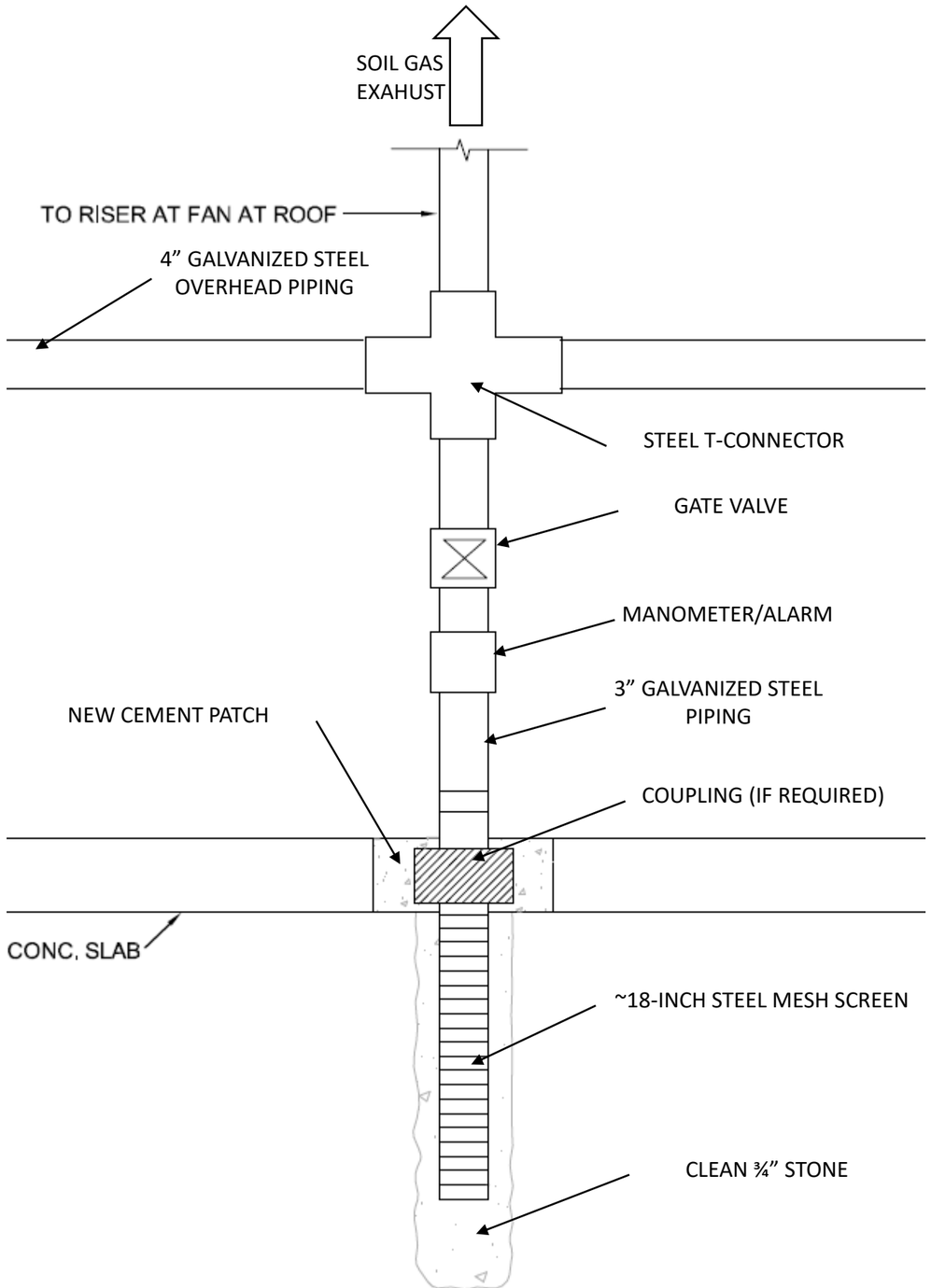
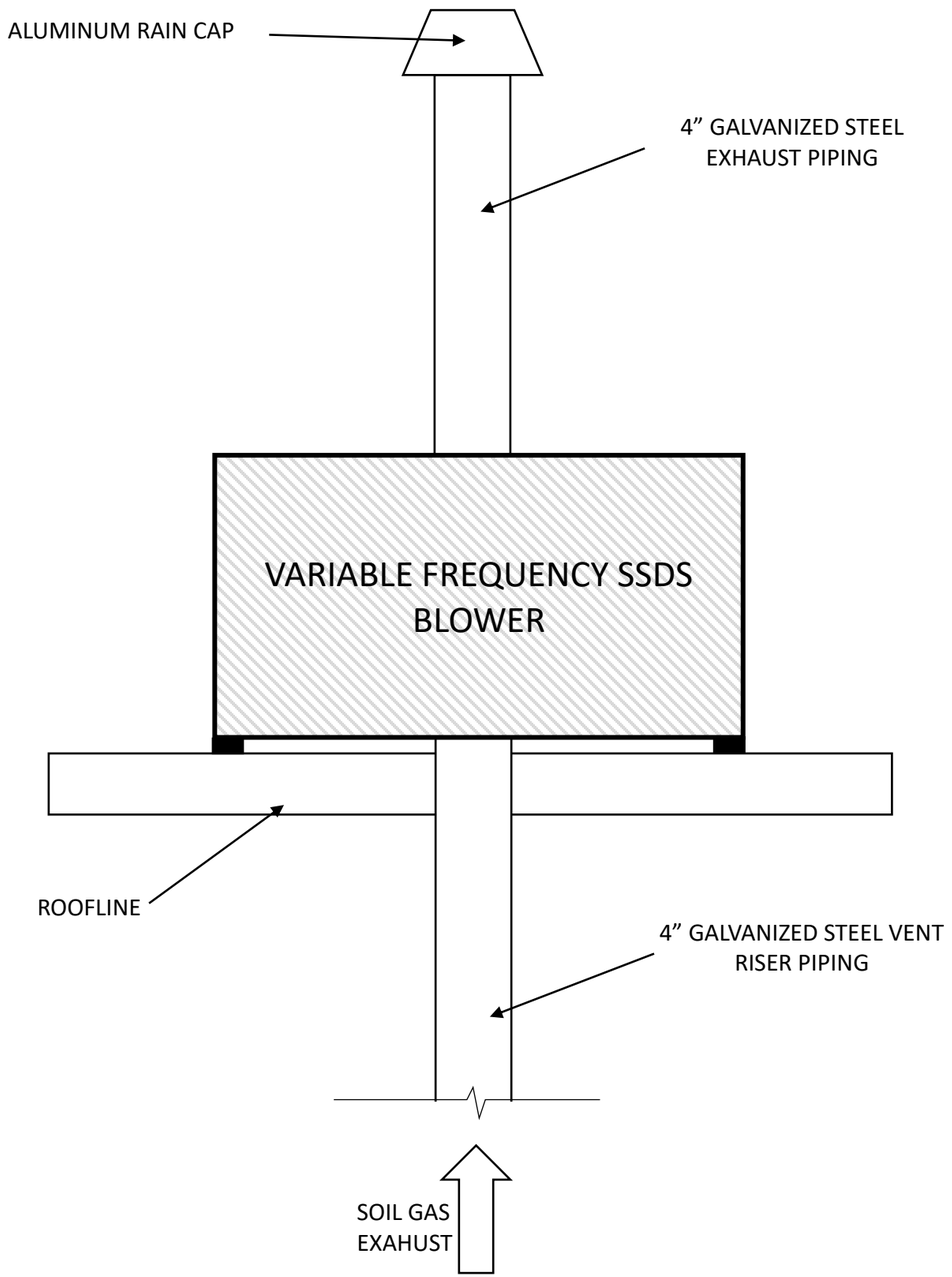
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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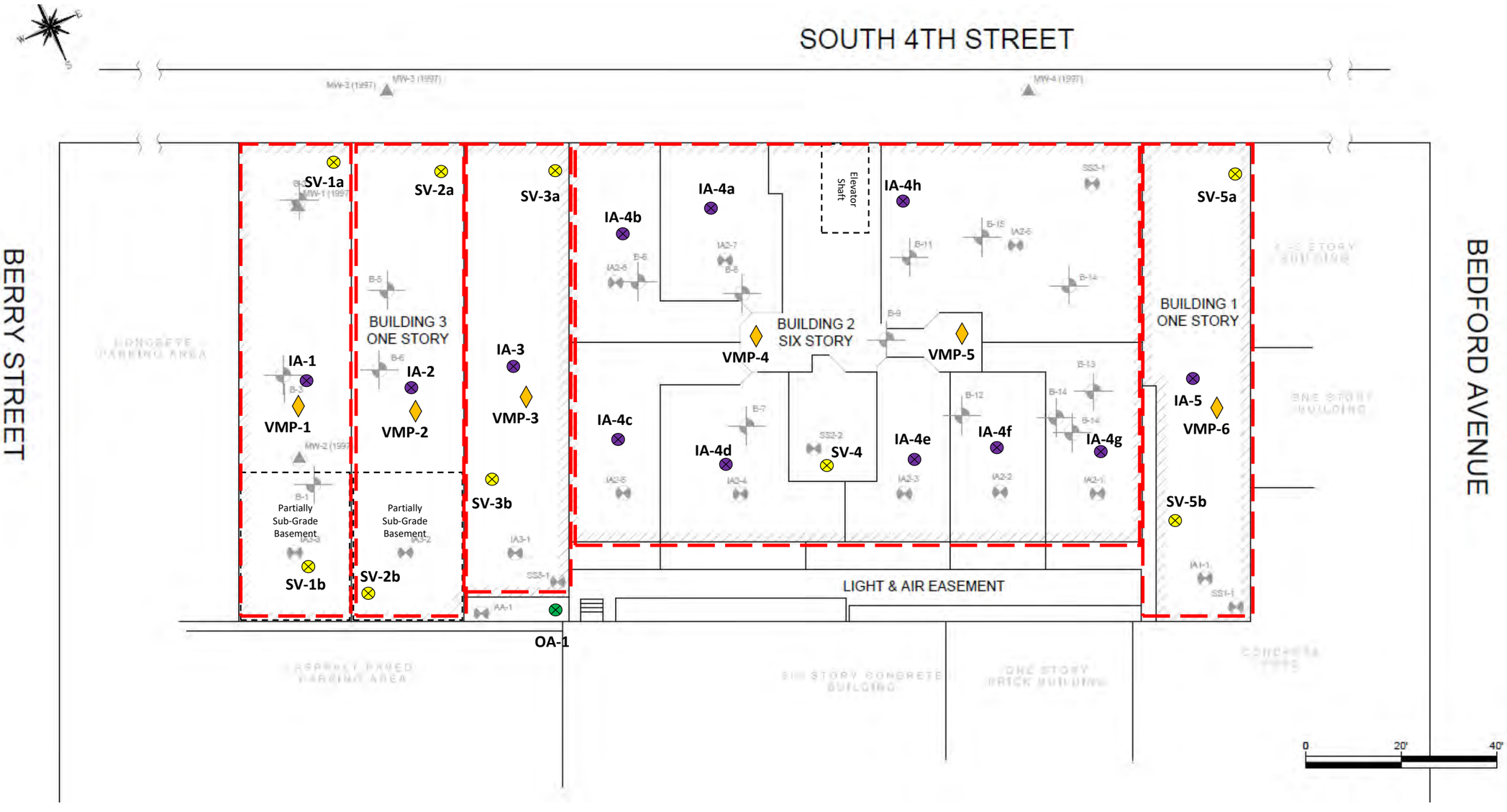
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

October 13, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#30 - Interim Remedial Measures Progress Report (10/12/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

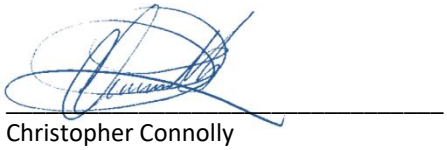
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 12, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 12, 2022

- CG installed suction points SP-7, and SP-8, in apartment 1-C along with riser piping.
- It was determined by IEC and CG, that suction points and piping could not feasibly be installed in 98a South 4th Street, Lemons and Olives Catering, due to abundance of obstructions and access restrictions. Suction points SP-7 and SP-8 will therefore be installed along the western wall within apartment 1-C, and suction point SP-9 will be installed along the western wall within apartment 1-B.
- CAMP was performed during all ground intrusive activities, and CAMP data can be found attached to this report.

Work planned for the following day (Thursday October 13, 2022) includes installing riser piping and horizontal piping between suction points SP-7 and SP-8.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP Data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map

Photograph No. 1: View of suction point and riser SP-7 installed in apartment 1-C

Photograph No. 2: View of suction point SP-6 and riser piping installed in apartment 1-C

Photograph No. 3: View of piping routed to exterior easement

PID Data
10-12-2022

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 Span2 Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time	Firmware Version
592-908437	10/12/2022 2:21:41 PM	Readings		PID		SC23030239N5	Normal	0.0	0.0	0.0	0.0	0.0	0.0																				
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PID Data
10-12-2022

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PID Data
10-12-2022

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PID Data
10-12-2022

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PID Data
10-12-2022

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Dust Data
10-12-2022

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530153015
Firmware Version	3.1
Calibration Date	2/22/2022
Test Name	MANUAL_024
Test Start Time	9:11:47 AM
Test Start Date	10/12/2022
Test Length [D:H:M]	0:05:05
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.075
Mass Minimum [mg/m3]	0.027
Mass Maximum [mg/m3]	0.441
Mass TWA [mg/m3]	0.047
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	305

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.139		
120	0.055		
180	0.062		
240	0.055		
300	0.049		
360	0.048		
420	0.044		
480	0.043		
540	0.043		
600	0.041		
660	0.043		
720	0.042		
780	0.042		
840	0.042		
900	0.048		
960	0.042		
1020	0.043		
1080	0.045		
1140	0.046		
1200	0.042		
1260	0.042		
1320	0.041		
1380	0.043		
1440	0.043		
1500	0.042		
1560	0.044		
1620	0.042		

Dust Data
10-12-2022

1680	0.043
1740	0.037
1800	0.04
1860	0.038
1920	0.037
1980	0.04
2040	0.041
2100	0.04
2160	0.04
2220	0.038
2280	0.038
2340	0.038
2400	0.037
2460	0.037
2520	0.04
2580	0.037
2640	0.036
2700	0.036
2760	0.037
2820	0.035
2880	0.036
2940	0.038
3000	0.039
3060	0.042
3120	0.042
3180	0.042
3240	0.042
3300	0.042
3360	0.045
3420	0.046
3480	0.045
3540	0.047
3600	0.053
3660	0.104
3720	0.088
3780	0.082
3840	0.23
3900	0.189
3960	0.238
4020	0.186
4080	0.204
4140	0.201
4200	0.273
4260	0.335
4320	0.303
4380	0.231
4440	0.265

Dust Data
10-12-2022

4500	0.258
4560	0.203
4620	0.236
4680	0.216
4740	0.221
4800	0.263
4860	0.267
4920	0.225
4980	0.229
5040	0.212
5100	0.218
5160	0.228
5220	0.326
5280	0.441
5340	0.337
5400	0.276
5460	0.251
5520	0.249
5580	0.231
5640	0.203
5700	0.197
5760	0.187
5820	0.176
5880	0.144
5940	0.137
6000	0.124
6060	0.101
6120	0.106
6180	0.097
6240	0.104
6300	0.095
6360	0.09
6420	0.082
6480	0.078
6540	0.071
6600	0.073
6660	0.071
6720	0.076
6780	0.086
6840	0.068
6900	0.065
6960	0.062
7020	0.051
7080	0.055
7140	0.051
7200	0.05
7260	0.05

Dust Data
10-12-2022

7320	0.045
7380	0.045
7440	0.043
7500	0.042
7560	0.039
7620	0.039
7680	0.039
7740	0.037
7800	0.035
7860	0.034
7920	0.035
7980	0.036
8040	0.037
8100	0.041
8160	0.037
8220	0.037
8280	0.038
8340	0.035
8400	0.037
8460	0.036
8520	0.034
8580	0.033
8640	0.033
8700	0.032
8760	0.036
8820	0.04
8880	0.037
8940	0.041
9000	0.044
9060	0.044
9120	0.05
9180	0.054
9240	0.05
9300	0.055
9360	0.053
9420	0.055
9480	0.057
9540	0.059
9600	0.054
9660	0.051
9720	0.053
9780	0.053
9840	0.053
9900	0.055
9960	0.051
10020	0.05
10080	0.056

Dust Data
10-12-2022

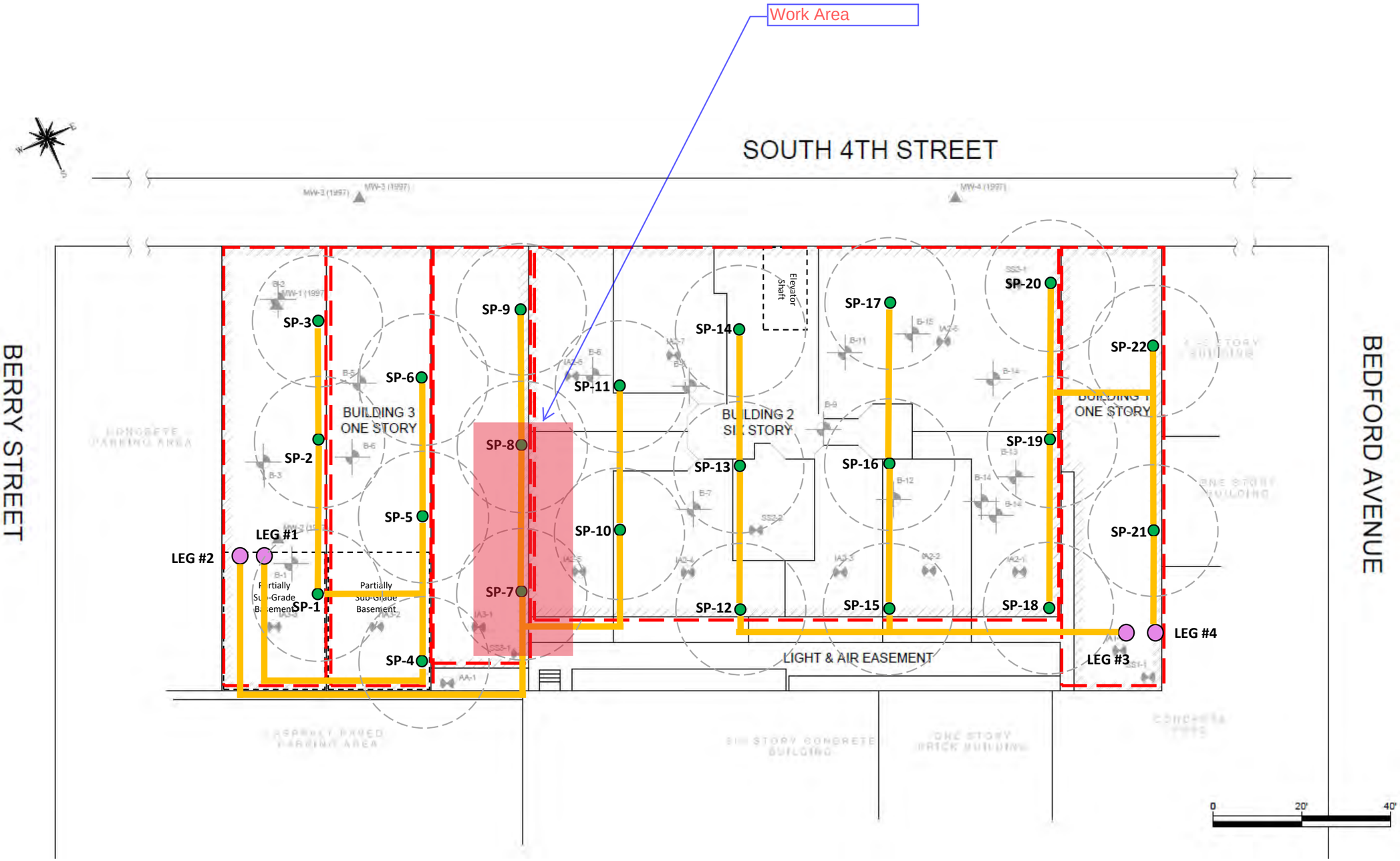
10140	0.054
10200	0.052
10260	0.051
10320	0.056
10380	0.06
10440	0.057
10500	0.057
10560	0.055
10620	0.057
10680	0.066
10740	0.056
10800	0.054
10860	0.053
10920	0.056
10980	0.05
11040	0.048
11100	0.046
11160	0.05
11220	0.058
11280	0.049
11340	0.047
11400	0.048
11460	0.046
11520	0.044
11580	0.041
11640	0.042
11700	0.043
11760	0.043
11820	0.05
11880	0.049
11940	0.049
12000	0.052
12060	0.049
12120	0.05
12180	0.045
12240	0.045
12300	0.05
12360	0.053
12420	0.052
12480	0.052
12540	0.035
12600	0.032
12660	0.031
12720	0.031
12780	0.029
12840	0.03
12900	0.029

Dust Data
10-12-2022

12960	0.029
13020	0.029
13080	0.028
13140	0.03
13200	0.037
13260	0.035
13320	0.034
13380	0.032
13440	0.03
13500	0.029
13560	0.029
13620	0.029
13680	0.035
13740	0.034
13800	0.034
13860	0.03
13920	0.03
13980	0.03
14040	0.03
14100	0.027
14160	0.028
14220	0.029
14280	0.03
14340	0.03
14400	0.028
14460	0.029
14520	0.029
14580	0.032
14640	0.03
14700	0.032
14760	0.034
14820	0.034
14880	0.036
14940	0.04
15000	0.039
15060	0.039
15120	0.039
15180	0.038
15240	0.038
15300	0.035
15360	0.035
15420	0.034
15480	0.034
15540	0.034
15600	0.034
15660	0.035
15720	0.033

Dust Data
10-12-2022

15780	0.031
15840	0.032
15900	0.037
15960	0.038
16020	0.041
16080	0.045
16140	0.045
16200	0.046
16260	0.048
16320	0.047
16380	0.045
16440	0.044
16500	0.045
16560	0.045
16620	0.04
16680	0.04
16740	0.039
16800	0.037
16860	0.039
16920	0.038
16980	0.037
17040	0.037
17100	0.036
17160	0.038
17220	0.046
17280	0.078
17340	0.117
17400	0.16
17460	0.22
17520	0.438
17580	0.4
17640	0.285
17700	0.233
17760	0.147
17820	0.101
17880	0.081
17940	0.074
18000	0.07
18060	0.064
18120	0.061
18180	0.056
18240	0.053
18300	0.048



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

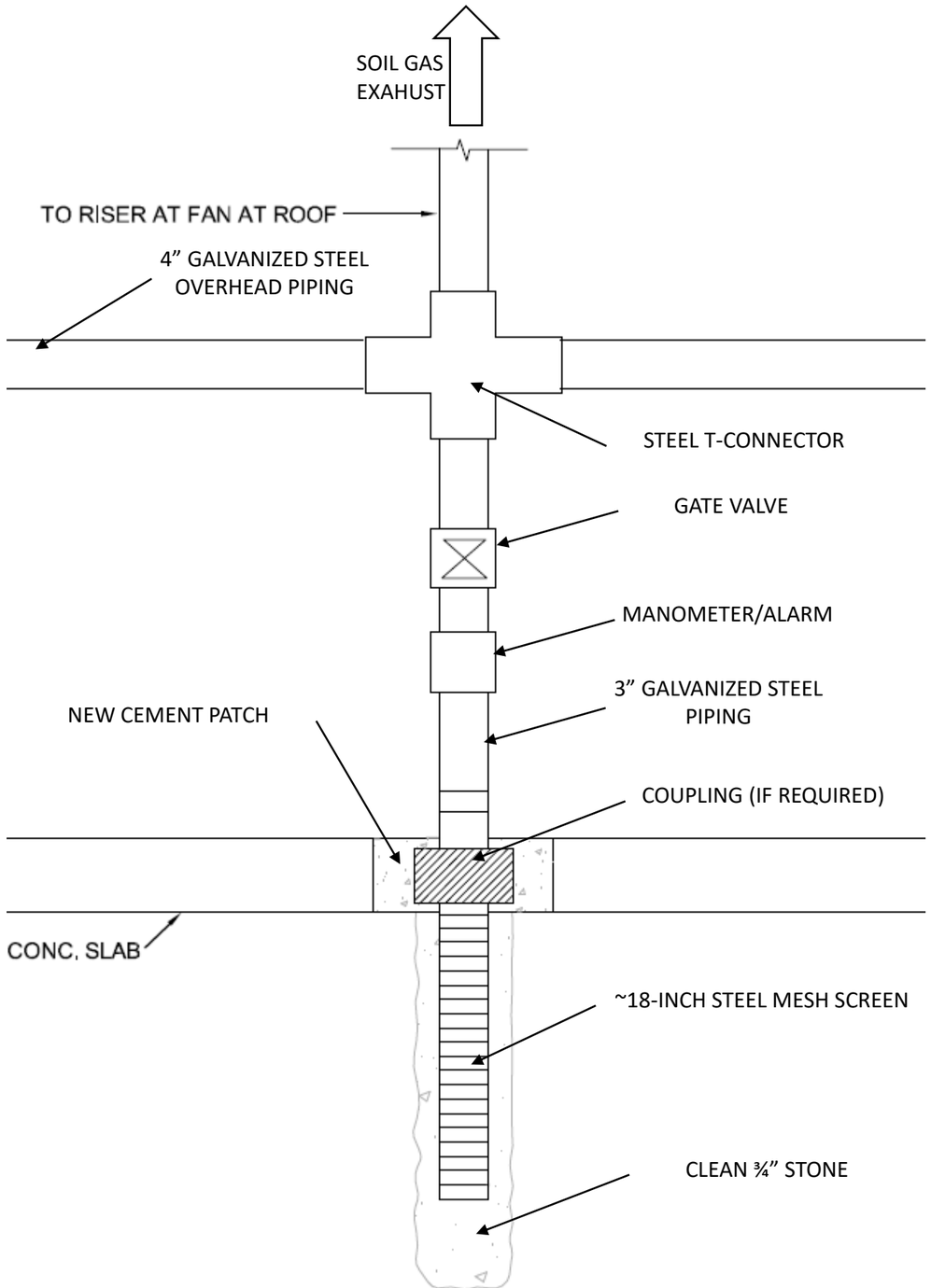
Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

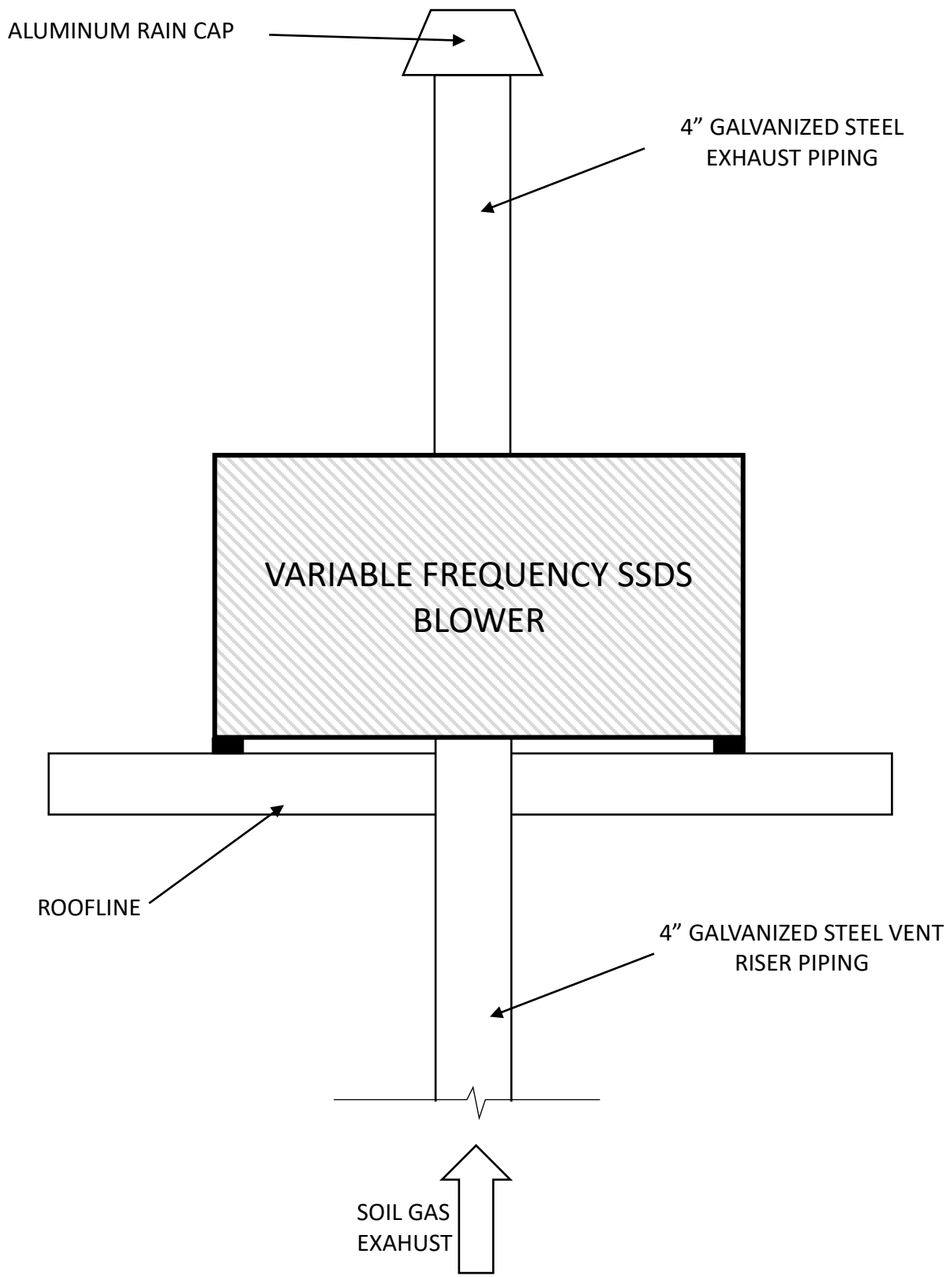
Not to scale

IMPACT ENVIRONMENTAL CLOSURES, INC.

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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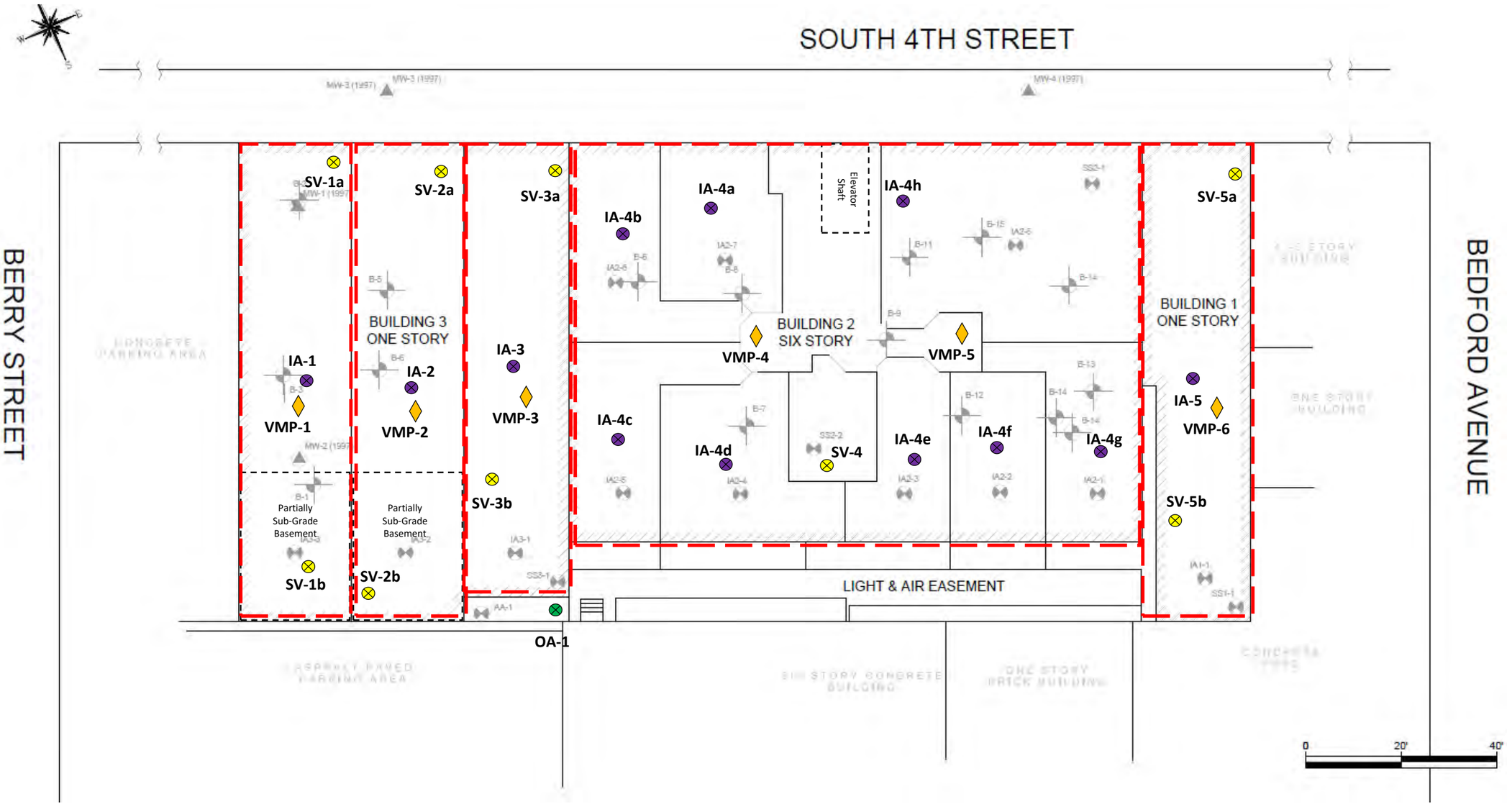
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
FAX (631) 269-1599



Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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FAX (631) 269-1599

IMPACT ENVIRONMENTAL 170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground… *www.impactenvironmental.com*

October 26, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#31 - Interim Remedial Measures Progress Report (10/25/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 25, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 25, 2022

- CG installed suction point SP-9, in apartment 1-B along with riser piping.
- CAMP was performed during all ground intrusive activities, and CAMP data can be found attached to this report.

Work planned for the following day (Wednesday October 26, 2022) includes installing riser piping and horizontal piping between suction points SP-7, SP-8, and SP-9.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – CAMP Data
Attachment 3 – Suction Point Location Maps
Attachment 4 – Vapor Monitoring Point Location Map

Photograph No. 1: View of suction point SP-9 in apartment 1-B

Photograph No. 2: View of riser piping and gate valve on SP-9

Photograph No. 3: View of horizontal piping routed towards apartment 1-C and SP-7 and SP-8

PID CAMP Data
100 South 4th Street
10-25-2022

Device Serial No	Log Time	Log Type	Log Interval	Sensor 1 Type	Sensor 1 Display Unit	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading	Sensor 1 Last Cal	Sensor 1 Span Setpoint	Sensor 1 High Alarm	Sensor 1 Low Alarm	Sensor 1 STEL Alarm	Sensor 1 TWA Alarm	Sensor 1 Overrange Threshold	Sensor 1 Measurement Gas Type	Sensor 1 Correction Factor	Unit Status	Running Mode	Log Start Type	Diagnostic Mode	Stop Reason	User Id	Site Id	Record Number	Session Start Time	Session Stop Time
592-923421	10/25/2022 1:44:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 1:43:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-923421	10/25/2022 1:41:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 1:40:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 1:39:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-923421	10/25/2022 1:37:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 1:36:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 1:35:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-923421	10/25/2022 1:30:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
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592-923421	10/25/2022 12:44:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:43:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:42:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:41:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:40:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:39:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:38:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:37:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:36:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:35:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:34:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:33:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:32:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:31:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:30:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:29:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:28:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:27:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:26:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:25:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:24:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:23:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:22:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:21:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:20:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:19:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:18:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:17:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:16:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			
592-923421	10/25/2022 12:15:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0																			

PID CAMP Data
100 South 4th Street
10-25-2022

592-923421	10/25/2022 12:14:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:13:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:12:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:11:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:10:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:09:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:08:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:07:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:06:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:05:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:04:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:03:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:02:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:01:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 12:00:47 PM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:59:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:58:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:57:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:56:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:55:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:54:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:53:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:52:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:51:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:50:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:49:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:48:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:47:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:46:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:45:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:44:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:43:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:42:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:41:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:40:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:39:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:38:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:37:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:36:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:35:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:34:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:33:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:32:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:31:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:30:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:29:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:28:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:27:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:26:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:25:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:24:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:23:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:22:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:21:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:20:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:19:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:18:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:17:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:16:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:15:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:14:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:13:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:12:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:11:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:10:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:09:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:08:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:07:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:06:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:05:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:04:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:03:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:02:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:01:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 11:00:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:59:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:58:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:57:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:56:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:55:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:54:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:53:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:52:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:51:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:50:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:49:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:48:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:47:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:46:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:45:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:44:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:43:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-923421	10/25/2022 10:42:47 AM	Readings		PID		SC23030199V2	Normal	0.0	0.0	0.0	0.0	0.0	0.0

PID CAMP Data
100 South 4th Street
10-25-2022

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Dust CAMP Data
10-25-2022

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530172204
Firmware Version	3.1
Calibration Date	1/7/2022
Test Name	MANUAL_001
Test Start Time	9:26:33 AM
Test Start Date	10/25/2022
Test Length [D:H:M]	0:04:03
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.118
Mass Minimum [mg/m3]	0.054
Mass Maximum [mg/m3]	0.269
Mass TWA [mg/m3]	0.06
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	243

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.103		
120	0.105		
180	0.104		
240	0.114		
300	0.111		
360	0.11		
420	0.091		
480	0.084		
540	0.084		
600	0.093		
660	0.091		
720	0.115		
780	0.112		
840	0.101		
900	0.101		
960	0.118		
1020	0.12		
1080	0.117		
1140	0.119		
1200	0.116		
1260	0.121		
1320	0.103		
1380	0.115		
1440	0.123		
1500	0.125		
1560	0.11		
1620	0.106		

Dust CAMP Data
10-25-2022

1680	0.101
1740	0.121
1800	0.1
1860	0.103
1920	0.097
1980	0.092
2040	0.103
2100	0.122
2160	0.142
2220	0.135
2280	0.119
2340	0.125
2400	0.156
2460	0.172
2520	0.192
2580	0.175
2640	0.197
2700	0.203
2760	0.198
2820	0.212
2880	0.207
2940	0.242
3000	0.22
3060	0.243
3120	0.261
3180	0.248
3240	0.231
3300	0.263
3360	0.269
3420	0.253
3480	0.243
3540	0.237
3600	0.249
3660	0.258
3720	0.235
3780	0.243
3840	0.23
3900	0.224
3960	0.228
4020	0.222
4080	0.223
4140	0.217
4200	0.218
4260	0.216
4320	0.206
4380	0.21
4440	0.196

Dust CAMP Data
10-25-2022

4500	0.205
4560	0.208
4620	0.199
4680	0.196
4740	0.206
4800	0.191
4860	0.195
4920	0.191
4980	0.185
5040	0.184
5100	0.184
5160	0.179
5220	0.177
5280	0.174
5340	0.174
5400	0.176
5460	0.167
5520	0.163
5580	0.171
5640	0.17
5700	0.162
5760	0.168
5820	0.165
5880	0.16
5940	0.16
6000	0.156
6060	0.149
6120	0.138
6180	0.134
6240	0.135
6300	0.141
6360	0.138
6420	0.136
6480	0.14
6540	0.134
6600	0.128
6660	0.125
6720	0.127
6780	0.129
6840	0.125
6900	0.125
6960	0.12
7020	0.115
7080	0.119
7140	0.121
7200	0.115
7260	0.115

Dust CAMP Data
10-25-2022

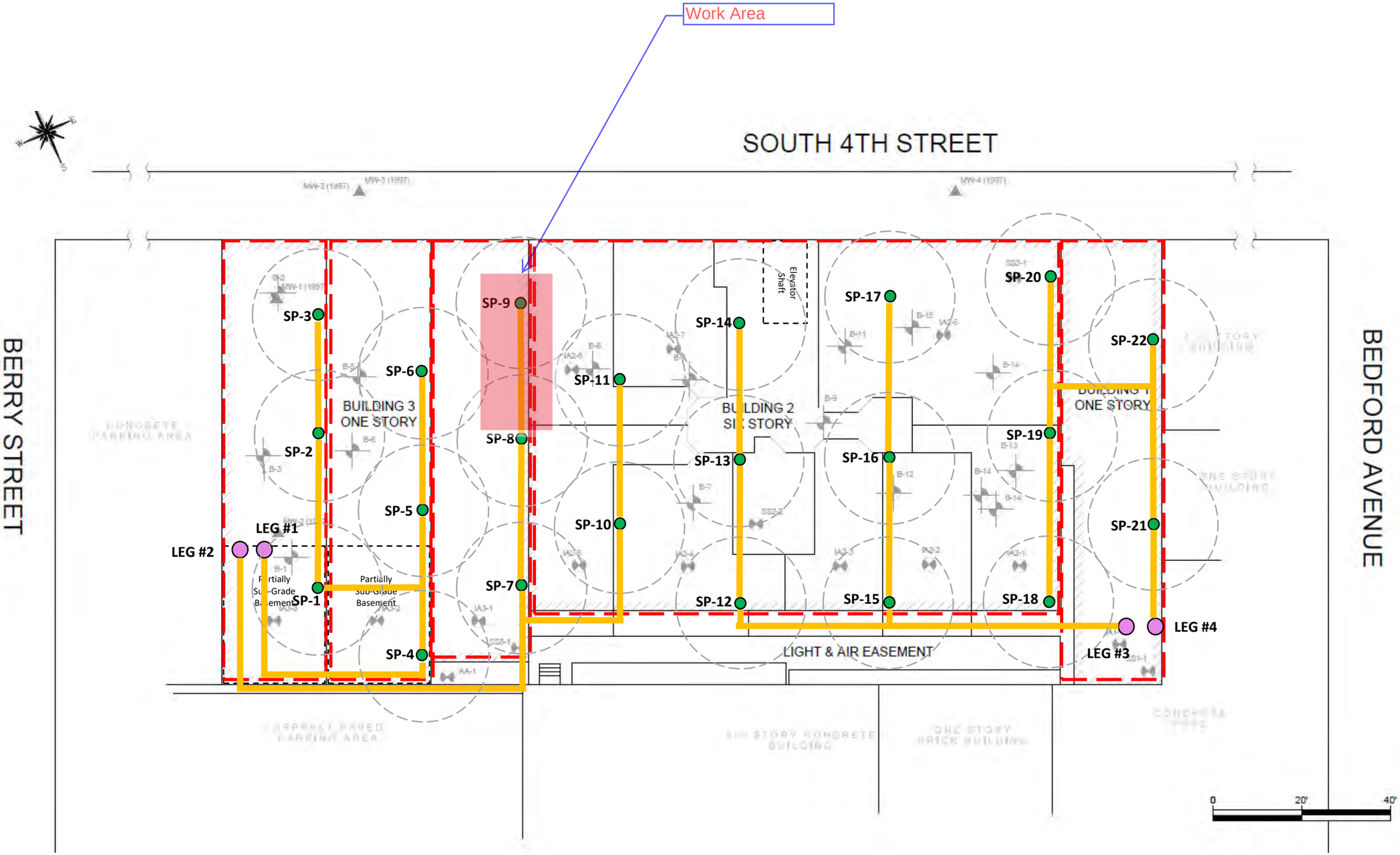
7320	0.119
7380	0.118
7440	0.116
7500	0.114
7560	0.113
7620	0.112
7680	0.113
7740	0.108
7800	0.108
7860	0.106
7920	0.105
7980	0.103
8040	0.101
8100	0.101
8160	0.103
8220	0.098
8280	0.097
8340	0.098
8400	0.093
8460	0.09
8520	0.089
8580	0.096
8640	0.095
8700	0.09
8760	0.089
8820	0.093
8880	0.09
8940	0.091
9000	0.087
9060	0.083
9120	0.082
9180	0.083
9240	0.081
9300	0.079
9360	0.081
9420	0.081
9480	0.08
9540	0.078
9600	0.08
9660	0.078
9720	0.078
9780	0.077
9840	0.078
9900	0.079
9960	0.079
10020	0.079
10080	0.08

Dust CAMP Data
10-25-2022

10140	0.08
10200	0.076
10260	0.078
10320	0.081
10380	0.08
10440	0.078
10500	0.077
10560	0.073
10620	0.072
10680	0.071
10740	0.069
10800	0.071
10860	0.074
10920	0.079
10980	0.075
11040	0.07
11100	0.069
11160	0.069
11220	0.064
11280	0.065
11340	0.069
11400	0.076
11460	0.074
11520	0.071
11580	0.067
11640	0.064
11700	0.062
11760	0.062
11820	0.058
11880	0.059
11940	0.059
12000	0.059
12060	0.062
12120	0.061
12180	0.061
12240	0.061
12300	0.058
12360	0.059
12420	0.06
12480	0.06
12540	0.059
12600	0.06
12660	0.059
12720	0.063
12780	0.059
12840	0.06
12900	0.063

Dust CAMP Data
10-25-2022

12960	0.066
13020	0.081
13080	0.071
13140	0.07
13200	0.059
13260	0.059
13320	0.059
13380	0.06
13440	0.06
13500	0.06
13560	0.057
13620	0.062
13680	0.065
13740	0.069
13800	0.081
13860	0.068
13920	0.07
13980	0.063
14040	0.061
14100	0.065
14160	0.066
14220	0.069
14280	0.068
14340	0.066
14400	0.063
14460	0.057
14520	0.055
14580	0.054



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

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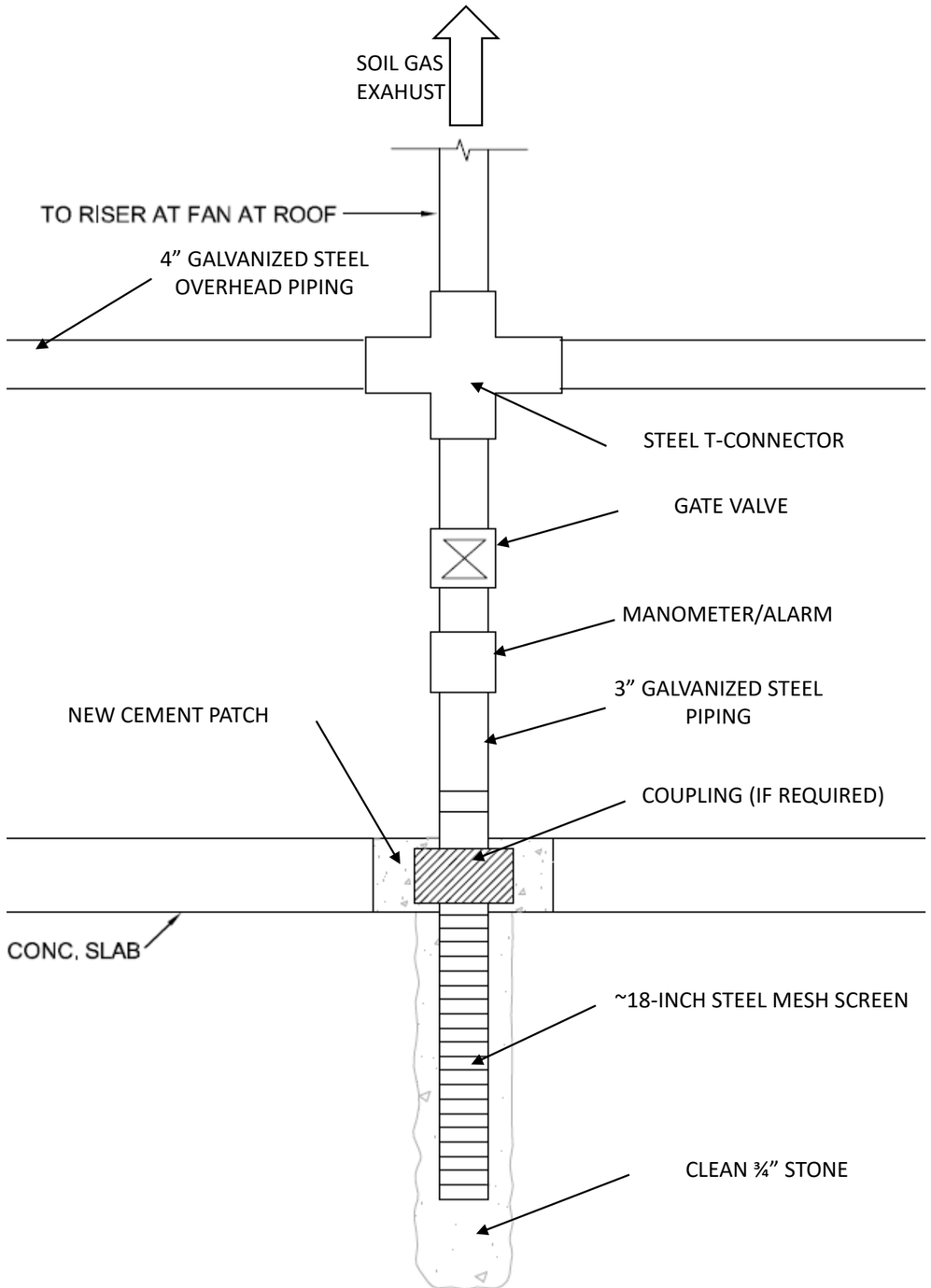
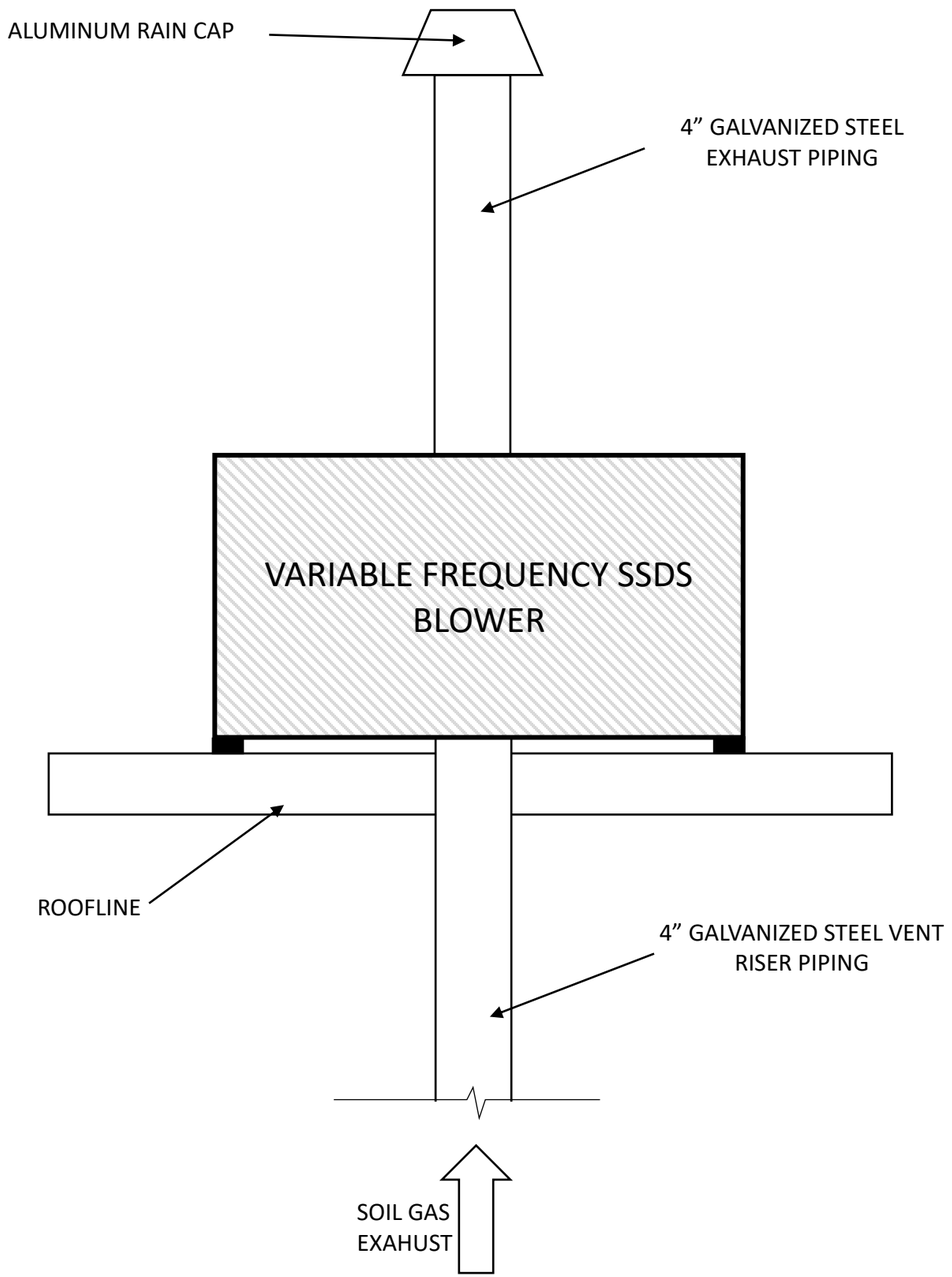


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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Revisions	

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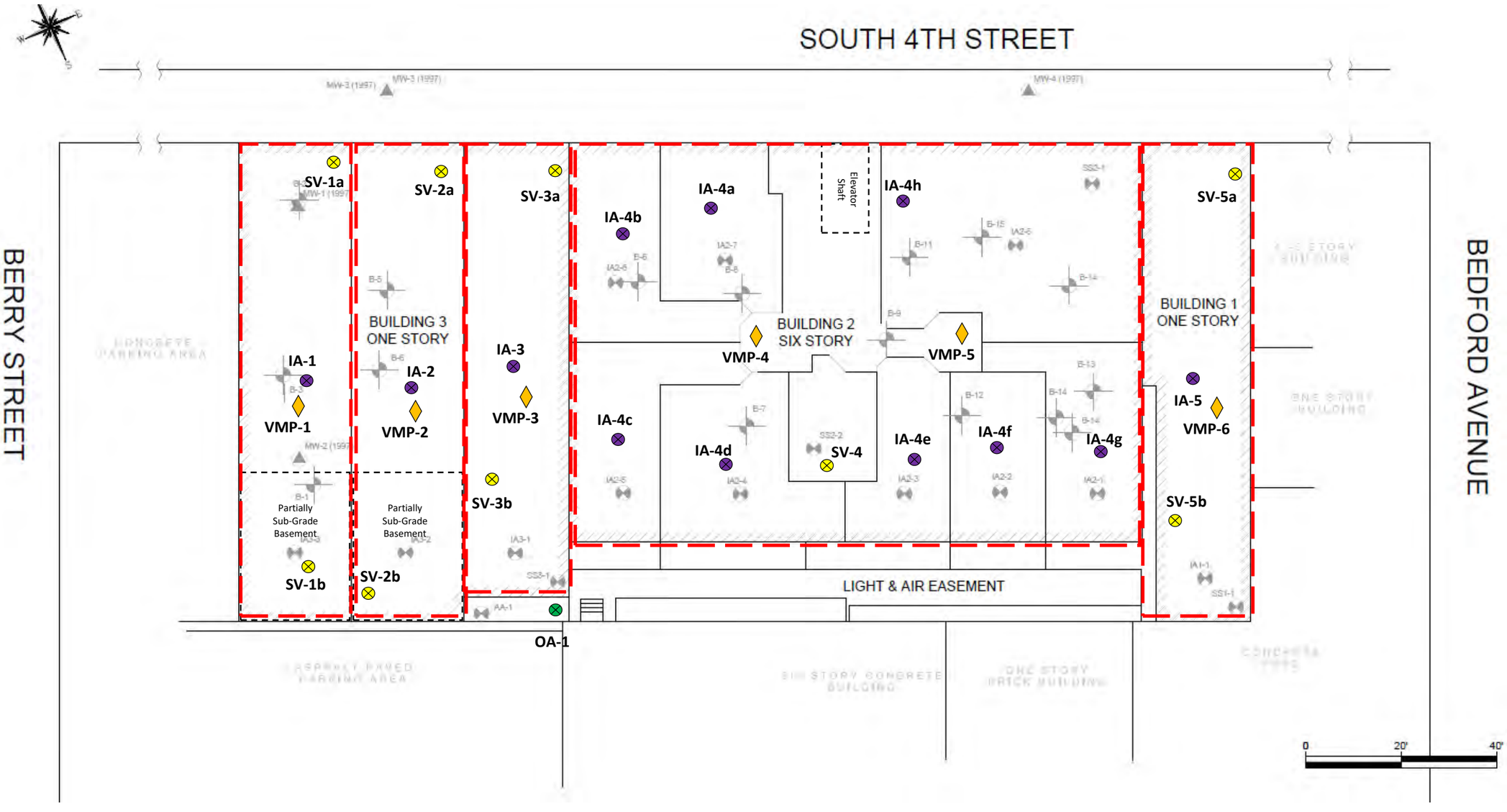

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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welcome to solid ground… *www.impactenvironmental.com*

October 27, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#32 - Interim Remedial Measures Progress Report (10/26/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

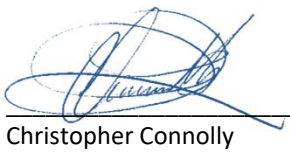
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 26, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 26, 2022

- CG installed horizontal piping between suction points SP-9 and SP-8/7.
- CG began routing interior piping to the rear exterior portion of 100 South 4th Street.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Thursday October 27, 2022) routing interior piping to the rear easement of 100 South 4th Street.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

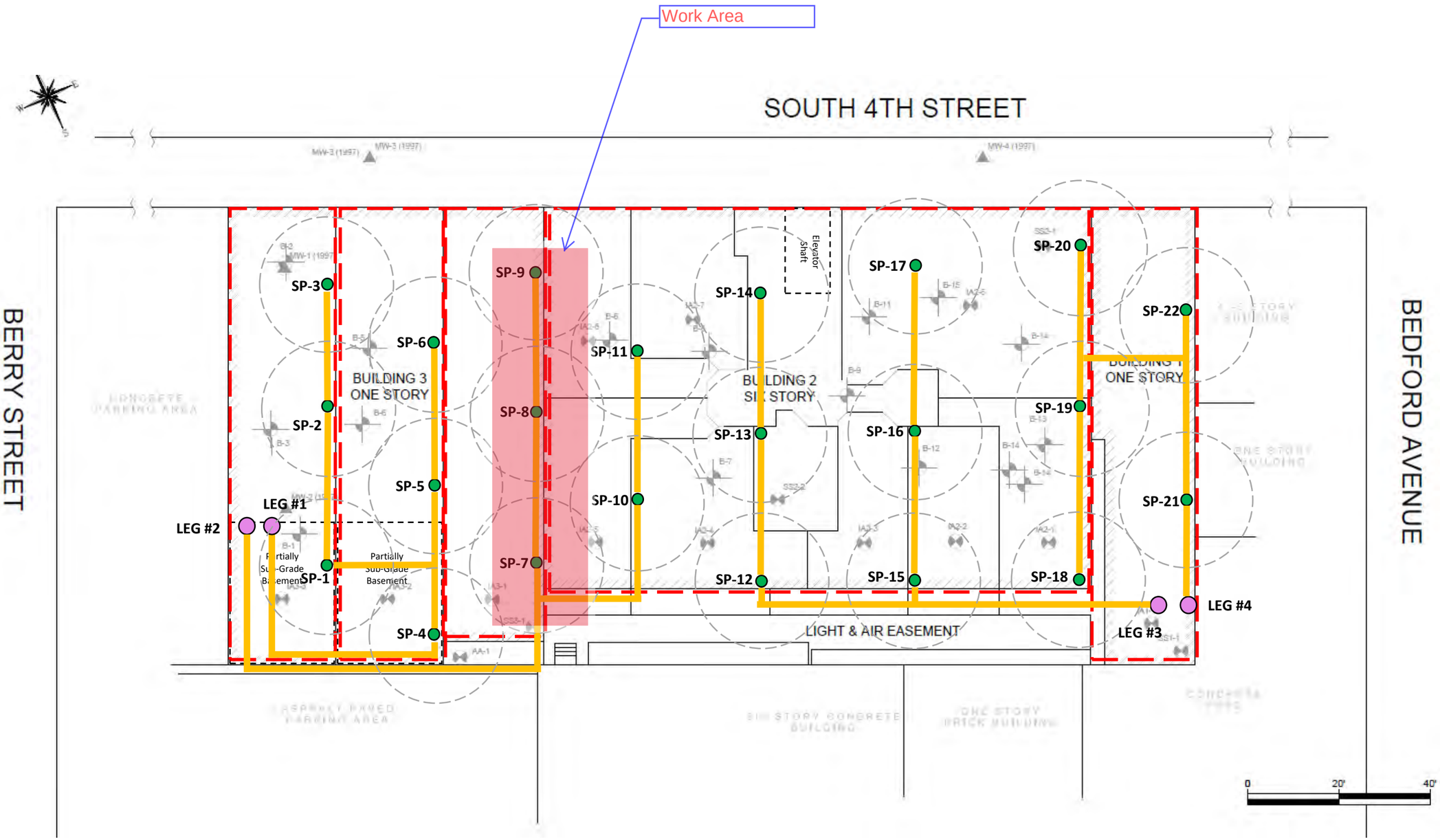
Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of vertical and horizontal piping, and gate valve, from SP-7 to SP-8

Photograph No. 2: View of piping from SP-7 to SP-8 and SP-9

Photograph No. 3: View of typical installation of exterior piping behind 100 South 4th Street apartments



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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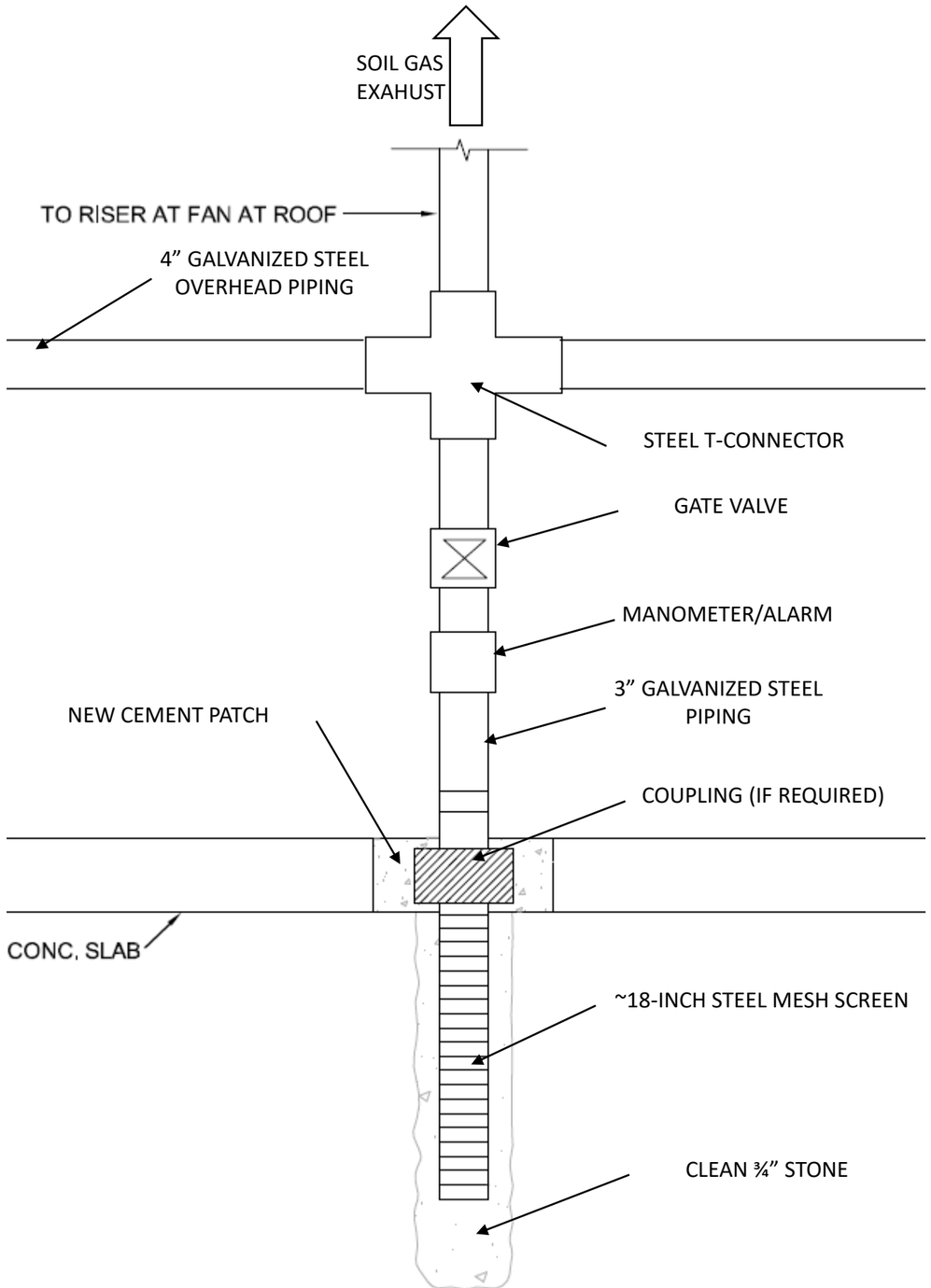
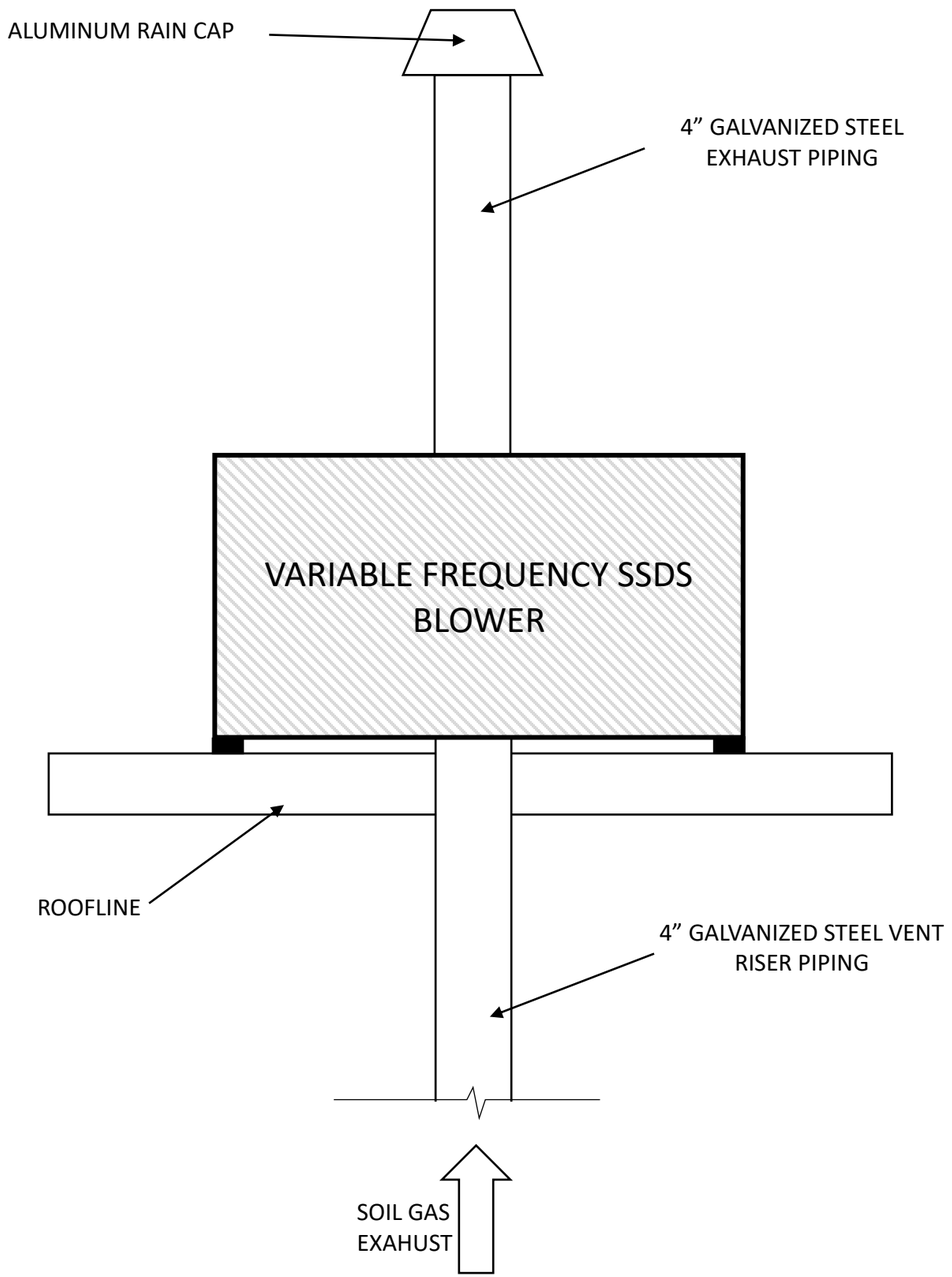
FAX (631) 269-1599



SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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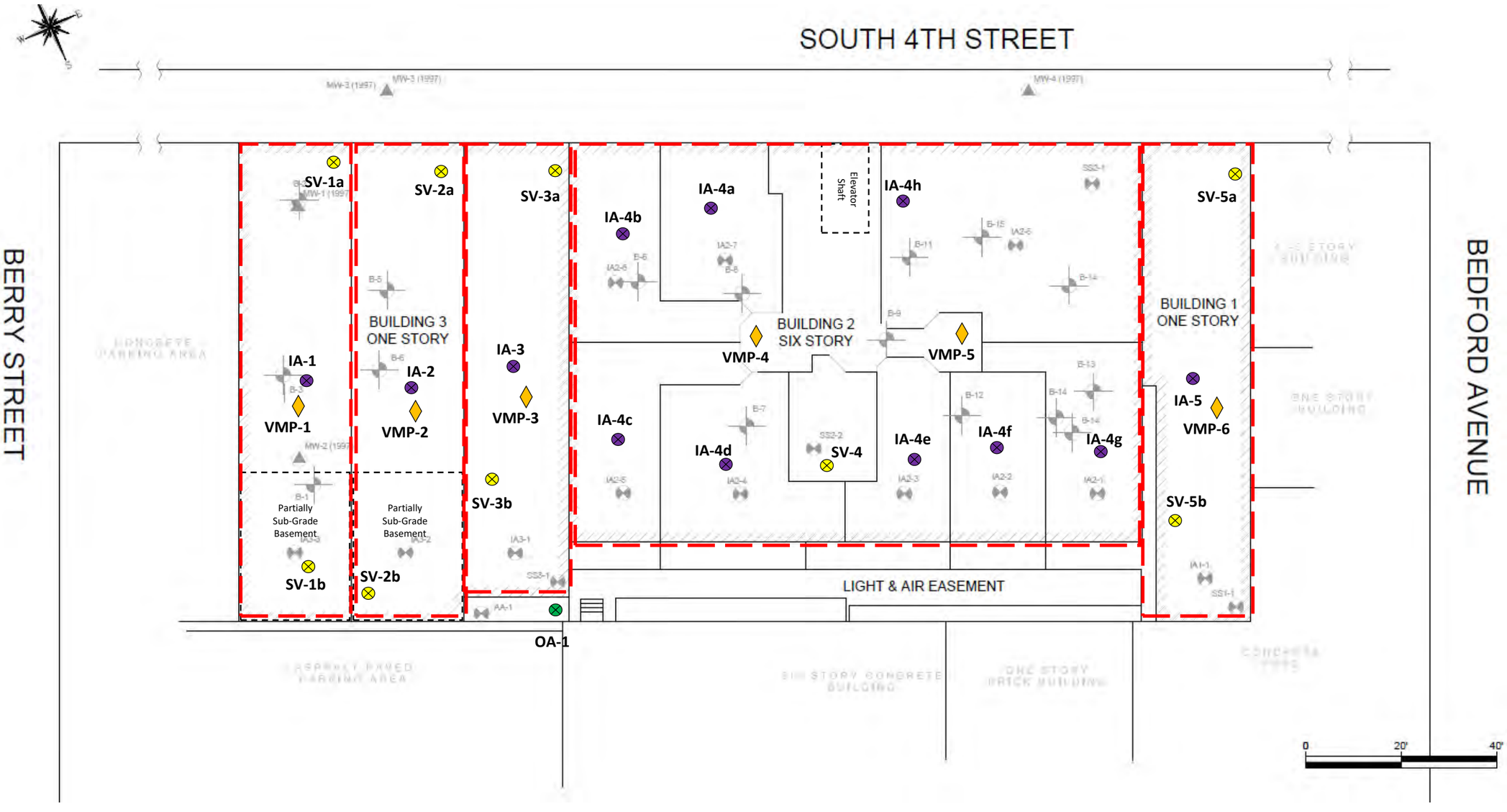

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
Revisions	

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October 28, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#33 - Interim Remedial Measures Progress Report (10/27/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

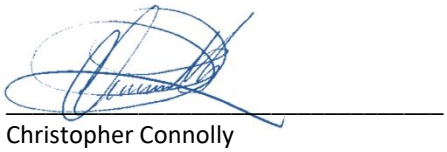
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 27, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 27, 2022

- CG continued routing interior piping to the rear exterior portion of 100 South 4th Street apartments 1-C and 1-F.
- Began routing PVC exterior piping to 98 South 4th Street rooftop.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Friday October 28, 2022) continue routing interior piping to the rear easement of 100 South 4th Street, and rout piping to commercial unit rooftops.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

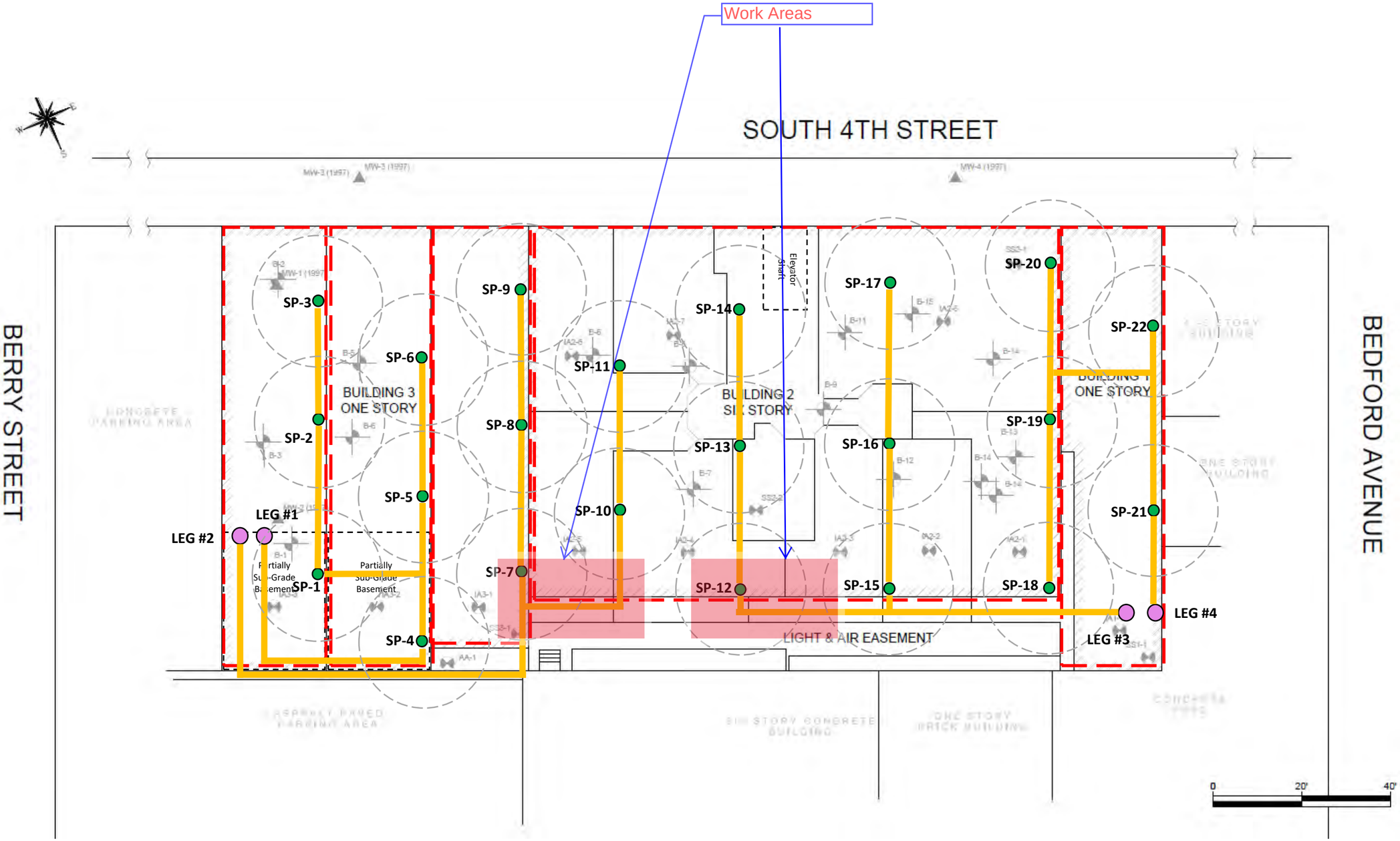
Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of piping routed to exterior easement and leading to rooftop of commercial units 98 South 4th Street.

Photograph No. 2: View of continuation of exterior piping.

Photograph No. 3: View of PVC exterior piping routed to 98 South 4th Street rooftop



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
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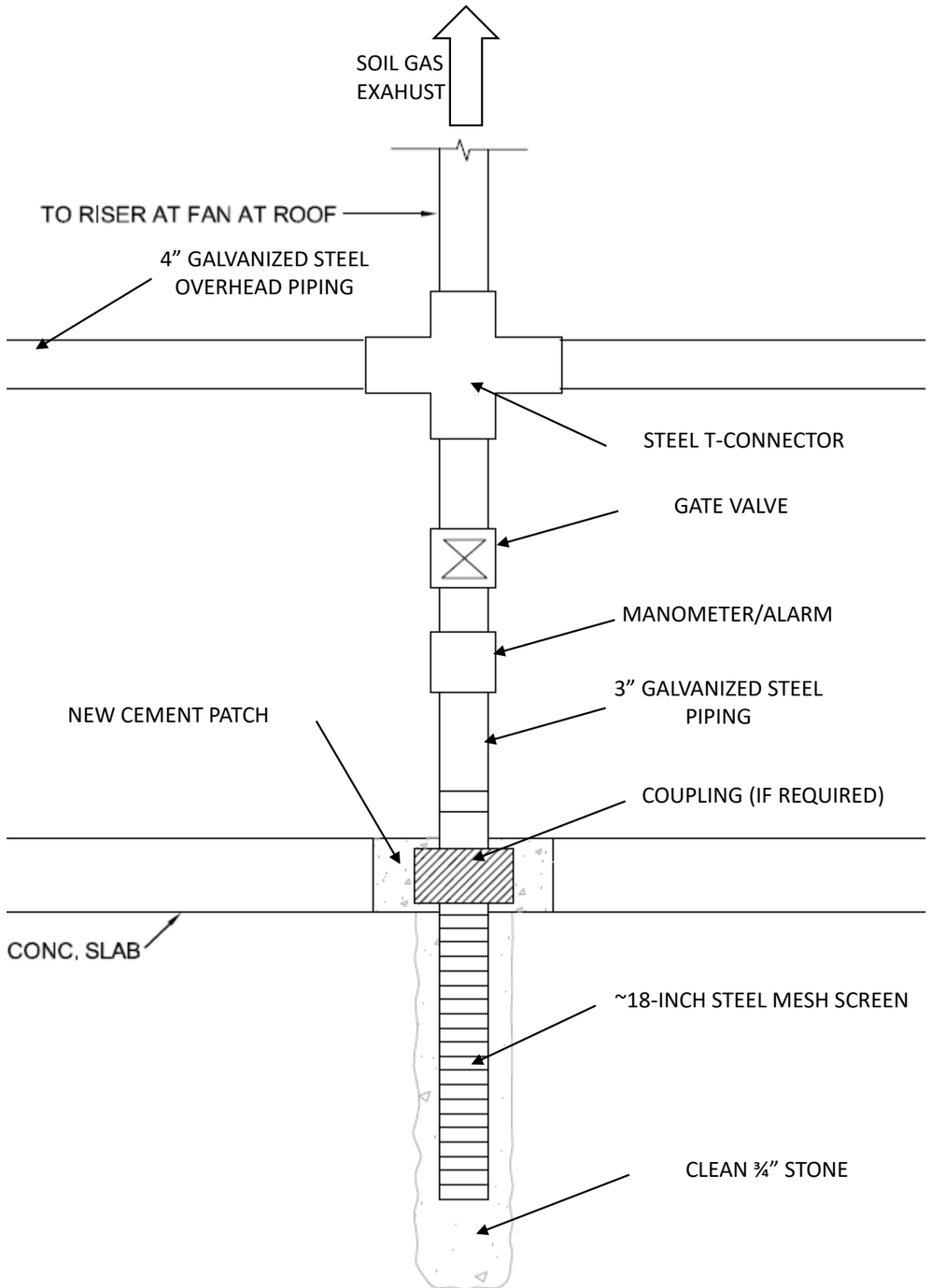
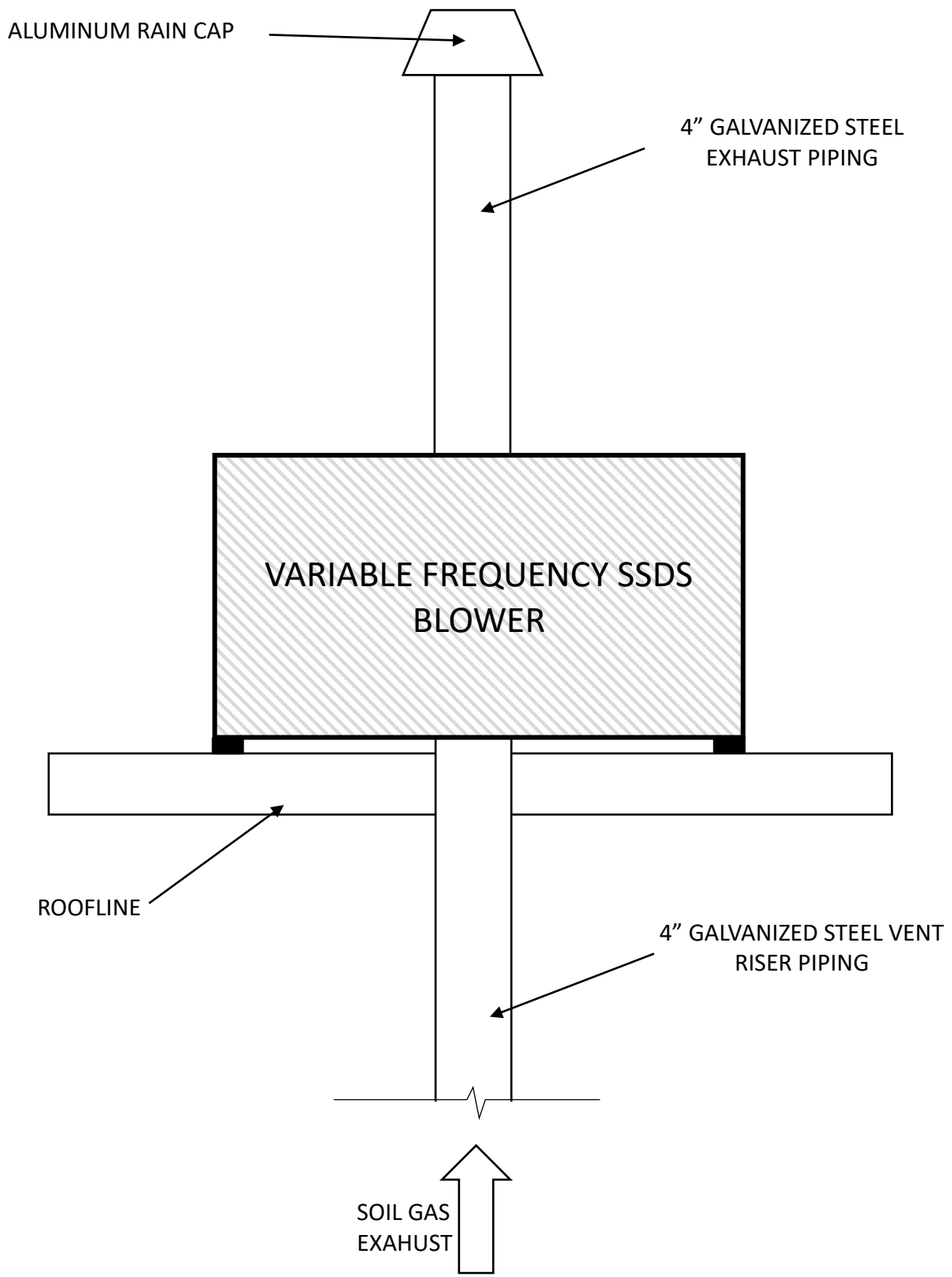


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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Revisions	

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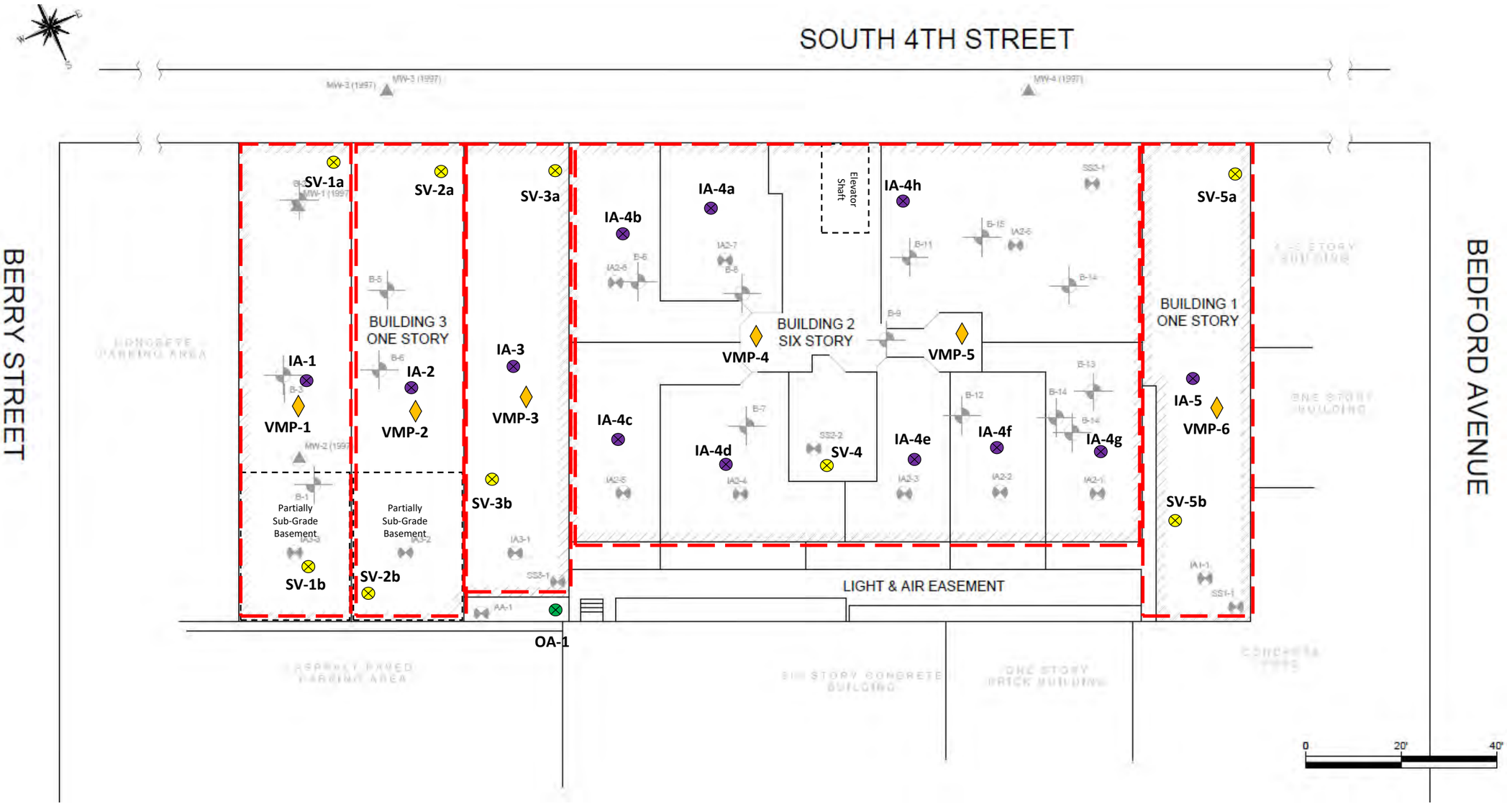

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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October 31, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#34 - Interim Remedial Measures Progress Report (10/28/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

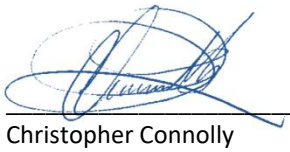
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 28, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 28, 2022

- CG continued routing PVC exterior piping to 98 South 4th Street and 104 South 4th Street rooftops.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Monday October 31, 2022) continue routing piping along rear easement of 100 South 4th Street, and rout piping to commercial unit rooftops. CG will begin installing SSDS fans on commercial rooftops.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
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S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of piping routed to exterior easement.

Photograph No. 2: View of continuation of exterior piping.

Photograph No. 3: View of installation of piping run from exterior of 100 South 4th Street to rooftop of 104 South 4th St.

Work Areas

SOUTH 4TH STREET

BERRY STREET

BEDFORD AVENUE

MW-3 (1997)

MW-4 (1997)

MW-1 (1997)

SP-1
SP-2
SP-3
SP-4
SP-5
SP-6
SP-7
SP-8
SP-9
SP-10
SP-11
SP-12
SP-13
SP-14
SP-15
SP-16
SP-17
SP-18
SP-19
SP-20
SP-21
SP-22

LEG #1
LEG #2
LEG #3
LEG #4

BUILDING 3
ONE STORY

BUILDING 2
SIX STORY

BUILDING 1
ONE STORY

Elevator Shaft

Partially Sub-Grade Basement

Partially Sub-Grade Basement

LIGHT & AIR EASEMENT

CONCRETE PARKING AREA

ASPHALT PAVED PARKING AREA

SIX STORY CONCRETE BUILDING

ONE STORY BRICK BUILDING

ONE STORY BUILDING

0 20' 40'

Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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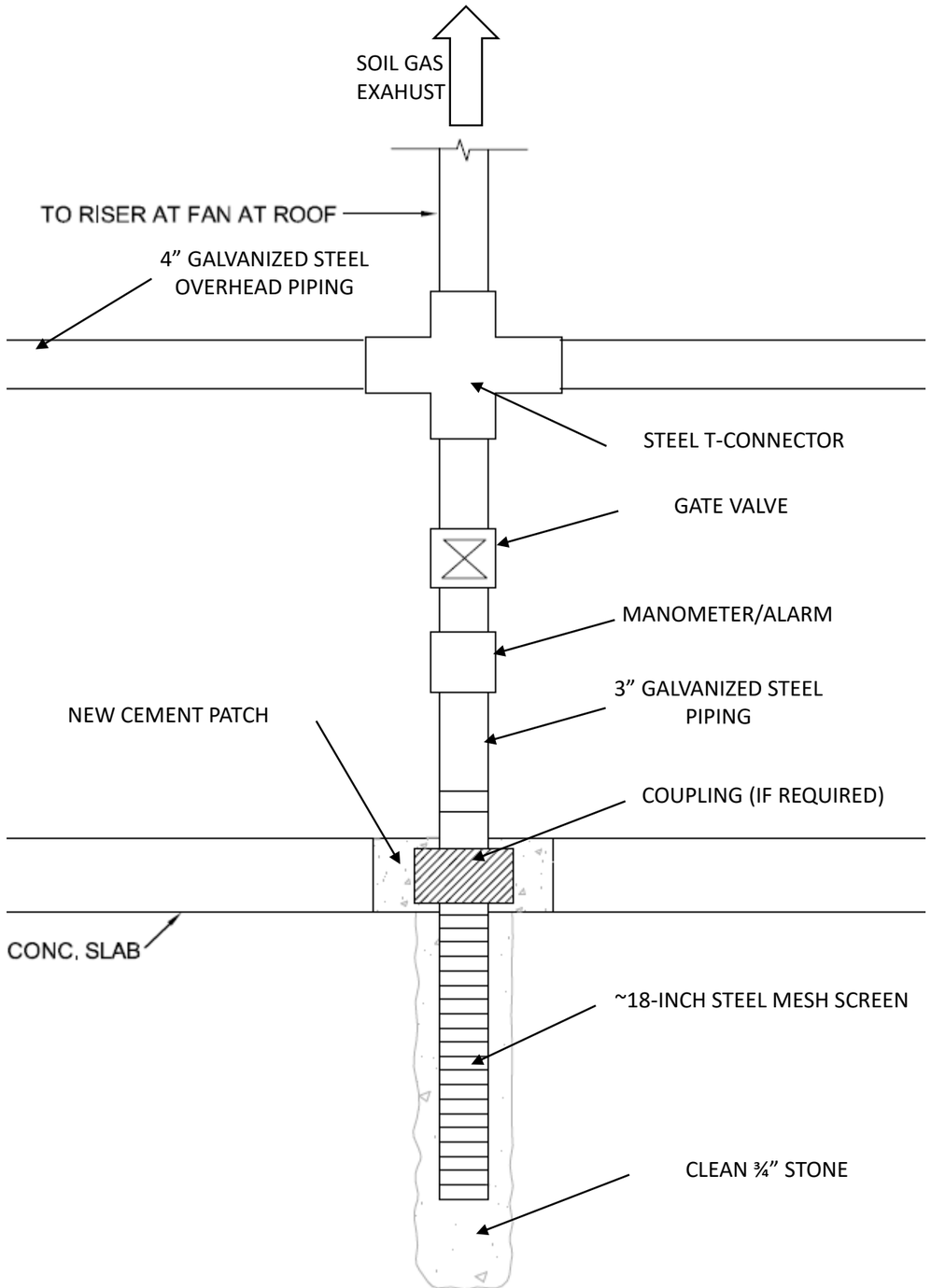
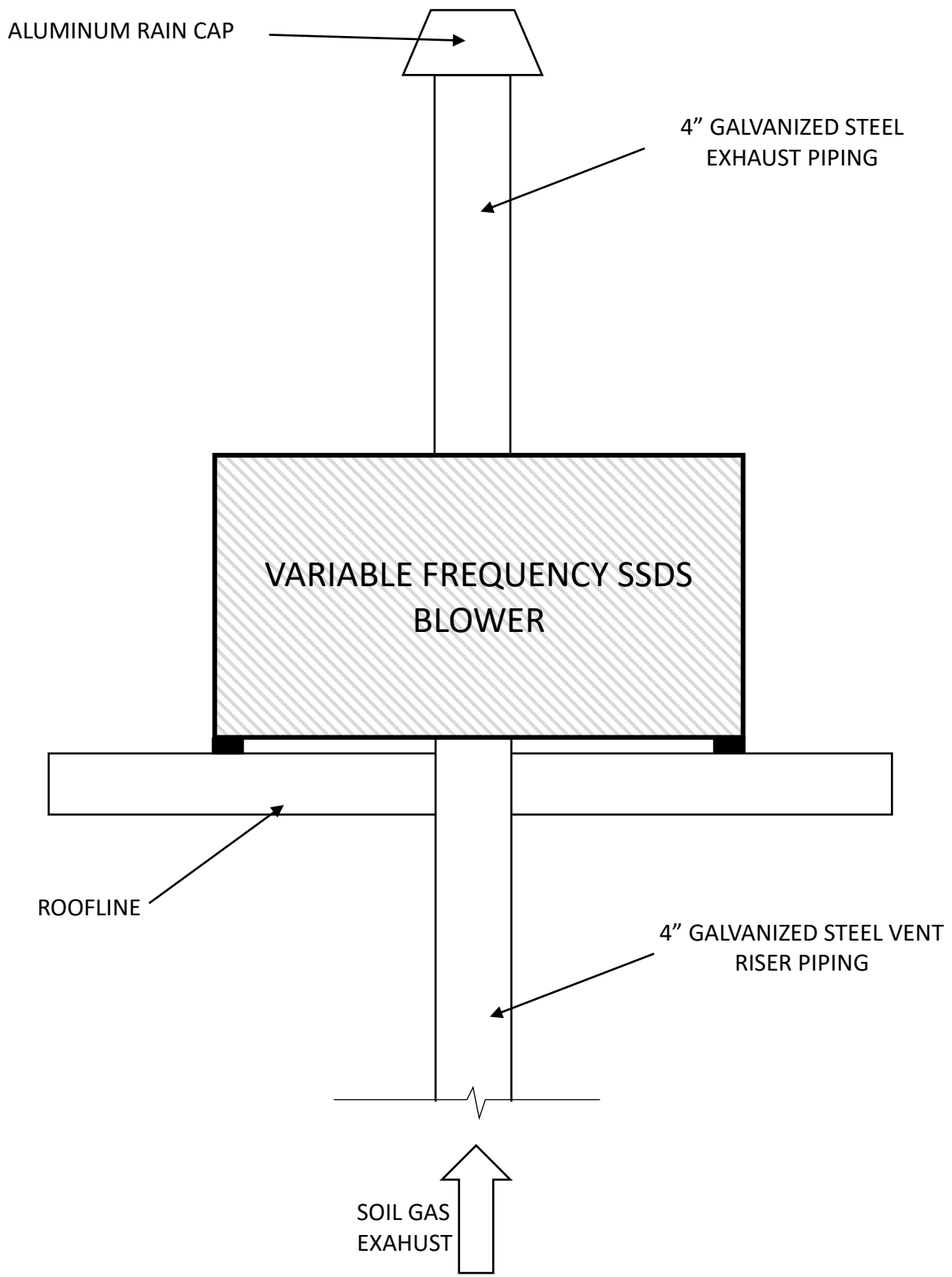


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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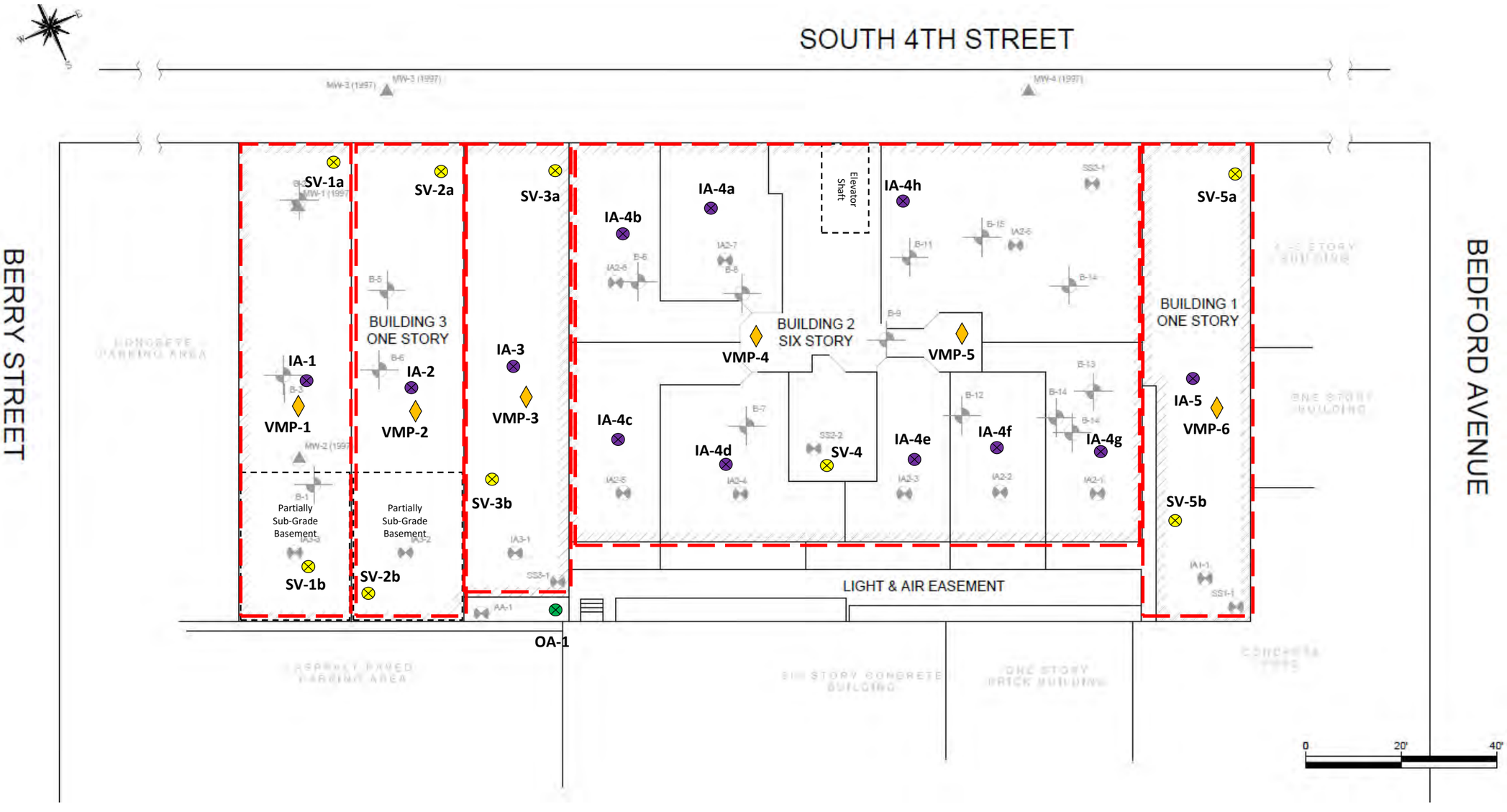

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

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Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

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FAX (631) 269-1599

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November 1, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#35 - Interim Remedial Measures Progress Report (10/31/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

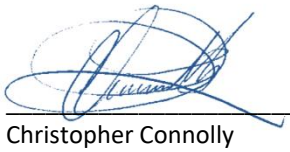
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on October 31, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

October 31, 2022

- CG continued routing PVC exterior piping to 98 South 4th Street and 104 South 4th Street rooftops.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Tuesday November 1, 2022) continue routing piping along rear easement of 100 South 4th Street, and rout piping to commercial unit rooftops. CG will begin installing SSDS fans on commercial rooftops. Electrician will visit site to determine best method of providing power to fans.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

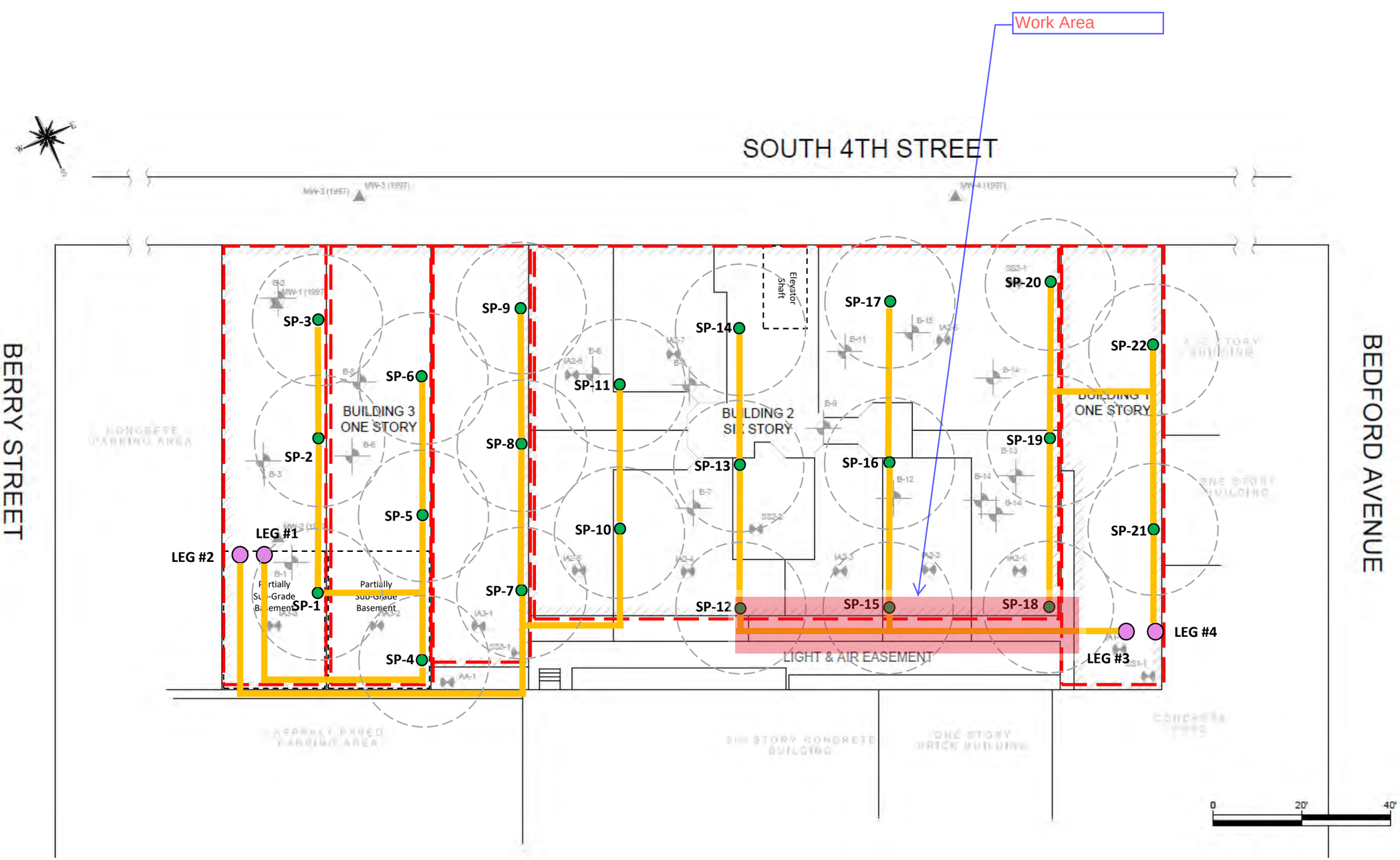
Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of piping routed along exterior easement.

Photograph No. 2: View of continuation of exterior piping.

Photograph No. 3: View of piping protruding from rear wall.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
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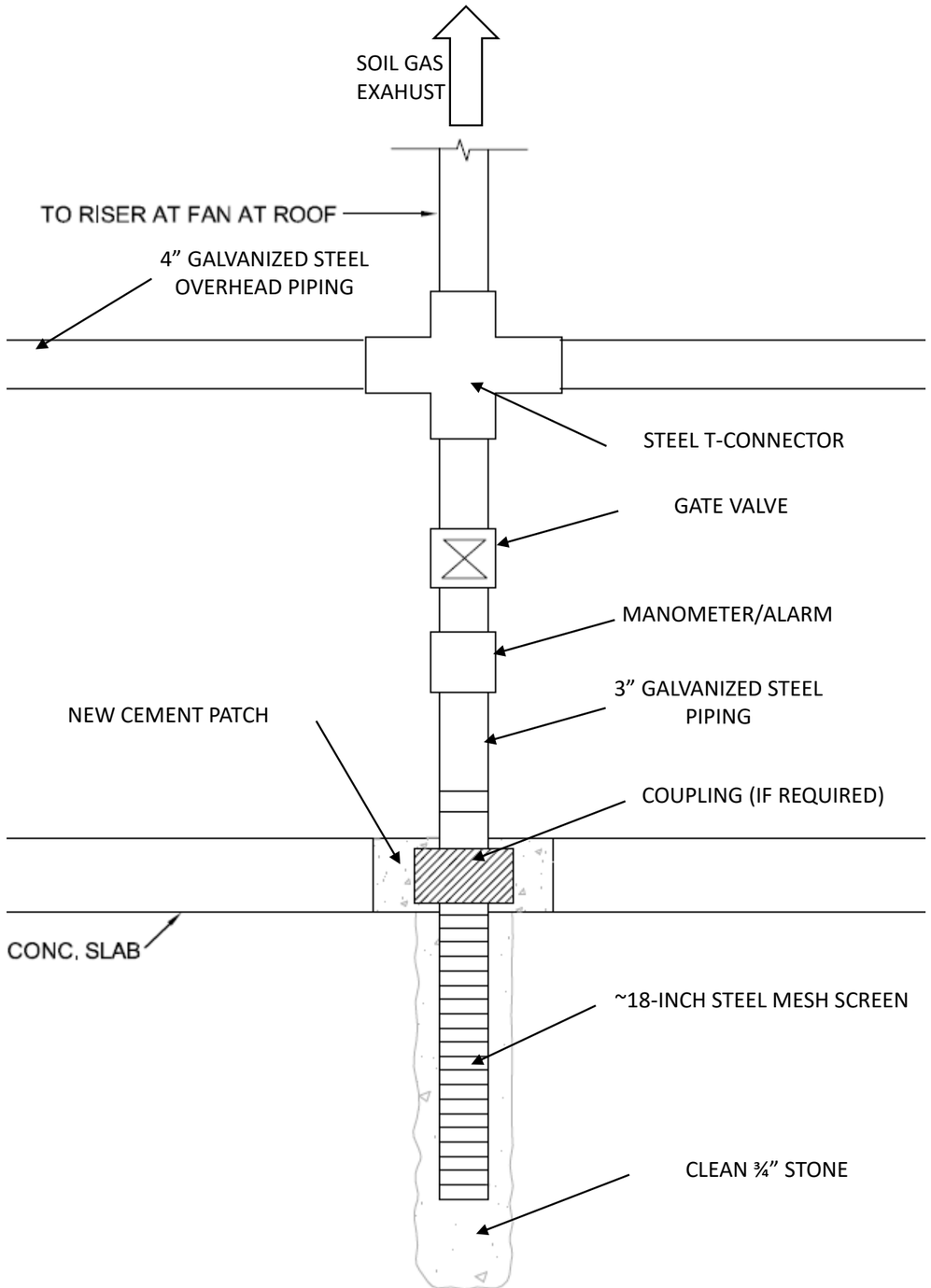
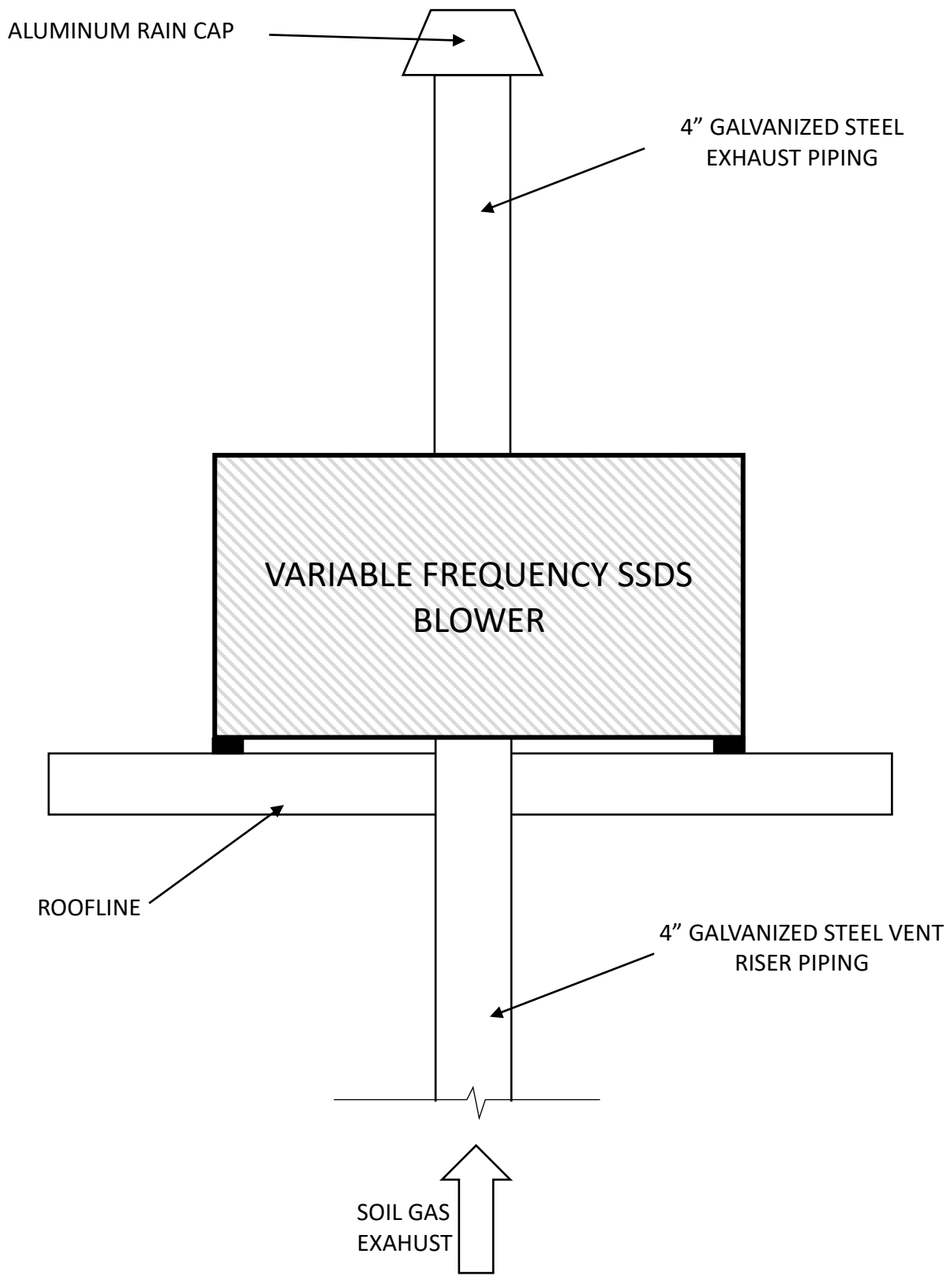


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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CHECKED BY	KK
DATE	3/25/21
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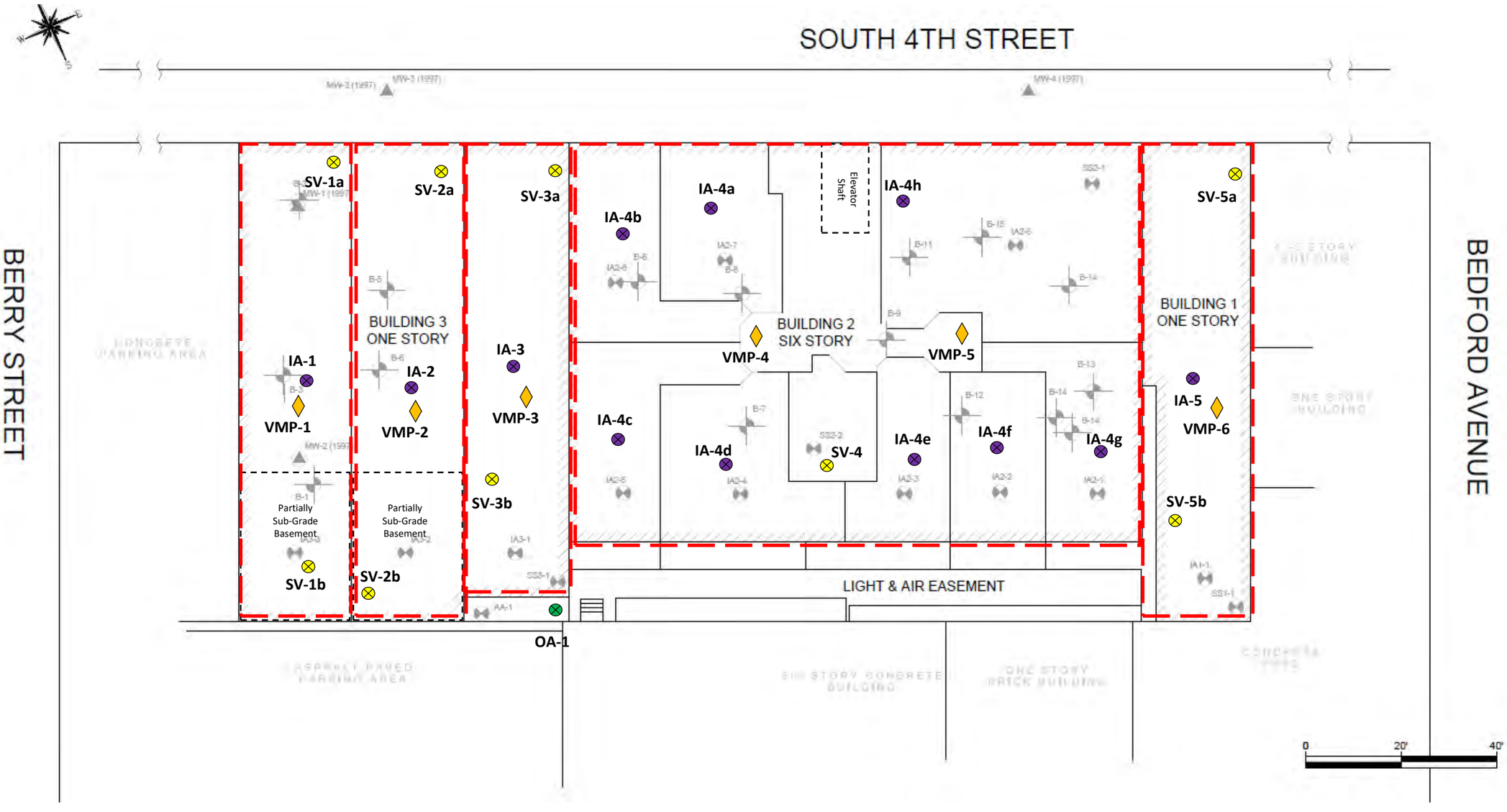

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
DRAWN BY	CJC
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DATE	3/25/21
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Not to scale

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November 2, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#36 - Interim Remedial Measures Progress Report (11/01/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

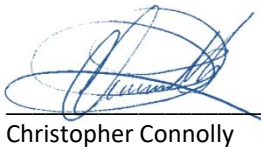
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 1, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 1, 2022

- CG continued routing PVC exterior piping to 98 South 4th Street and 104 South 4th Street rooftops.
- Piping was routed to rooftop of 104 South 4th Street.
- Electrician was onsite to discuss locations of blowers, and suitable power source.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Wednesday November 2, 2022) CG will begin installing SSDS fans on commercial rooftops. Electrician will begin hooking up power for fans on Thursday.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



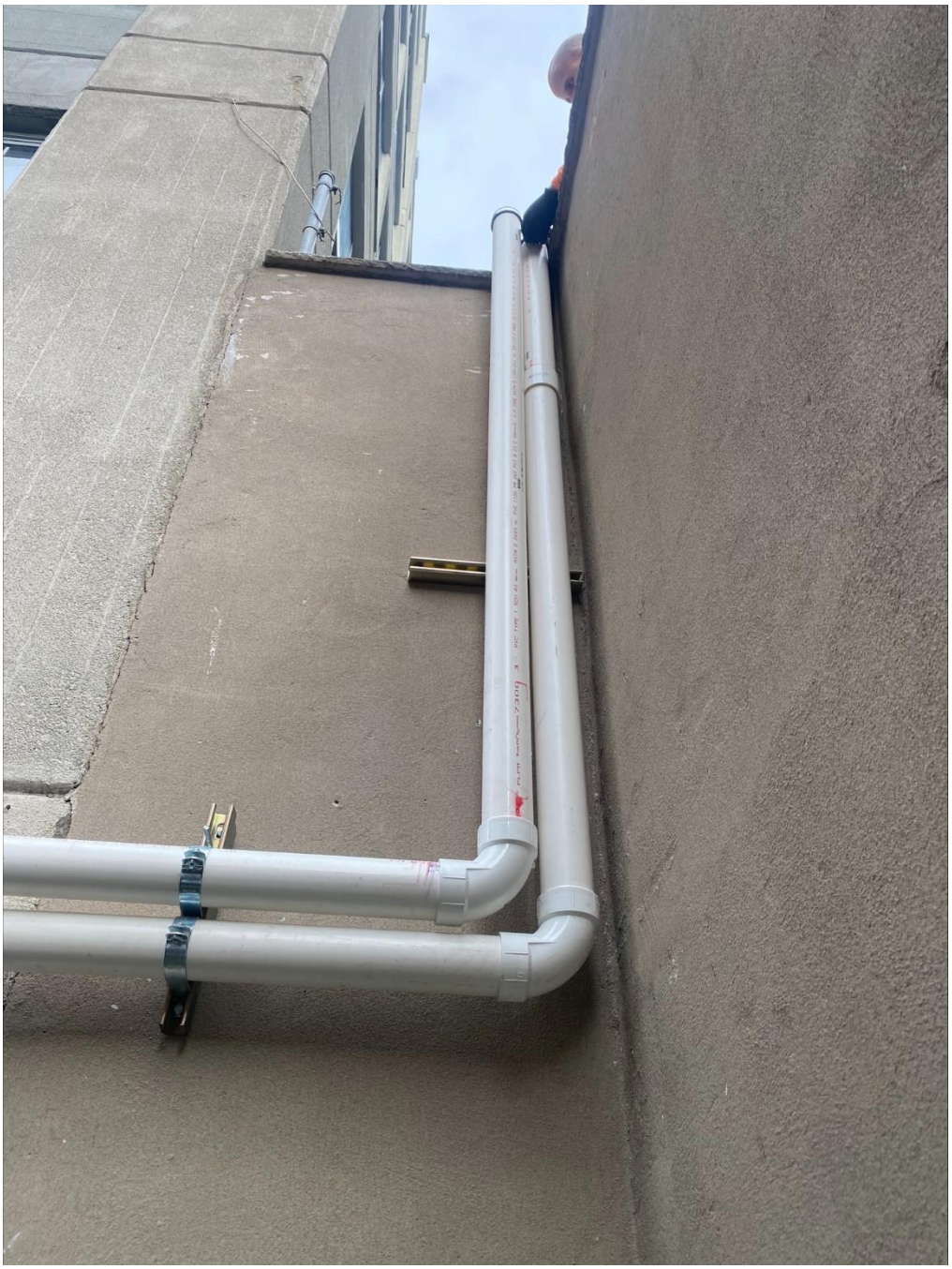
Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

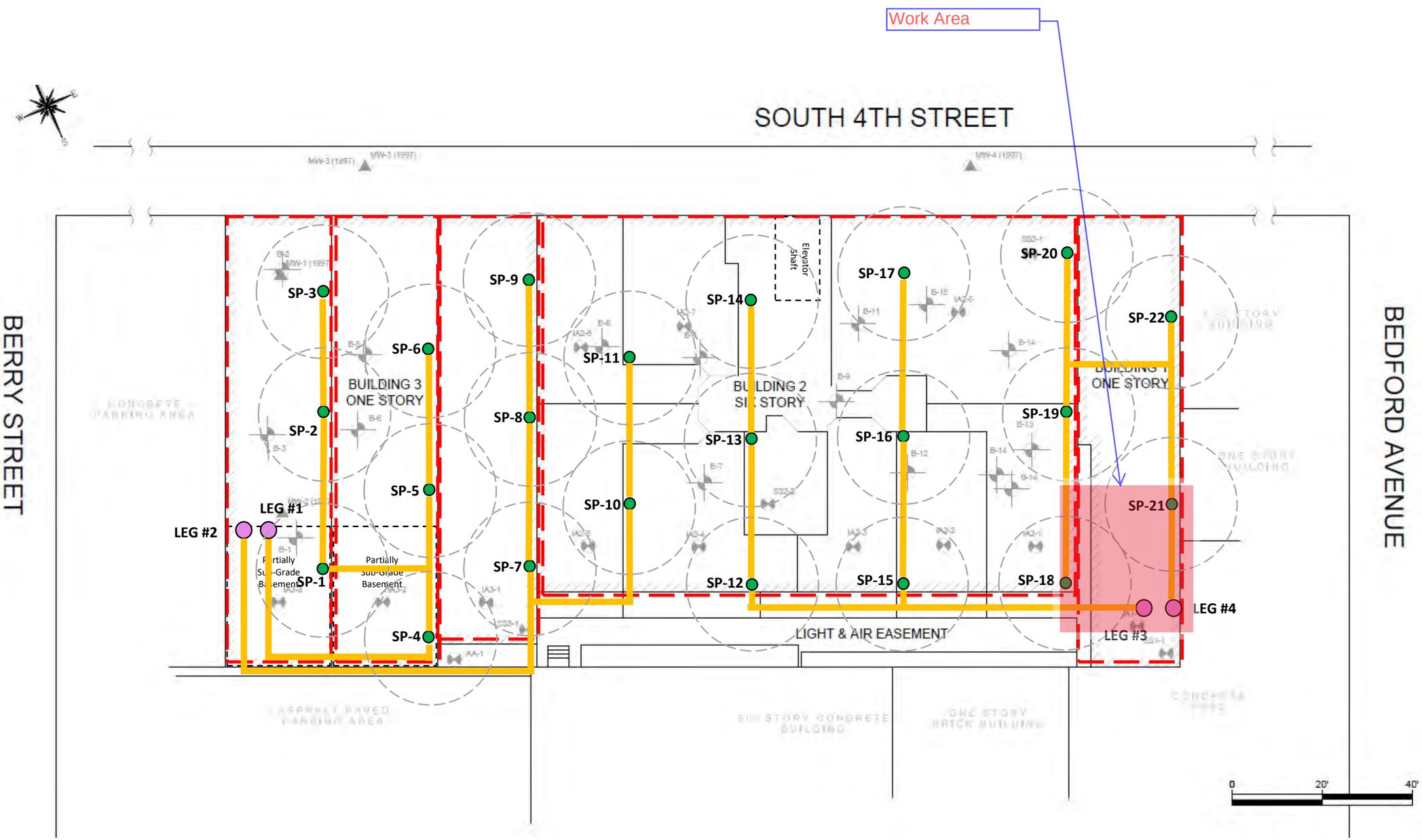
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of proposed location for failure alarms and liquid manometer in 104 South 4th Street.

Photograph No. 2: View of continuation of exterior piping.



Photograph No. 3: View of piping routed to rooftop of 104 South 4th Street..



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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CHECKED BY	KK
DATE	3/25/21
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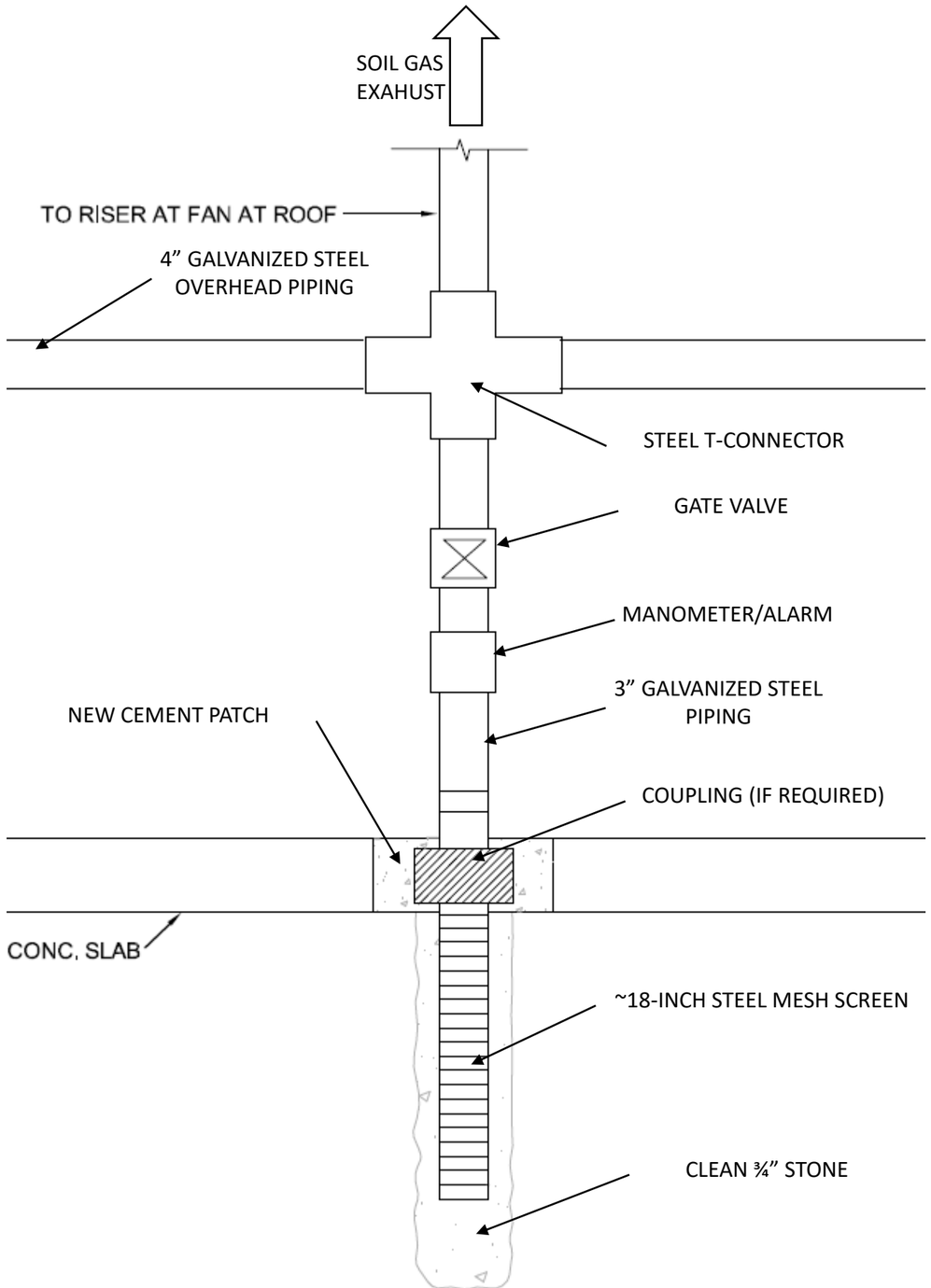
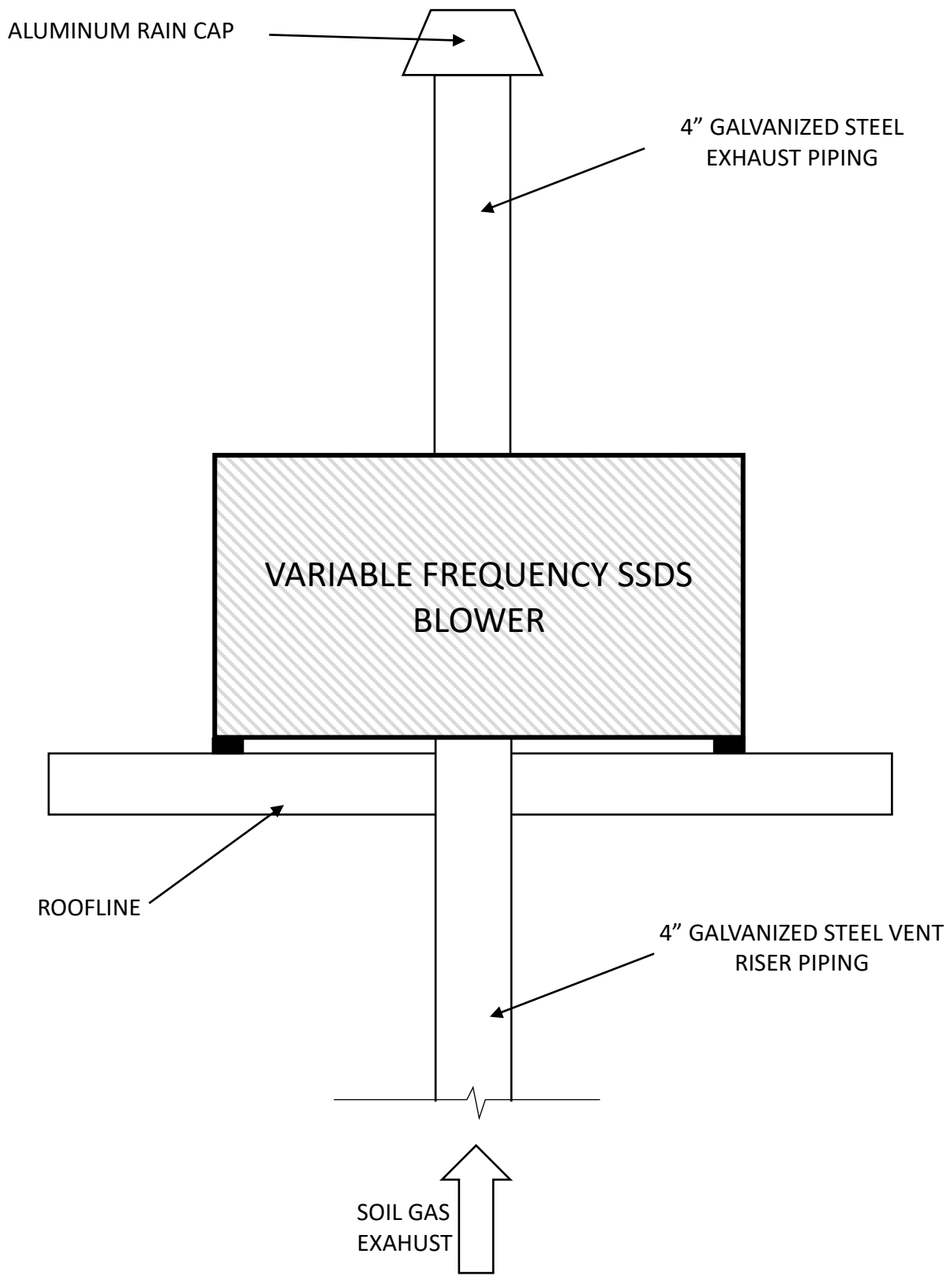


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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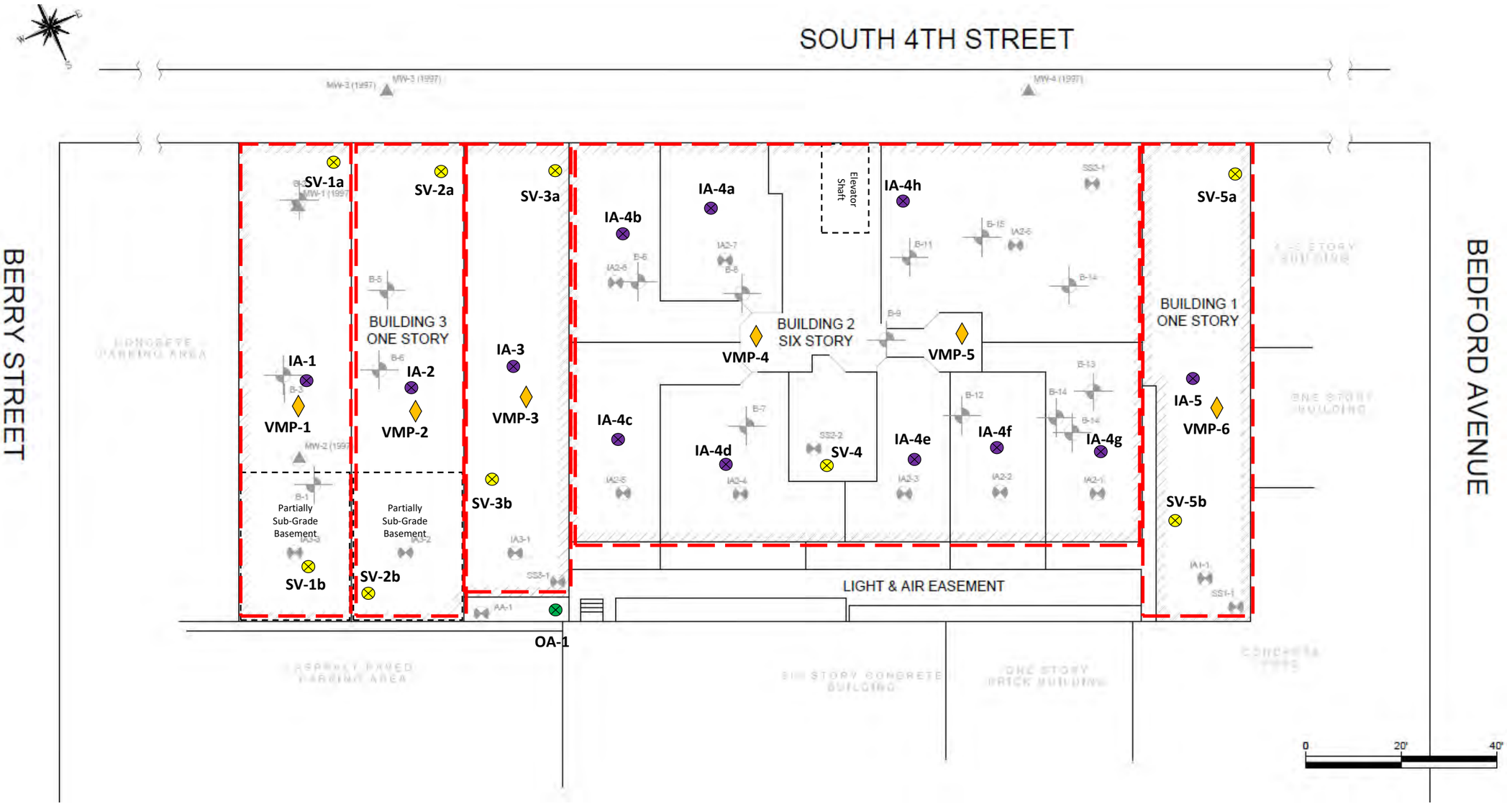

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

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November 3, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#37 - Interim Remedial Measures Progress Report (11/02/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

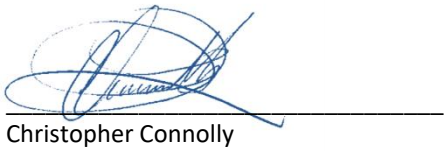
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 2, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 2, 2022

- Piping was routed to rooftop of 104 South 4th Street land 98 South 4th Street.
- SSDS fans were successfully placed on rooftop of 104 South 4th Street.
- Electrician was onsite to begin routing power to SSDS fans on rooftops.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Thursday November 3, 2022) CG will continue installing SSDS fans on commercial rooftops. Electrician will continue hooking up power for fans.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



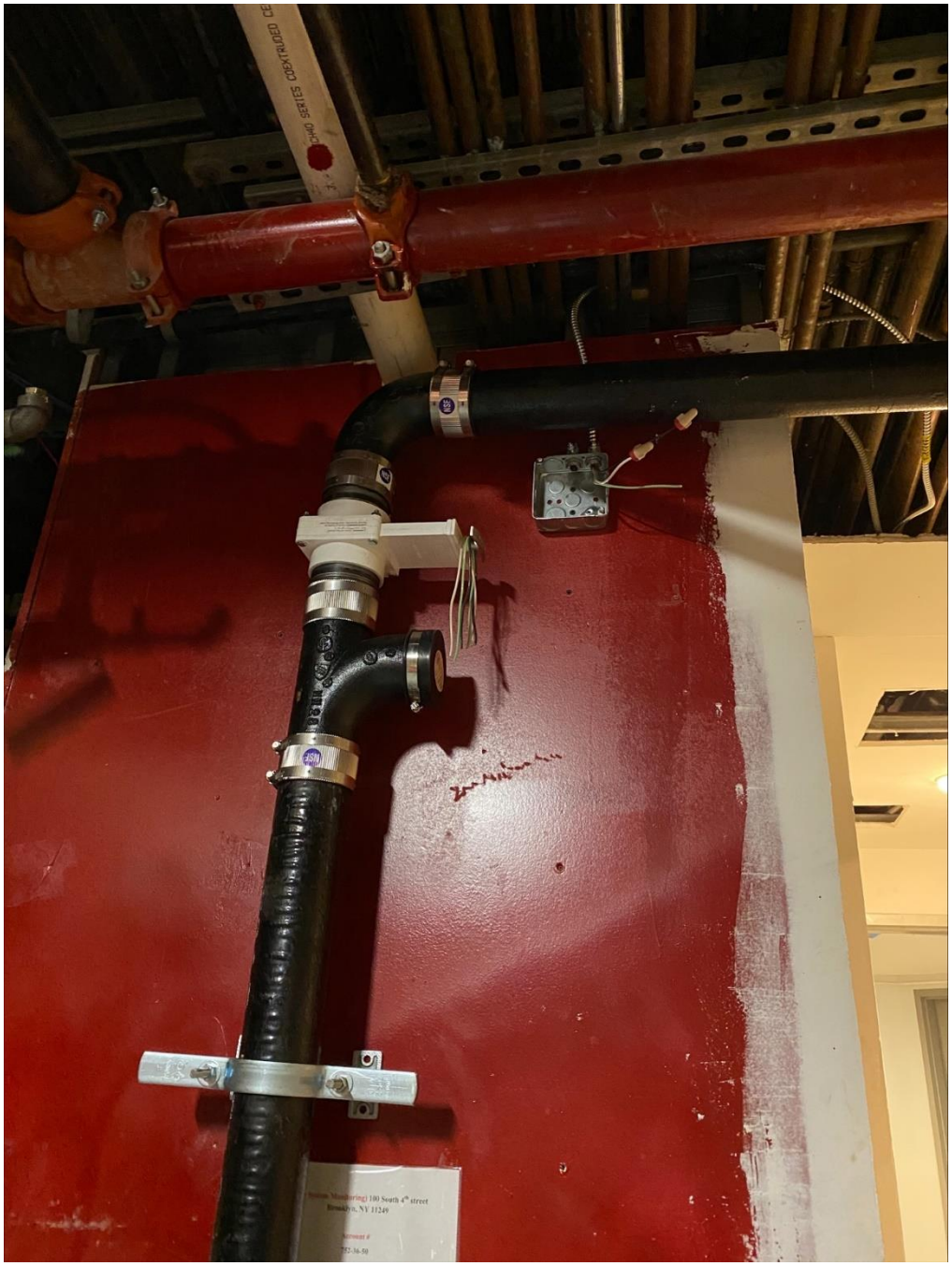
Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

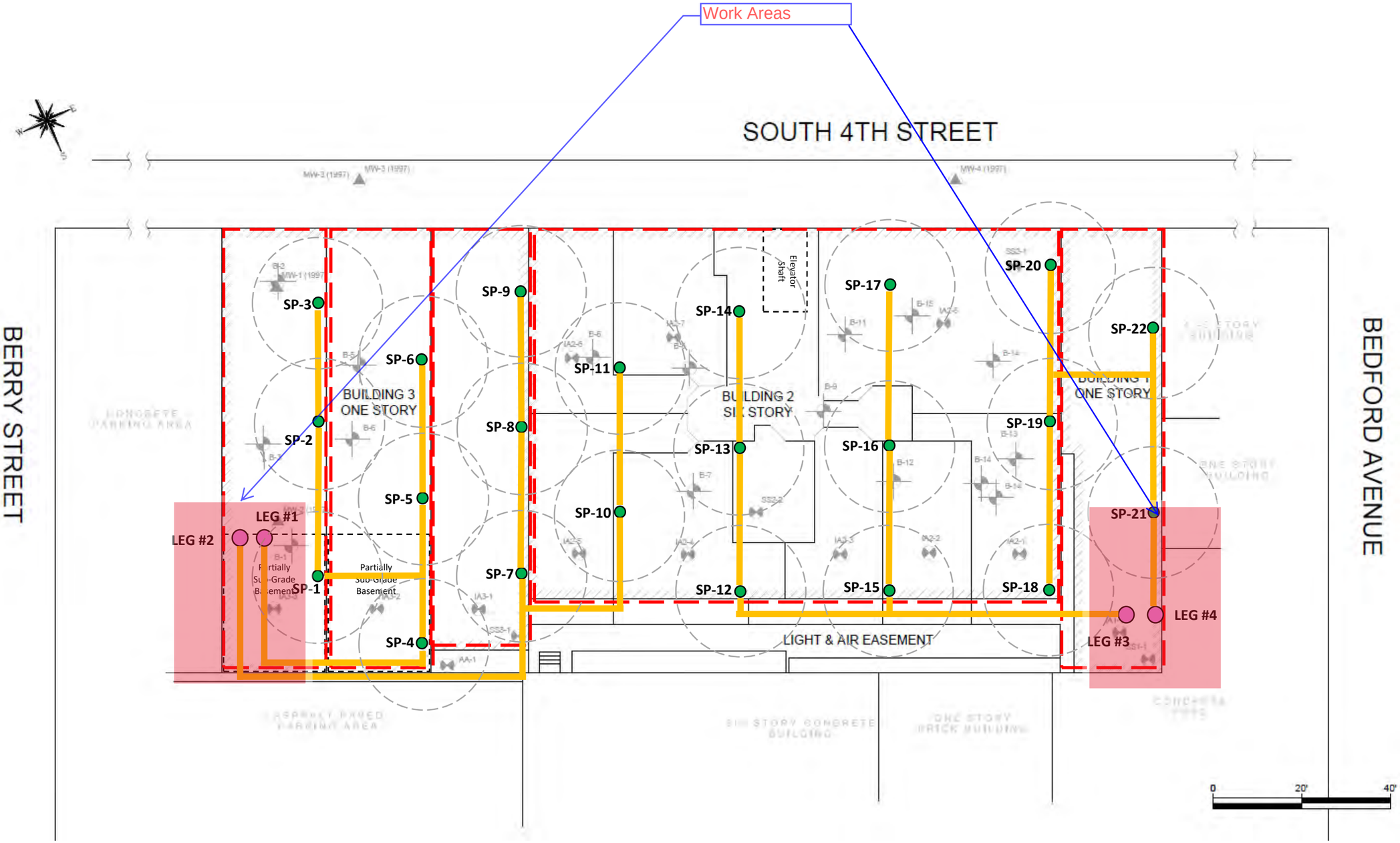
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of exterior piping along front of 100 South 4th Street..

Photograph No. 2: View of SSDS fans delivered and placed on roof of 104 South 4th Street.



Photograph No. 3: View of installation of electrical connection for future failure alarm.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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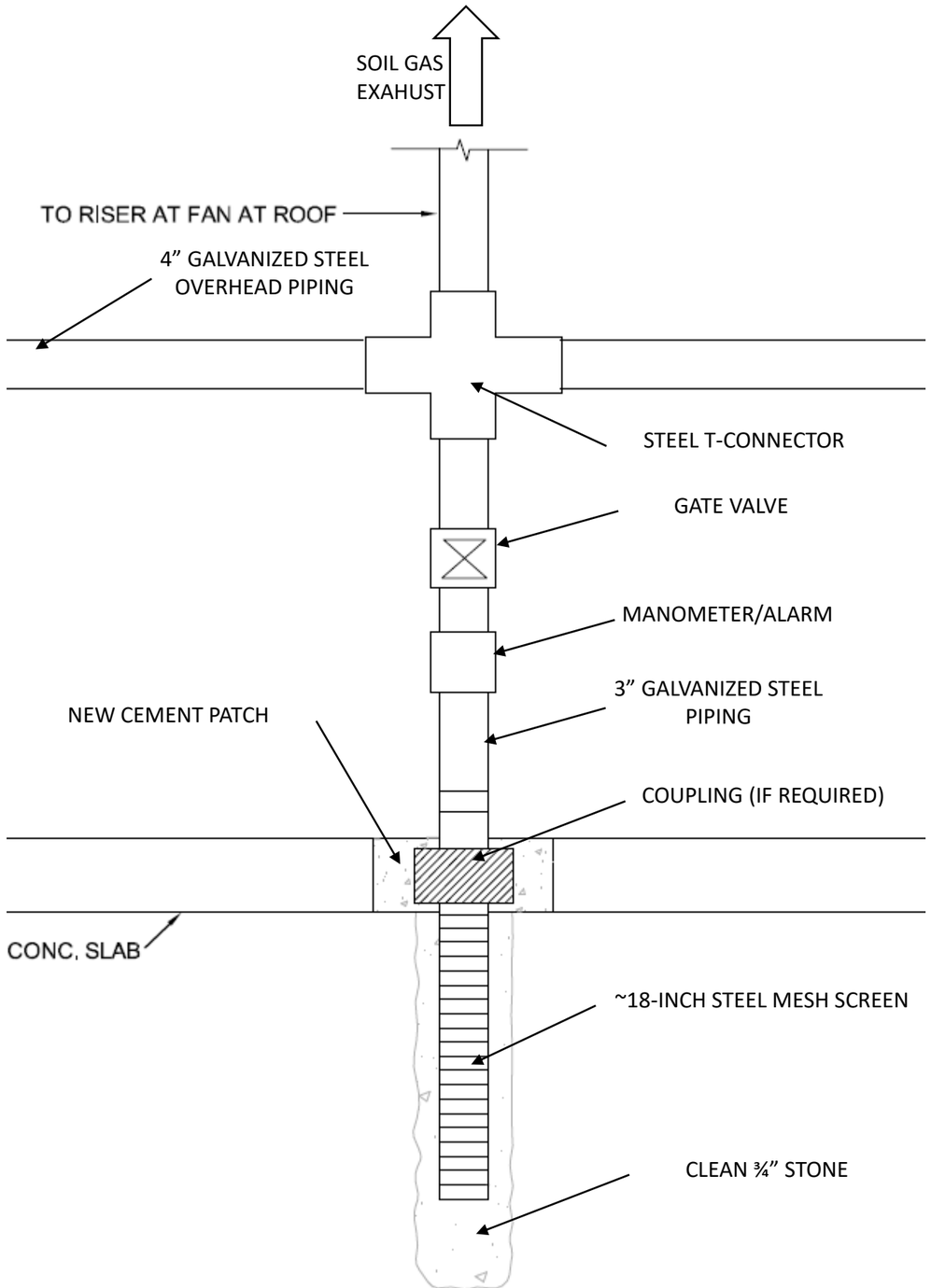
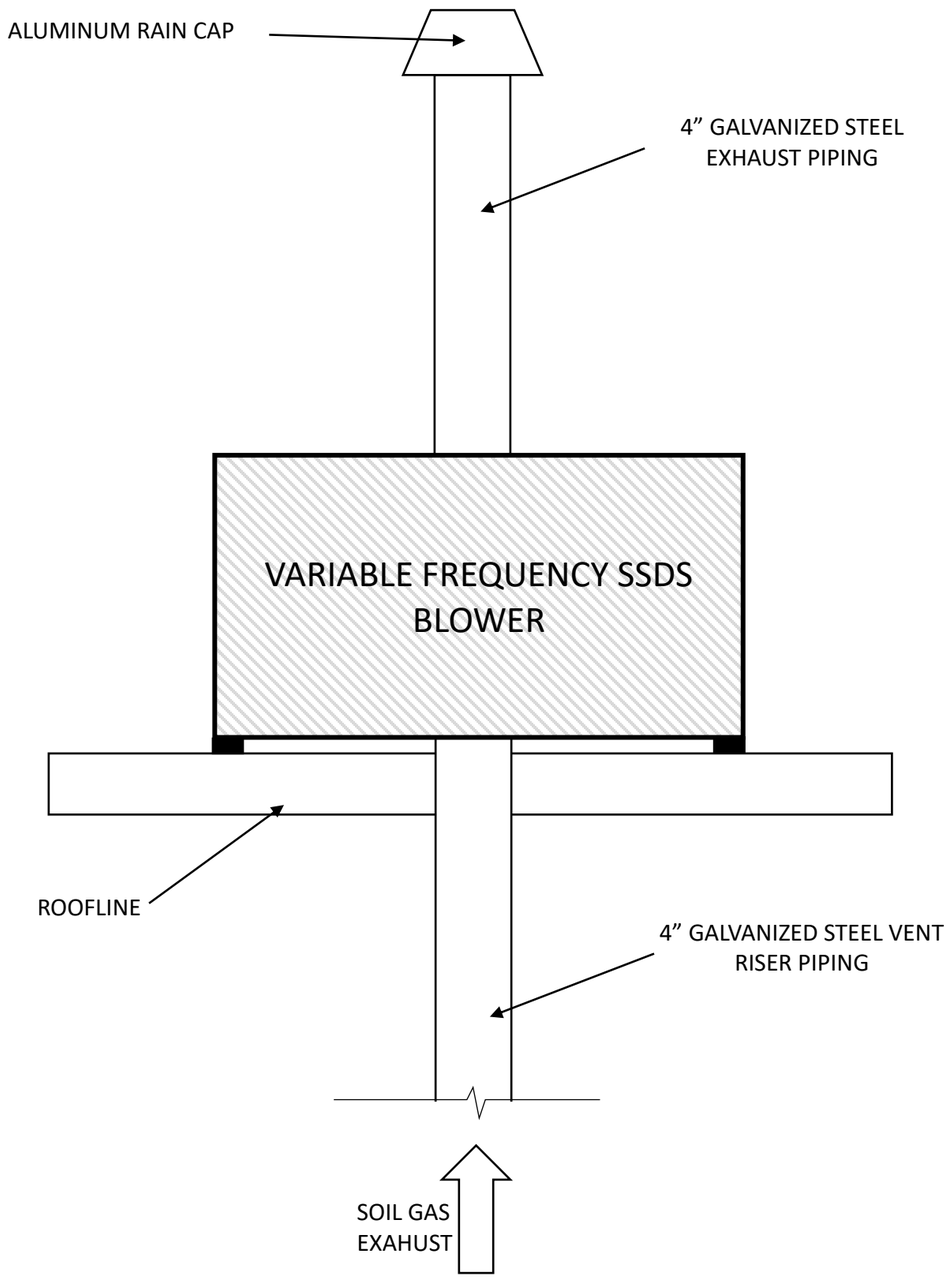


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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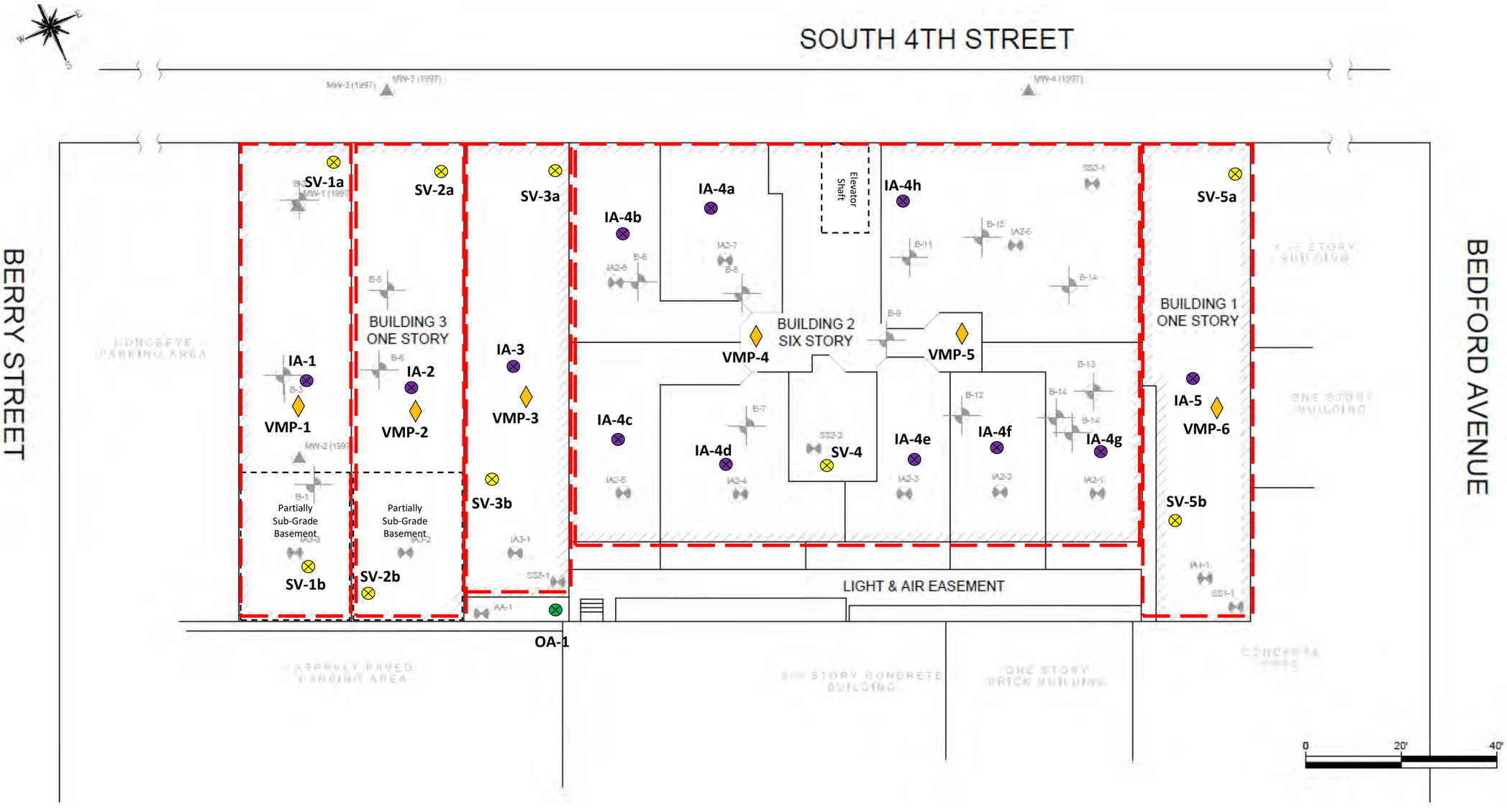

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

PROJECT #	13817
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November 4, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#38 - Interim Remedial Measures Progress Report (11/03/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

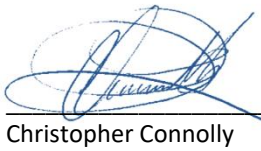
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 3, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 3, 2022

- Piping was routed along rooftop of 98 South 4th Street towards newly constructed SSDS fans.
- SSDS fans were successfully placed on rooftop of 98 South 4th Street.
- Electrician was onsite to continue routing power to SSDS fans on rooftops of both buildings.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Friday November 4, 2022) CG will continue installing SSDS fans on commercial rooftops. Electrician will continue hooking up power for fans.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

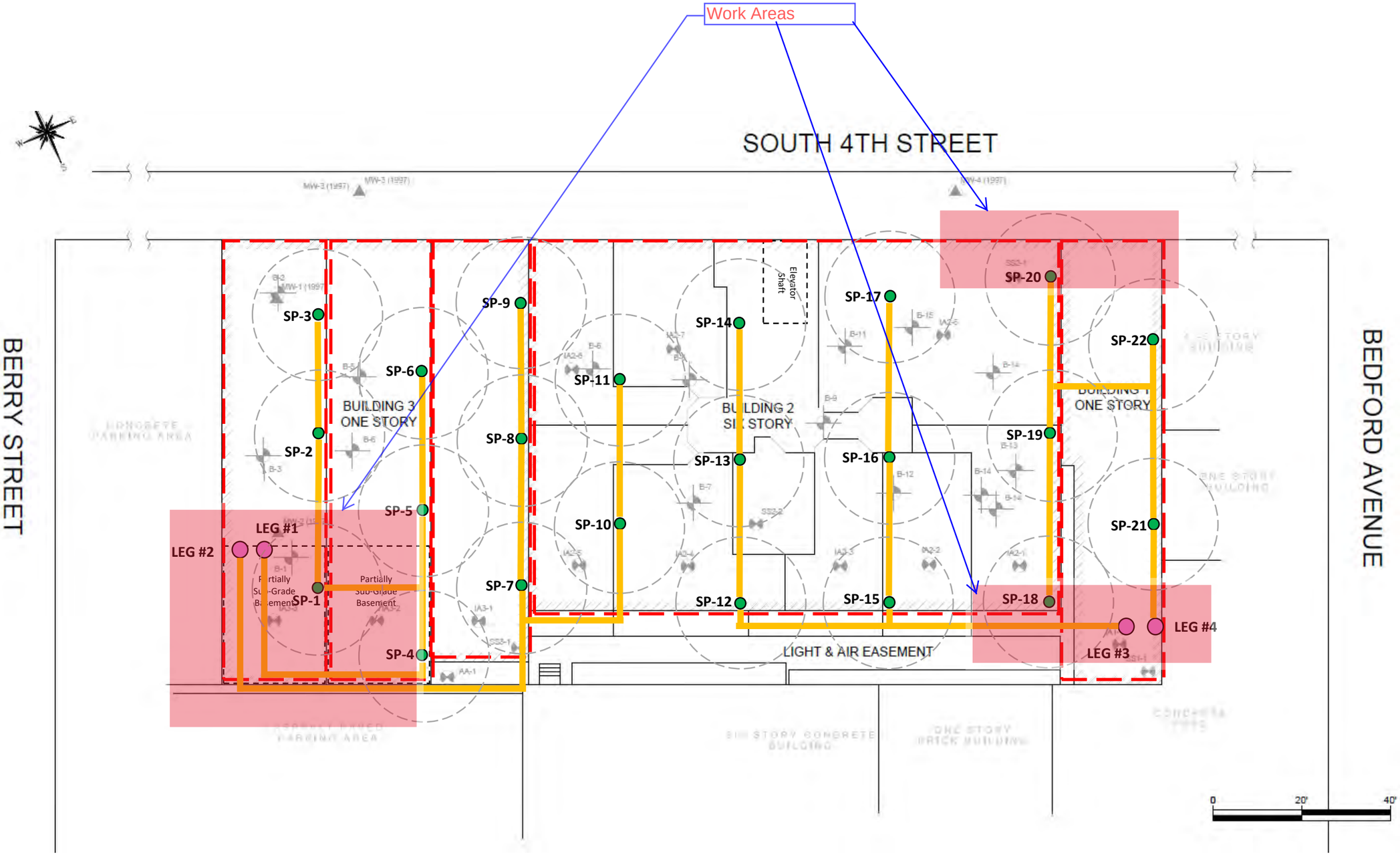
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of piping routed to roof of 98 South 4th Street..

Photograph No. 2: View of construction of SSDS fans on roof of 98 South 4th Street.

Photograph No. 3: View of installation of electrical connection for fans on rooftop of 104 South 4th Street.

Photograph No. 4: View of installation of exterior piping towards fans on rooftop of 98 South 4th Street.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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DATE	3/25/21
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170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800
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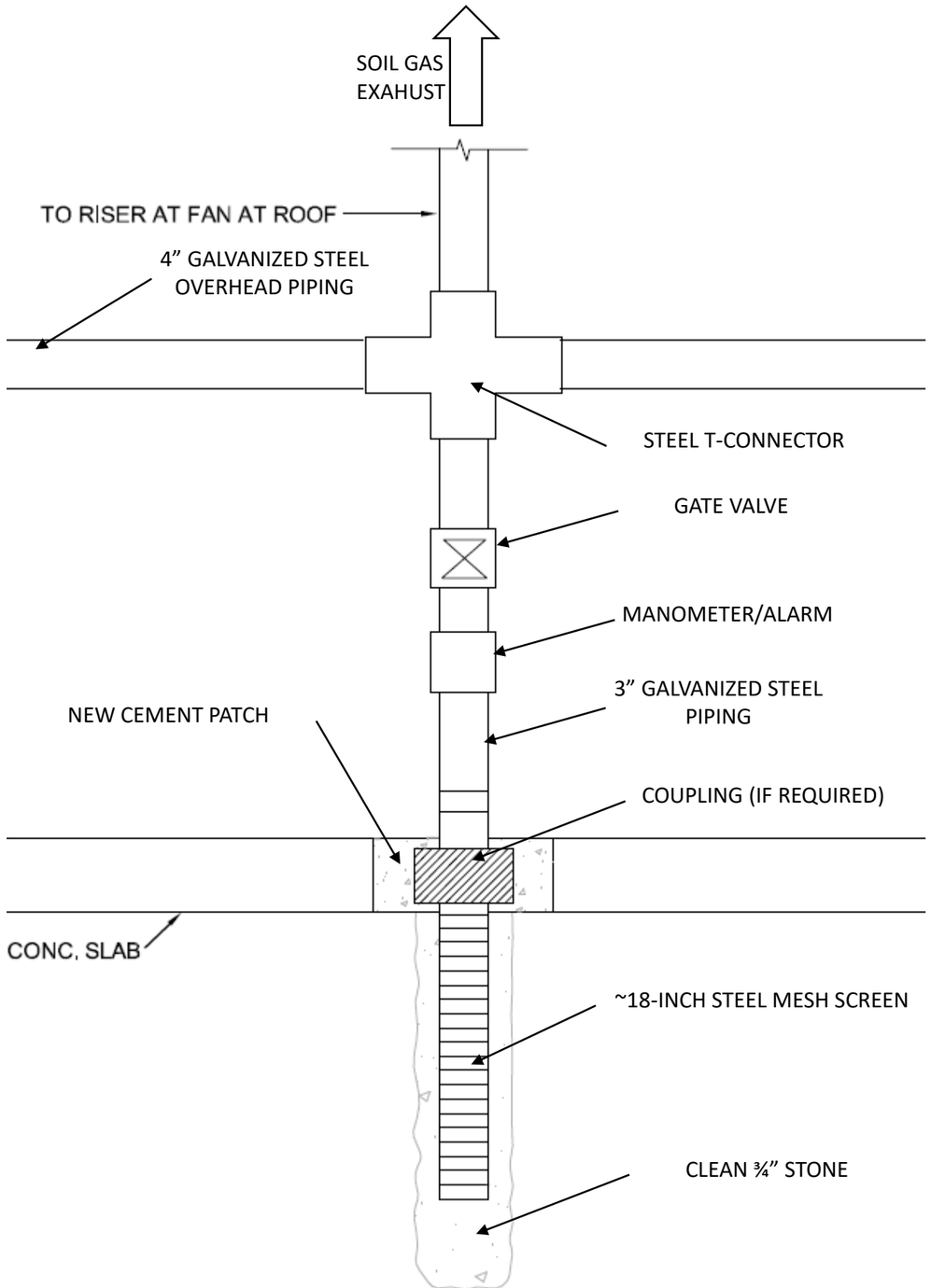
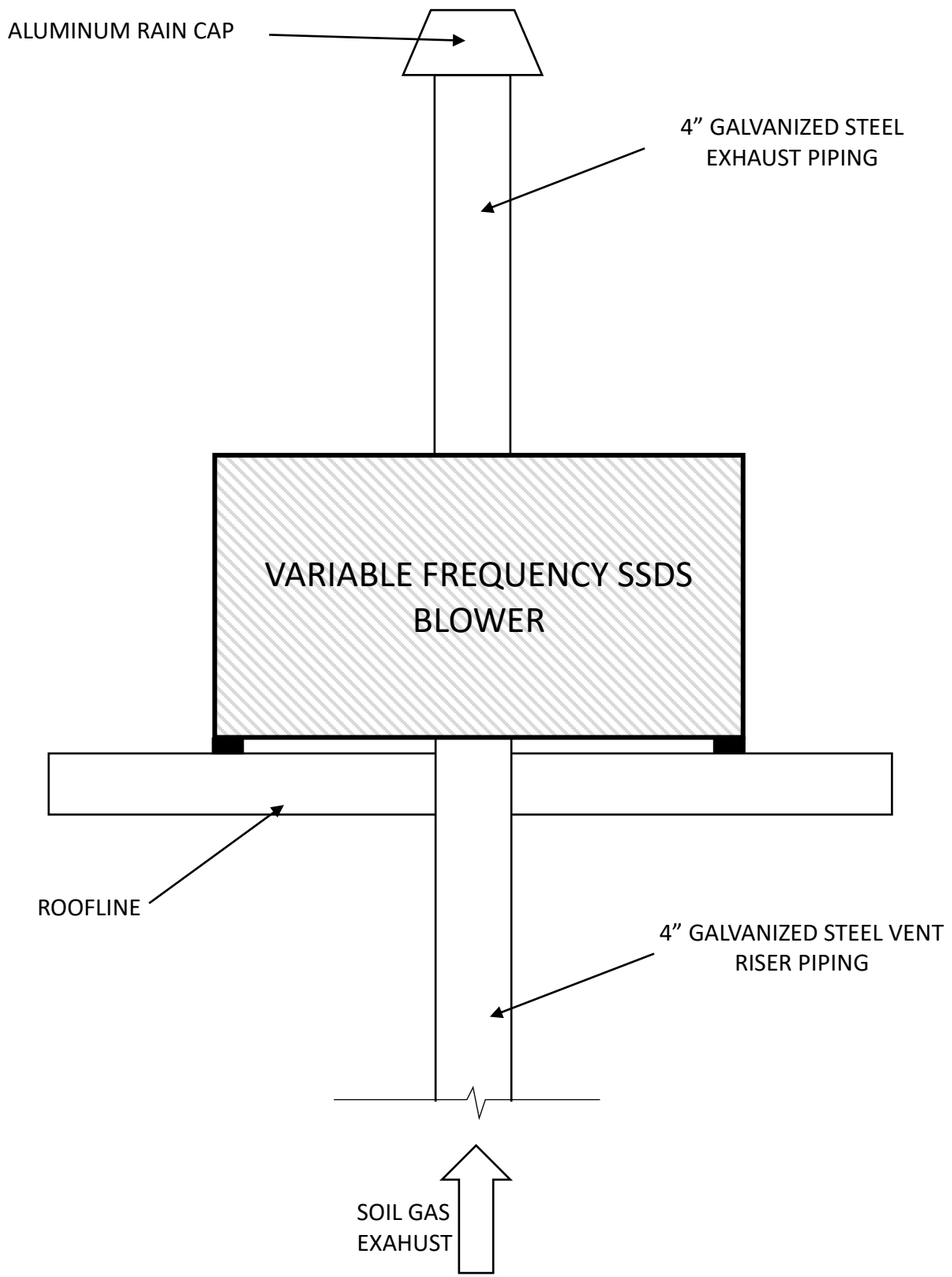


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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CHECKED BY	KK
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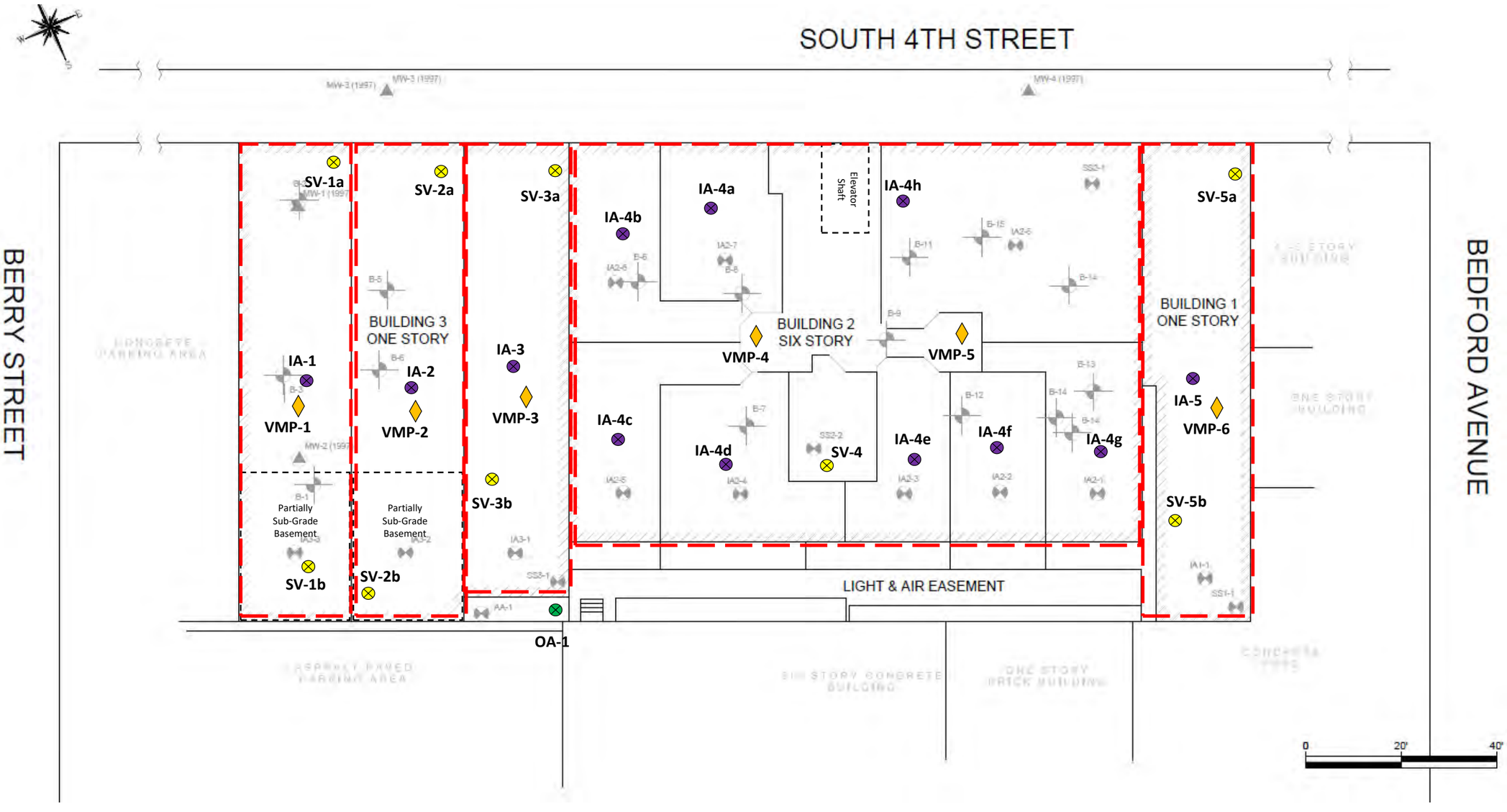

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

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November 7, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#39 - Interim Remedial Measures Progress Report (11/04/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

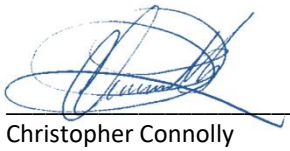
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 4, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 4, 2022

- SSDS fans were successfully installed on rooftop of 98 South 4th Street with associated piping.
- Electrician was onsite to continue routing power to SSDS fans on rooftop of 98 South 4th Street.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Monday November 7, 2022) electrician will continue hooking up power for fans and outlets inside buildings for eventual failure alarm installation.

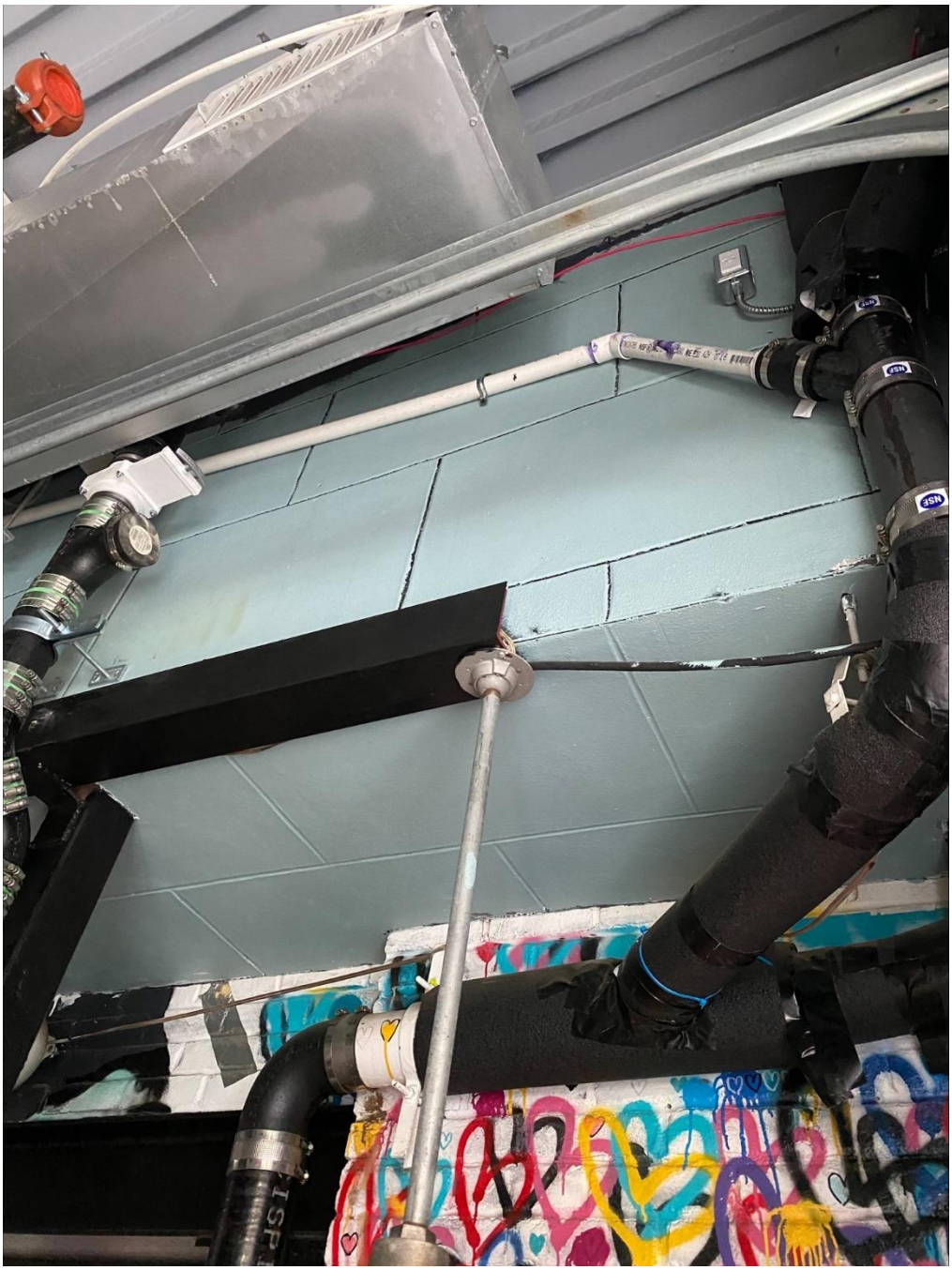
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

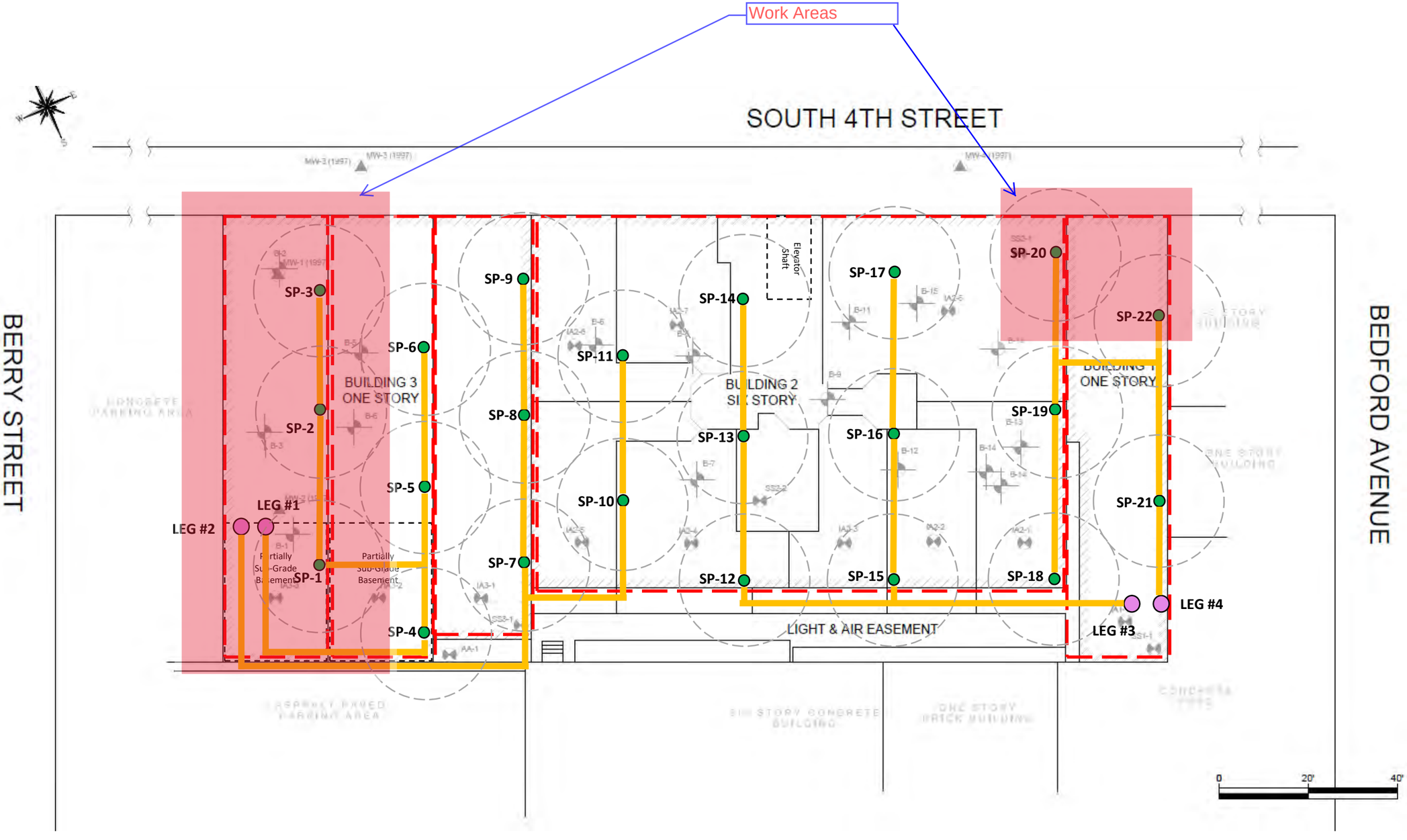


Photograph No. 1: View of power outlet installed in 104 South 4th Street for future failure alarm installation.

Photograph No. 2: View of power supply routed to rooftop of 104 South 4th Street.

Photograph No. 3: View of SSDS fans installed on 98 South 4th Street rooftop, with risers and temporary rain caps.

Photograph No. 4: View of power supply being routed towards SSDS fans on 98 South 4th Street roof.



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
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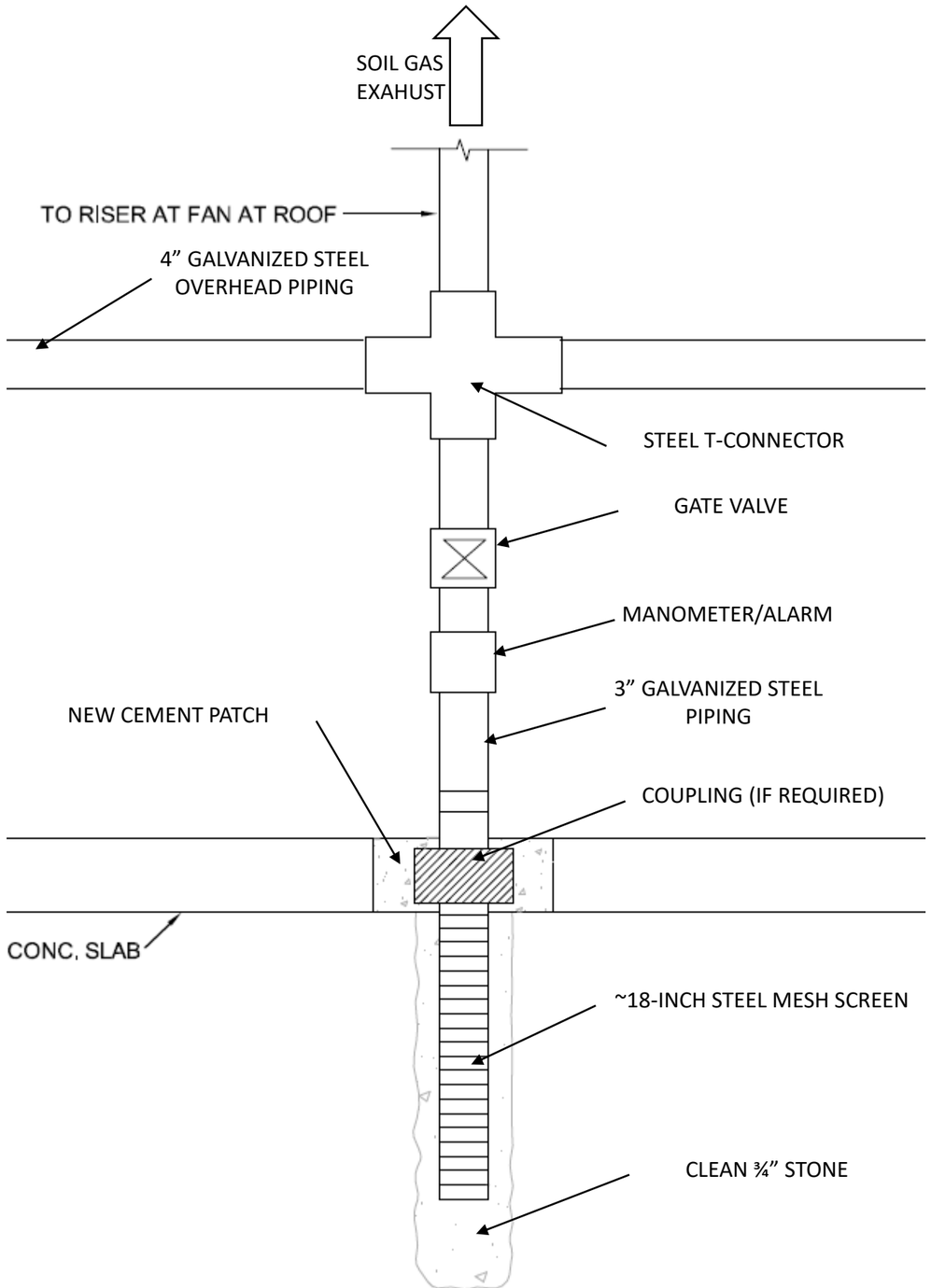
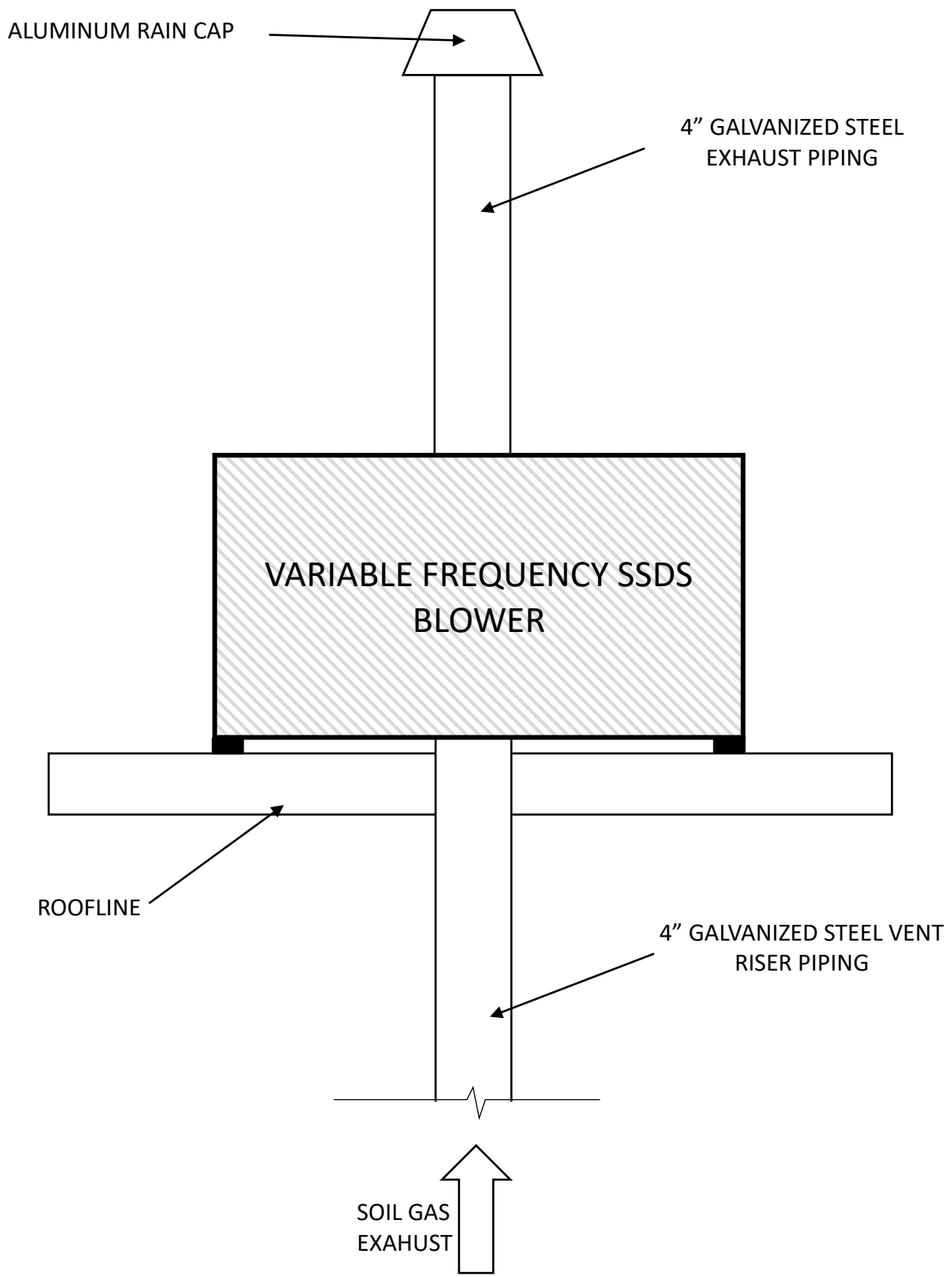


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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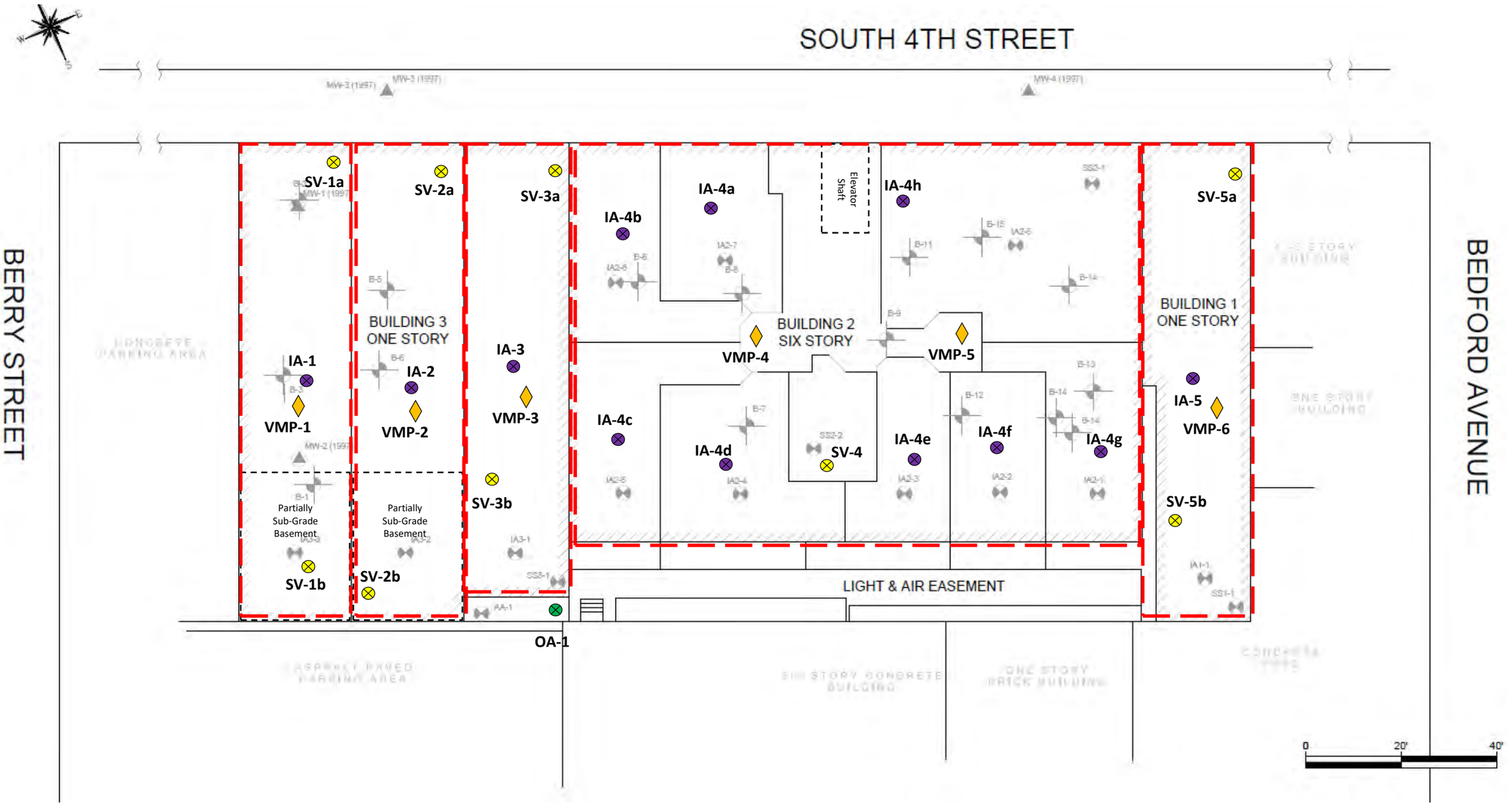

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

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November 8, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#40 - Interim Remedial Measures Progress Report (11/07/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

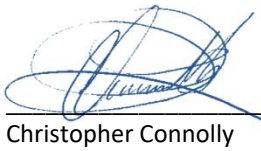
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 7, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 7, 2022

- Four (4) SSDS failure alarms, one (1) for each system leg, were installed and supplied power by EIS.
- Electrician (EIS) was onsite to continue routing power to SSDS fans on rooftop of 104 and 98 South 4th Street.
- Aluminum rain caps were installed on risers of SSDS fans on roof of 104 South 4th Street.
- No ground intrusive work was completed; thus, CAMP was not required.

Work planned for the following day (Tuesday November 8, 2022) electrician will complete hooking up power for fans and outlets inside buildings for eventual failure alarm installation.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

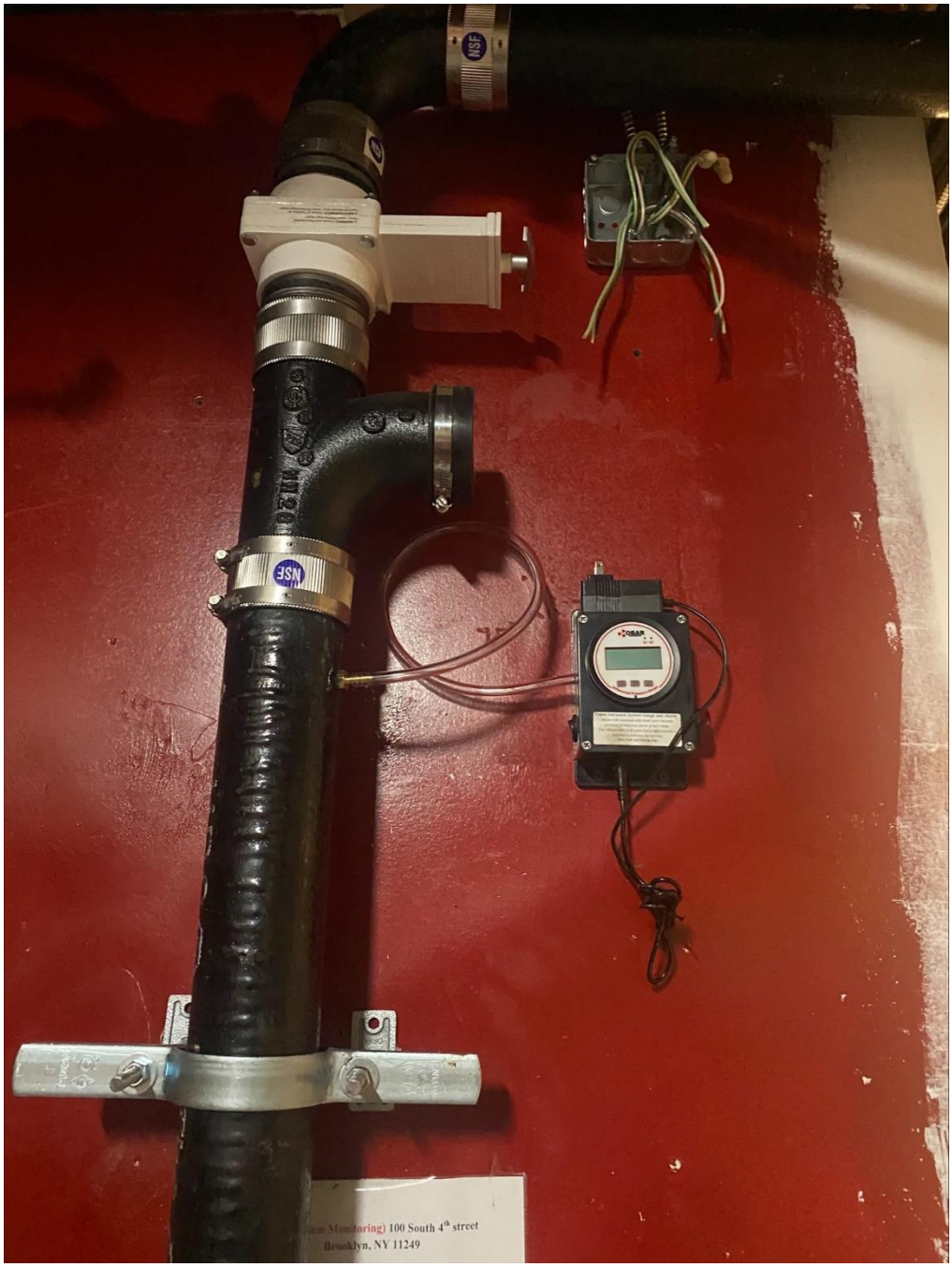


Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
J. Kandel - BCD Owner LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of installation of failure alarm within 98c South 4th Street.



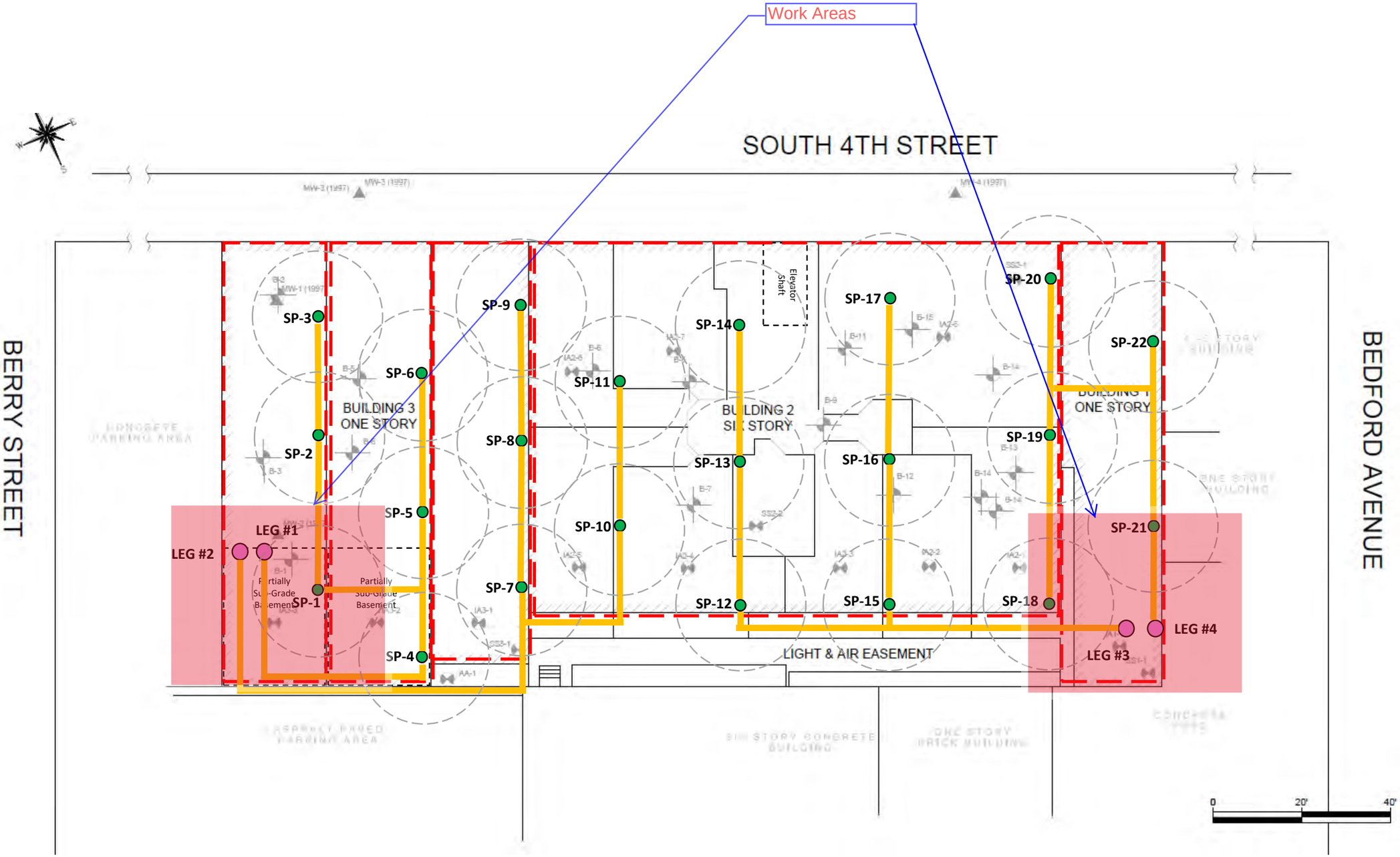
Photograph No. 2: View of installation of failure alarm in 100 South 4th Street utility room.

Photograph No. 3: View of installation of failure alarm in 104 South 4th Street.

Photograph No. 4: View of installation of failure alarm in 100 South 4th Street lobby.

Photograph No. 5: View of power supply to fans on 98 South 4th Street roof.

Photograph No. 6: View of power supply to fans on 104 South 4th Street roof. Rain caps installed



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Notes:

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

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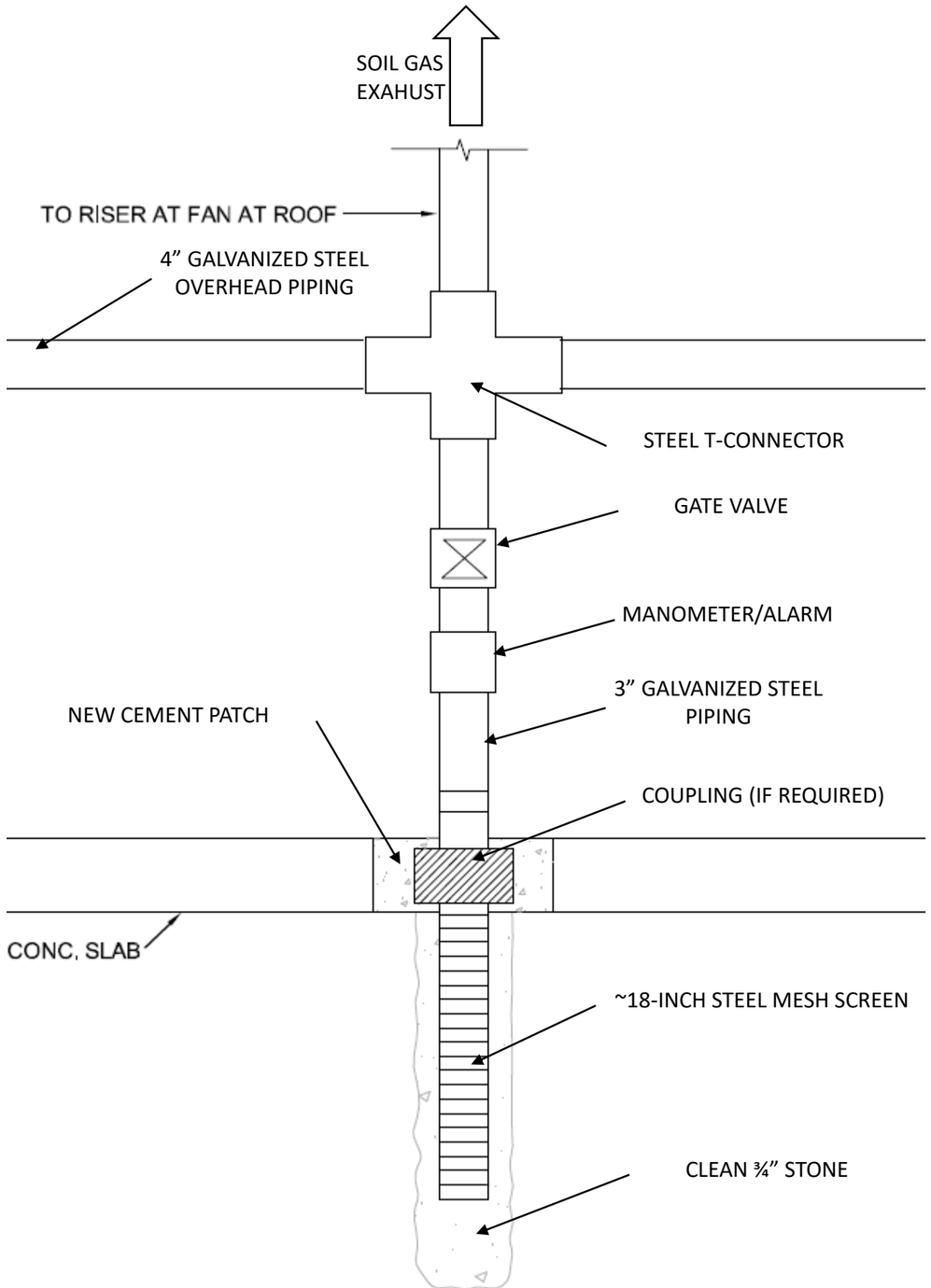
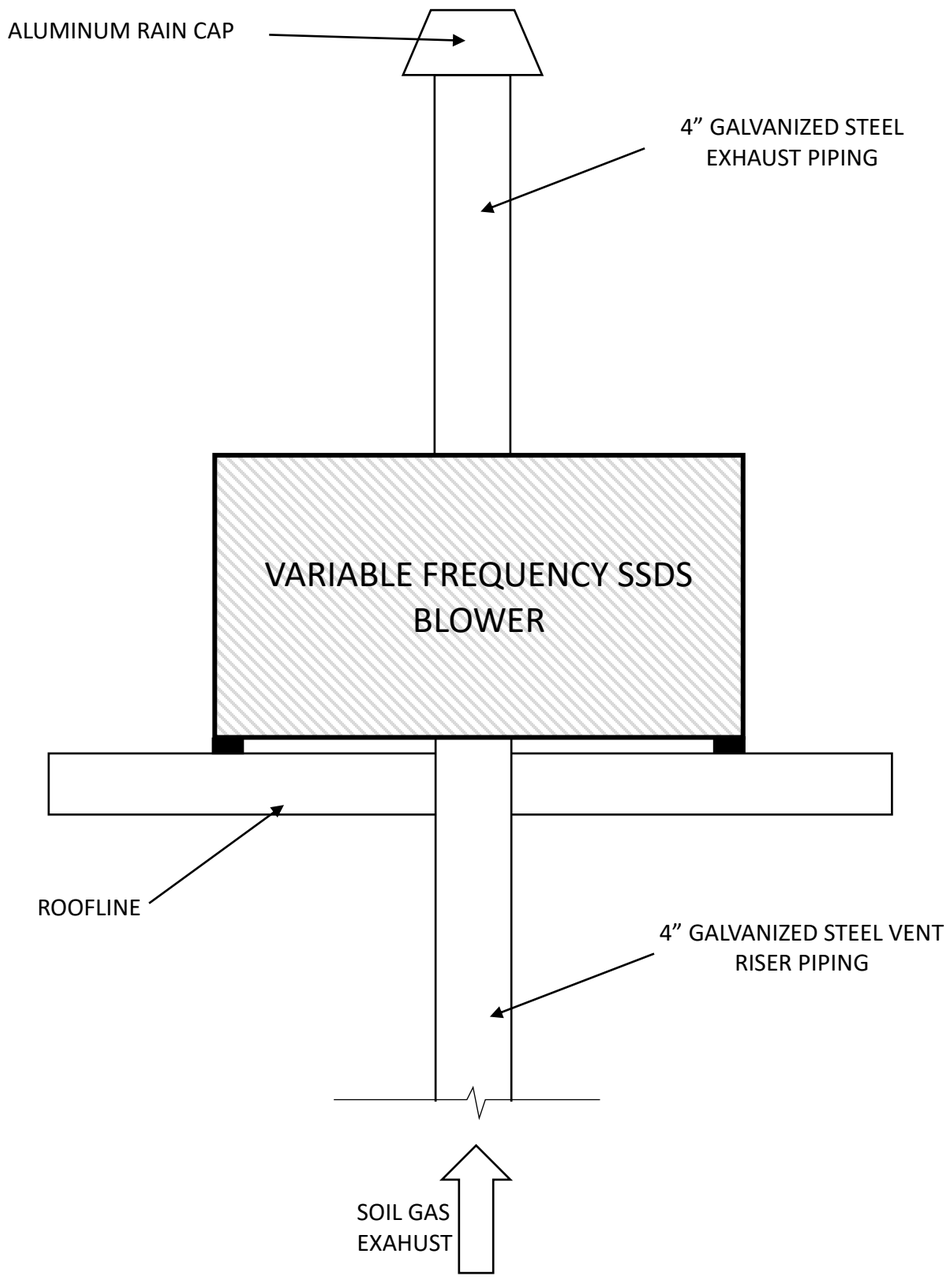


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Notes:

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

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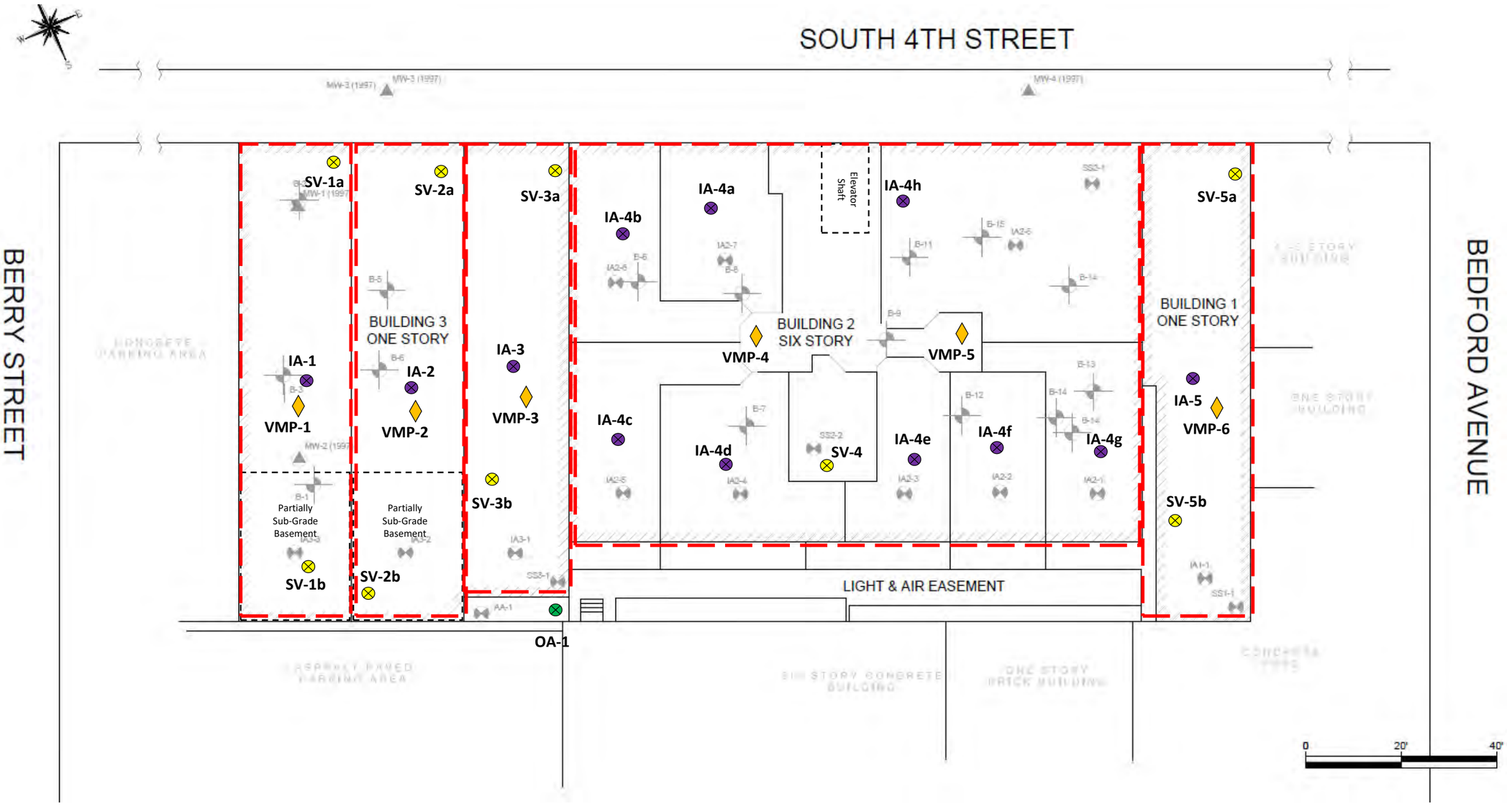

Legend

- Sub-Slab Soil Vapor Sample Locations
- Indoor Air Sample Locations
- Outdoor Ambient Air Sample Locations
- Vacuum Monitoring Point

Notes:

VMP pressure readings will be monitored using a digital manometer during the startup testing of the SSDS

Post Installation/Pre-SSDS Startup Sampling Plan

100 South 4th Street, Brooklyn, NY

Plate 10

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November 17, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#41 - Interim Remedial Measures Progress Report (11/16/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

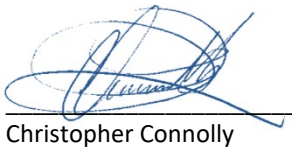
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 16, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 16, 2022

- The system is fully installed.
- IEC commenced the startup/shakedown testing of the SSDS.
- CG continued to install liquid manometers of each of the 22 suction point risers to facilitate evaluation of the system efficacy.
- As per the IRM Work Plan, IEC performed the startup in sections as planned. Flow was initiated through each of the blowers individually to balance the airflow from each of the risers, and the sub-slab pressure gradient beneath the slab.
- SSDS Blower #1 and associated risers and vacuum points and appurtenances were successfully tested today.

Work planned for the following day (Thursday November 17th, 2022) SSDS Shakedown testing will continue.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
R. Howard – 100 S 4th St LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

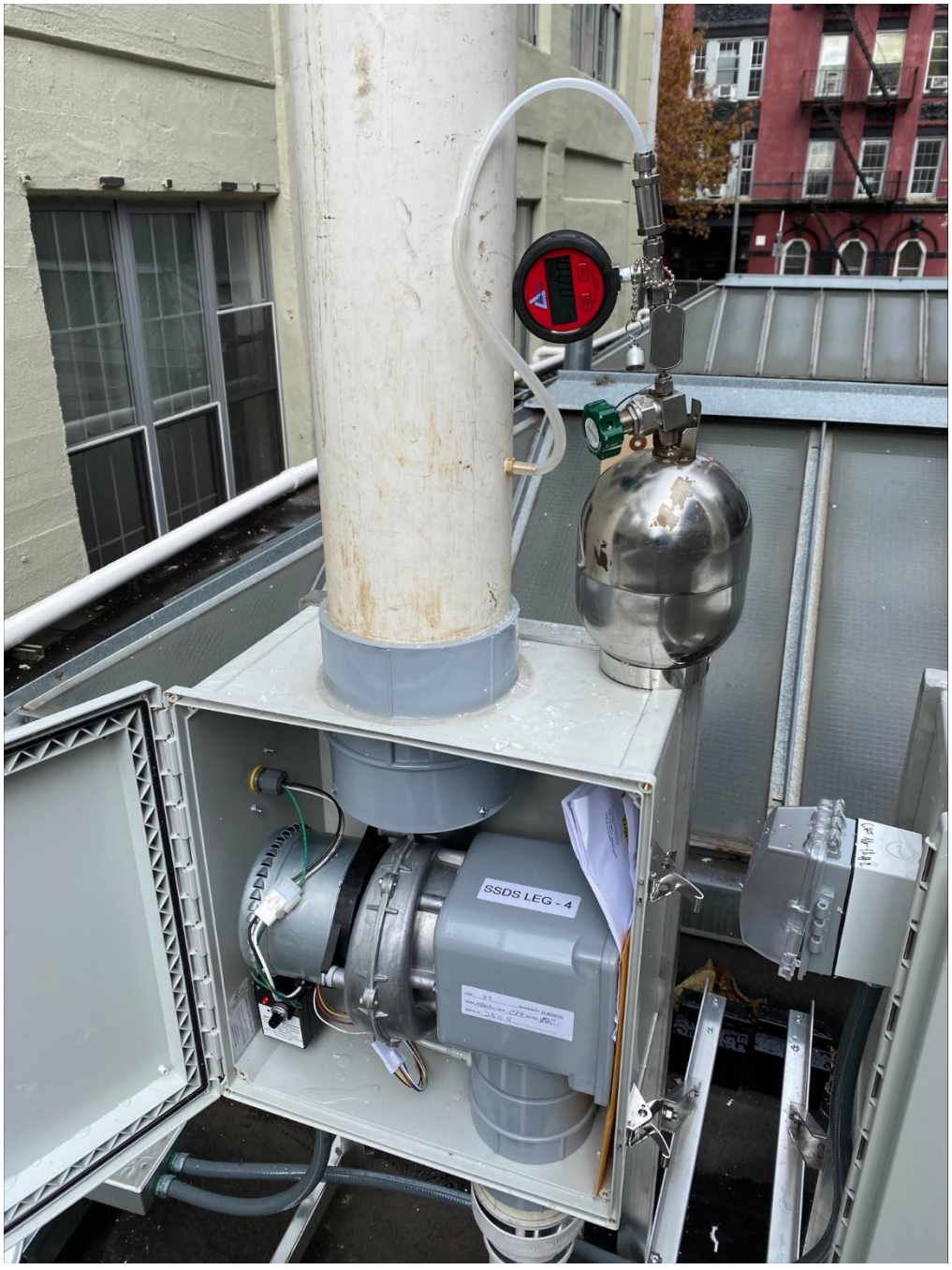
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of fans on roof of 104 South 4th Street, during system testing.

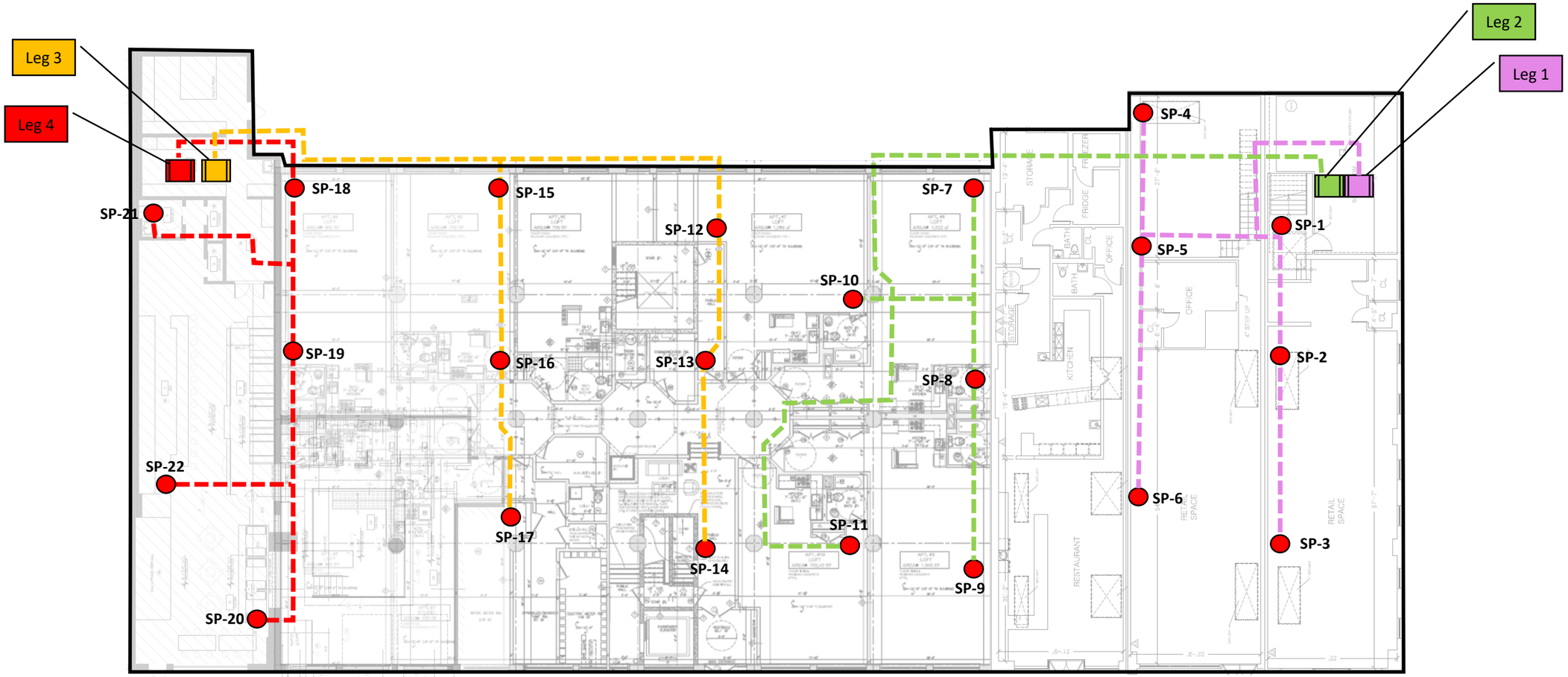
Photograph No. 2: View of typical SSDS riser valve, being adjusted during startup system testing.

Photograph No. 3: View of pipe run from suction points within 104 South 4th Street, directed towards fans.

Photograph No. 4: View of typical liquid manometer mounted on suction point riser during system testing.



Photograph No. 5: View of typical collection of effluent grab sample from SSDS leg.



Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location

Notes:
Locations of the SSDS Suction Points and Blowers is not to scale.

As-Built SSDS Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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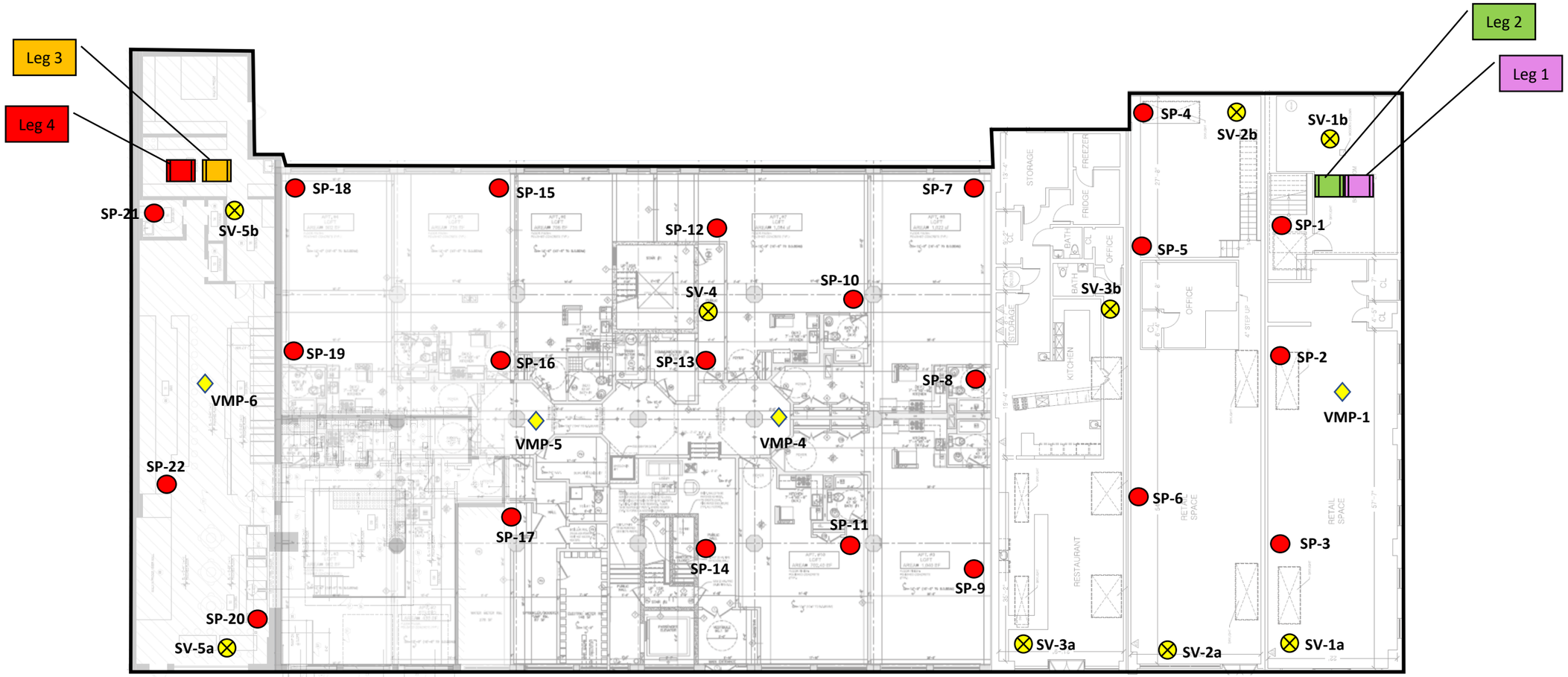

Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

As-Built Monitoring Point Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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November 18, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#41 - Interim Remedial Measures Progress Report (11/16/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

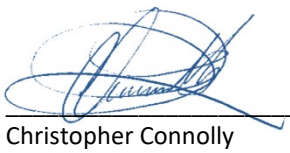
This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 17, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 17, 2022

- The system is fully installed.
- IEC continued the startup/shakedown testing of the SSDS.
- CG completed installed liquid manometers of each of the 22 suction point risers to facilitate evaluation of the system efficacy.
- As per the IRM Work Plan, IEC continued to perform the startup in sections as planned. Flow was initiated through each of the blowers individually to balance the airflow from each of the risers, and the sub-slab pressure gradient beneath the slab.
- SSDS Blower #2, #3, and #4 along with their associated vacuum points and appurtenances were successfully tested today. All equipment remained in operation at the end of the day.

Work planned for the following day (Friday November 18, 2022) Impact technician(s) will monitor the operation of all equipment to ensure the safety and efficacy of the entire system.

Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.



Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
R. Howard – 100 S 4th St LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC

S. McLaughlin, E. O'Neil - NYSDOH

Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

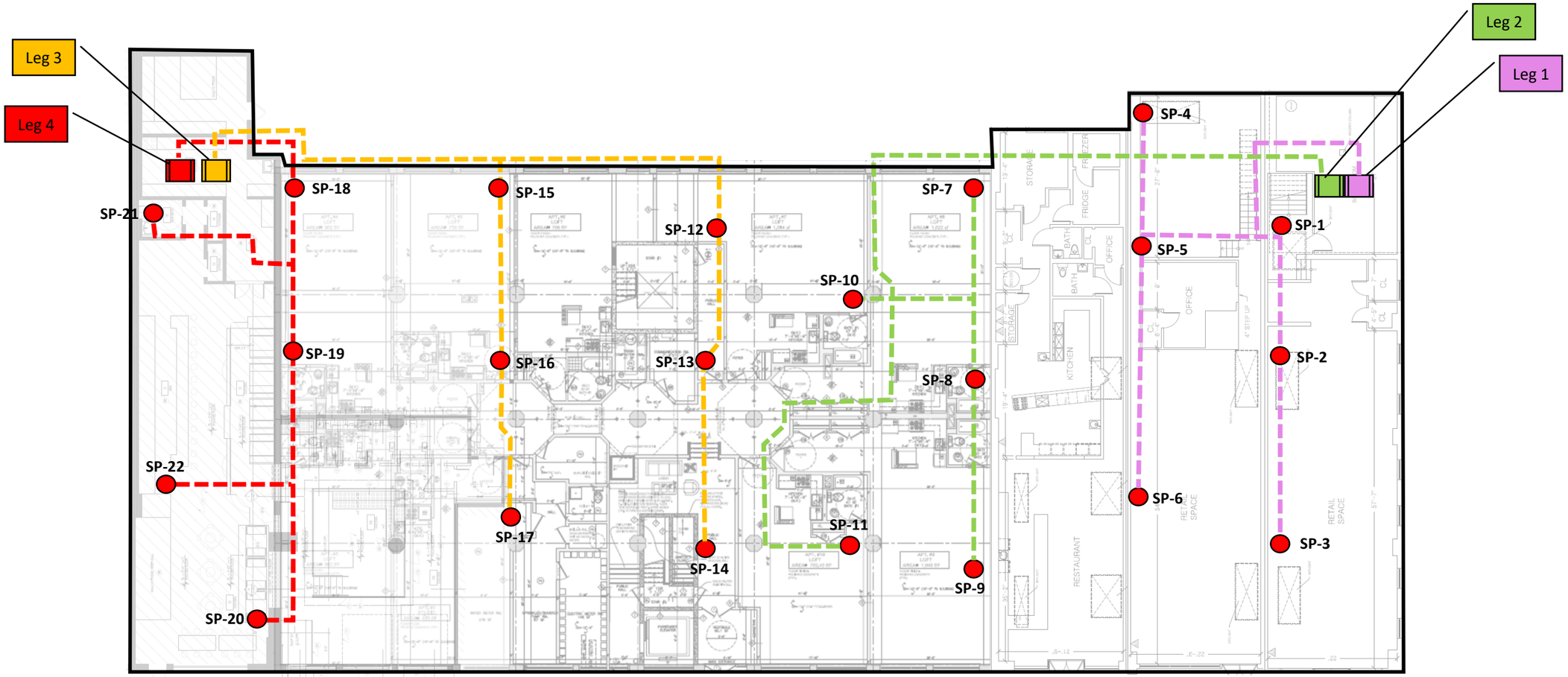
Photograph No. 1: View of typical SSDS blower frequency controller.

Photograph No. 2: View of typical effluent grab sample collection.

Photograph No. 3: View of typical liquid manometer installed, and gate valve adjusted during startup testing.

Photograph No. 4: View of typical liquid manometer being installed on suction point riser during system testing.

Photograph No. 5: View of typical liquid manometer installed.



Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location

Notes:
Locations of the SSDS Suction Points and Blowers is not to scale.

As-Built SSDS Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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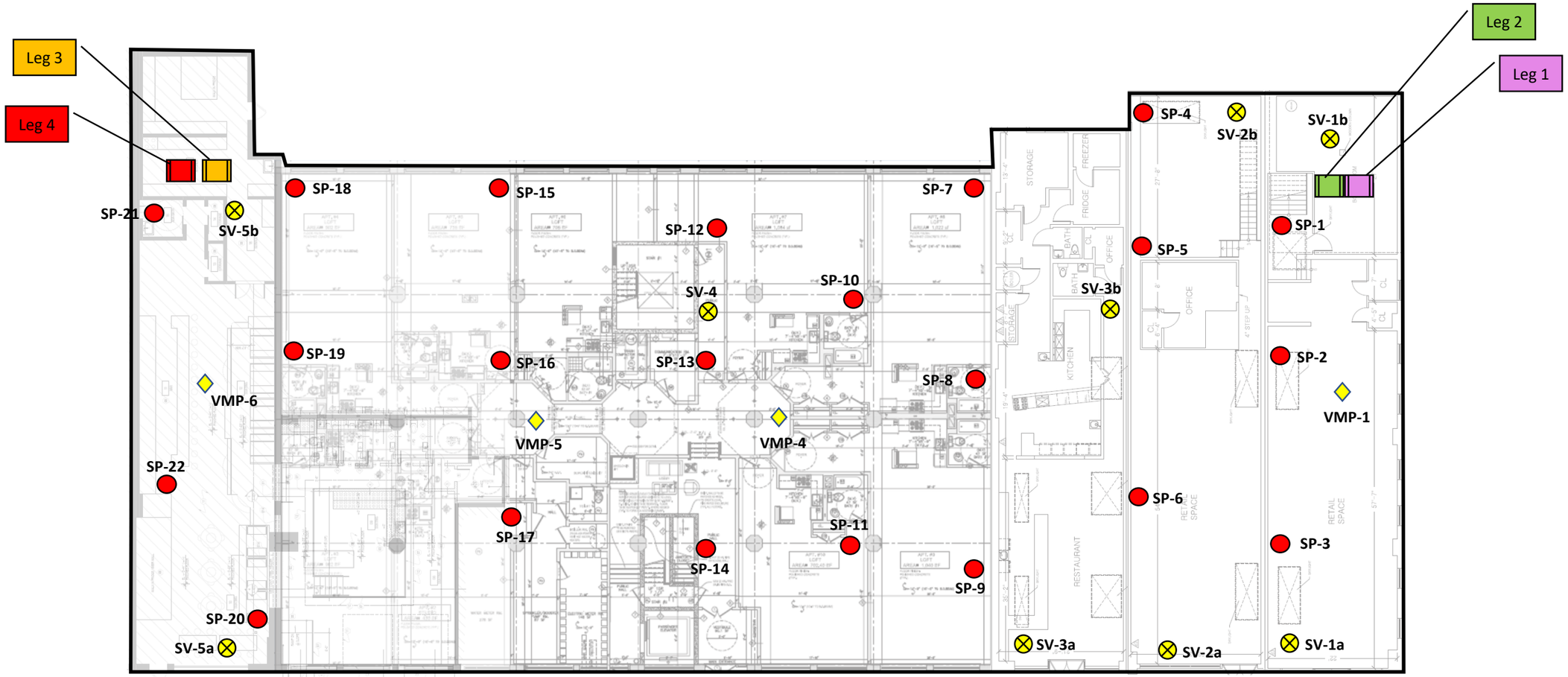

Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

As-Built Monitoring Point Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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November 19, 2022

Attn: Ms. Wendi Zheng
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: **#41 - Interim Remedial Measures Progress Report (11/16/22)**
98, 100, and 104 South 4th Street, Brooklyn, New York – Former El Puente Site
Brownfields Cleanup Program Site # C224260

Dear Ms. Zheng,

This letter details the Interim Remedial Measures (IRM) activities conducted at the above referenced Site on November 18, 2022. The following is a description of the day's field activities, performed in accordance with the NYSDEC Approved IRM Work Plan:

November 18, 2022

- The system is fully installed.
- IEC finished the startup/shakedown testing of the SSDS yesterday November 17, 2022.
- The Impact technician returned to the site to inspect the SSDS system equipment and appurtenances to verify that they remained working as designed. No major issues were encountered.

Further work will be scheduled and performed as per the IRM Work Plan.

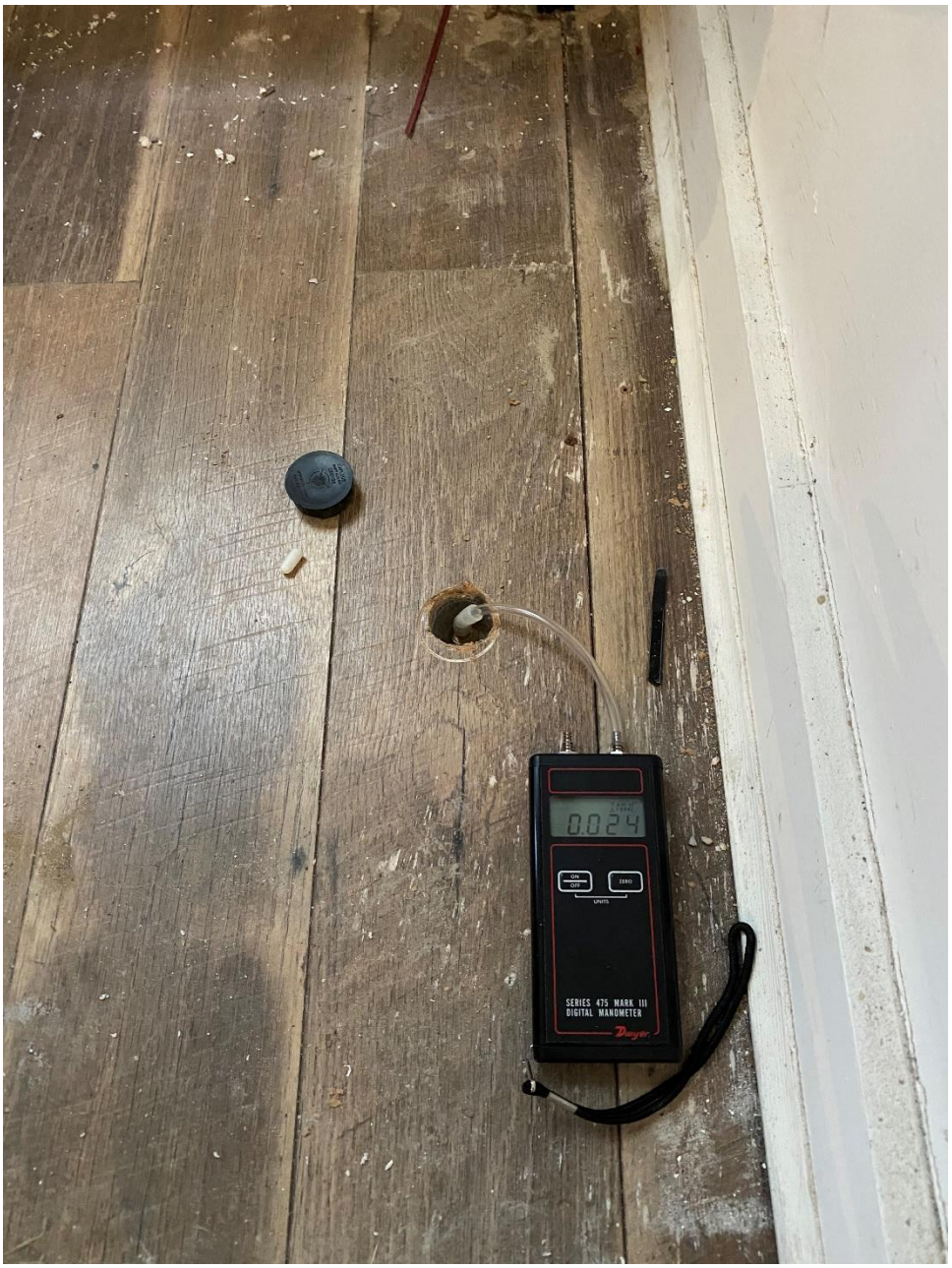
Should you have any further questions or requests, please feel free to contact me.
Sincerely,
IMPACT ENVIRONMENTAL CLOSURES INC.

Christopher Connolly
Project Manager
Environmental Professional

Cc: Kevin Kleaka - Impact Environmental
R. Howard – 100 S 4th St LLC
J. O'Connell, M. Yau, G. Nam – NYSDEC
S. McLaughlin, E. O'Neil - NYSDOH

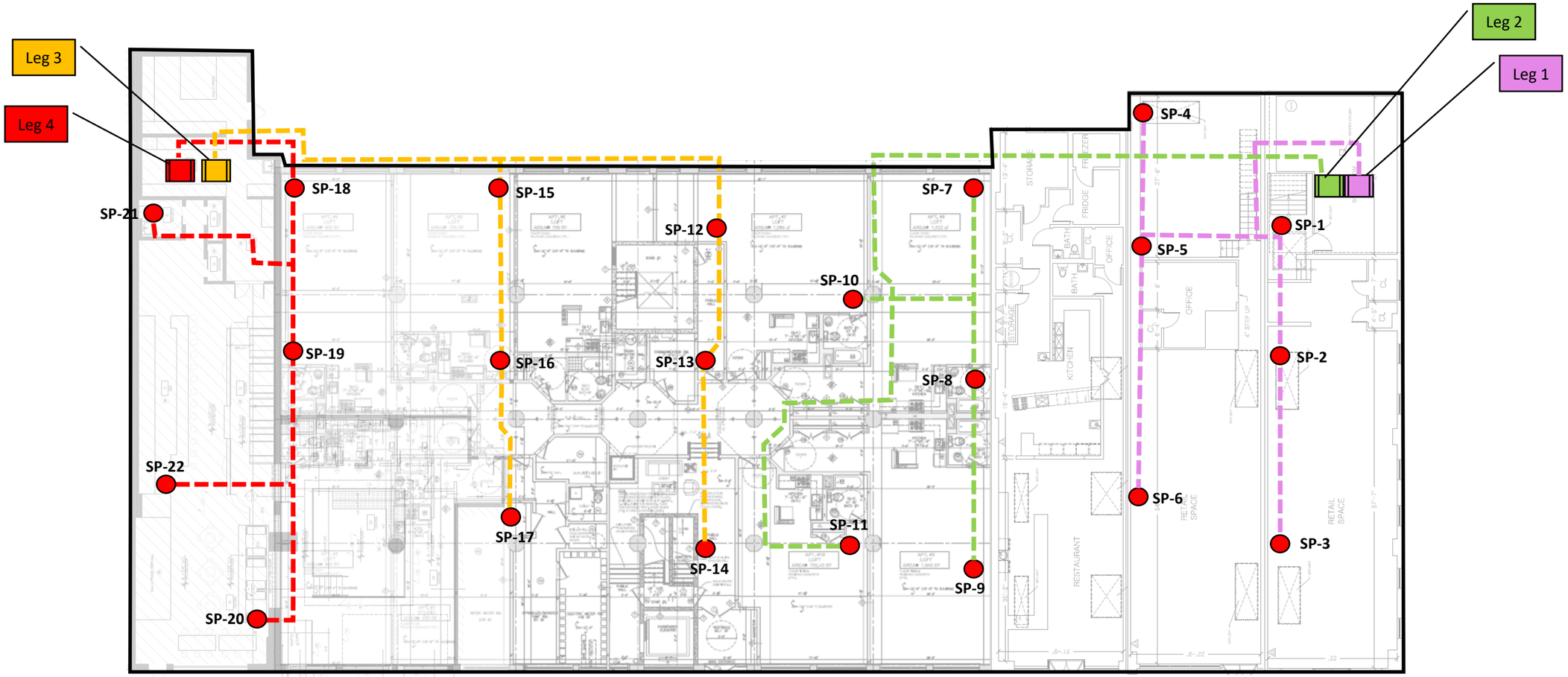
Attachments: Attachment 1 – Photo Log
Attachment 2 – Suction Point Location Maps
Attachment 3 – Vapor Monitoring Point Location Map

Photograph No. 1: View of typical vacuum monitoring point used to test efficacy of SSDS.



Photograph No. 2: View of typical vacuum testing result of SSDS.

Photograph No. 3: View of pipe run from suction points within 104 South 4th Street, with liquid manometer installed.



Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location

Notes:
Locations of the SSDS Suction Points and Blowers is not to scale.

As-Built SSDS Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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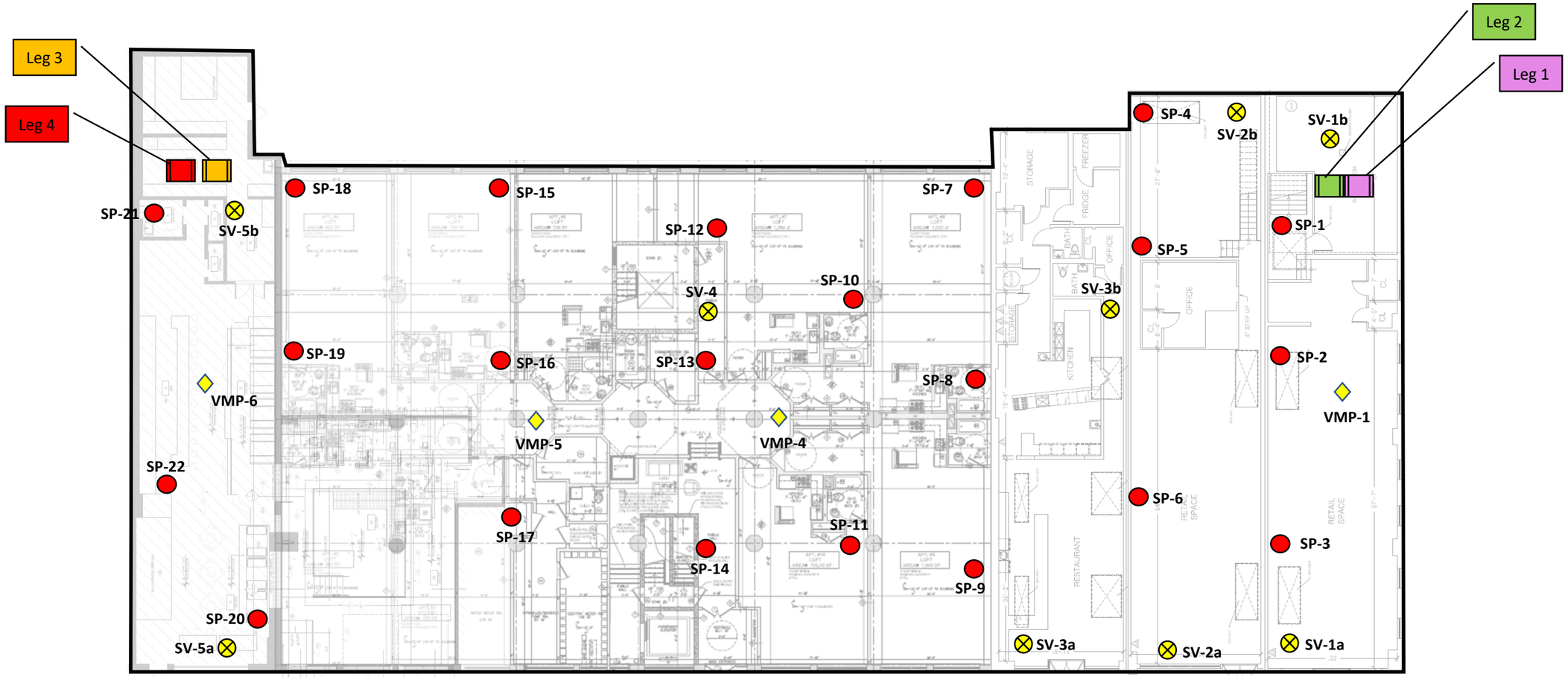

Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

As-Built Monitoring Point Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

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IRM CCR

Appendix E

IRM Photographs

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Photograph No. 1: View of installation of typical SSDS suction pit (9/9/22).

Photograph No. 2: View of installed suction pit (9/10/22).

Photograph No. 3: View of cement sealed SSDS suction pit (9/10/22).

Photograph No. 4: View of installed suction pit riser pipe (9/10/22).

Photograph No. 5: View of riser at ceiling level with gate valve (9/11/22).

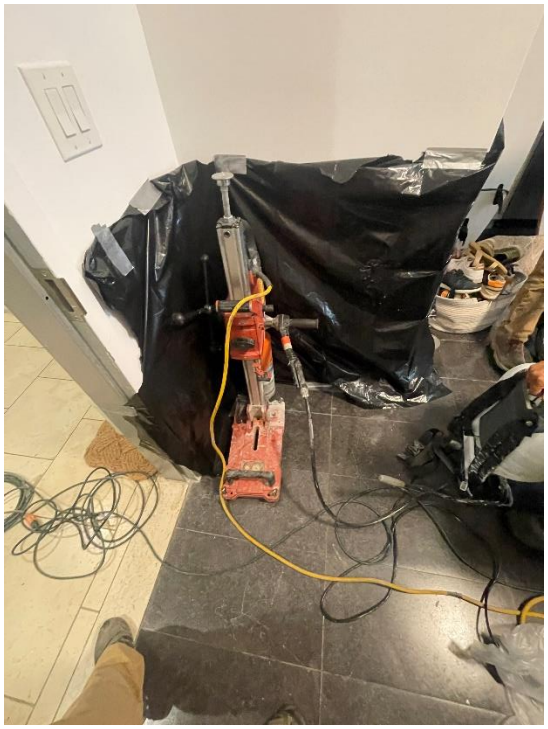
Photograph No. 6: View of riser pipe and horizontal piping (9/11/22).

Photograph No. 7: View of typical pit depth measurement (9/11/22).

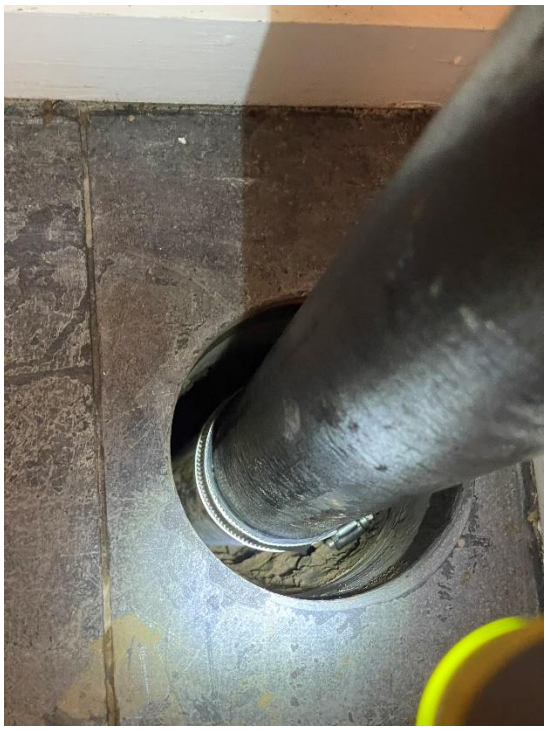
Photograph No. 8: View of riser pipe and horizontal piping (9/11/22).

Photograph No. 9: View of typical pit sealing (9/12/22).

Photograph No. 10: View of riser pipe and horizontal piping (9/12/22).



Photograph No. 11: View of typical pit installation (9/13/22).

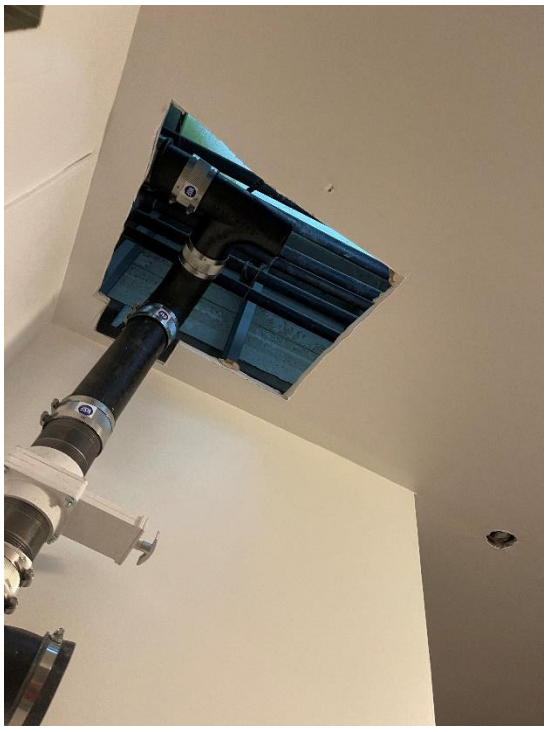


Photograph No. 12: View of pipe screen in pit (9/13/22).

Photograph No. 13: View of typical pit installation (9/13/22).

Photograph No. 14: View of VMP-4 in lobby (9/14/22).

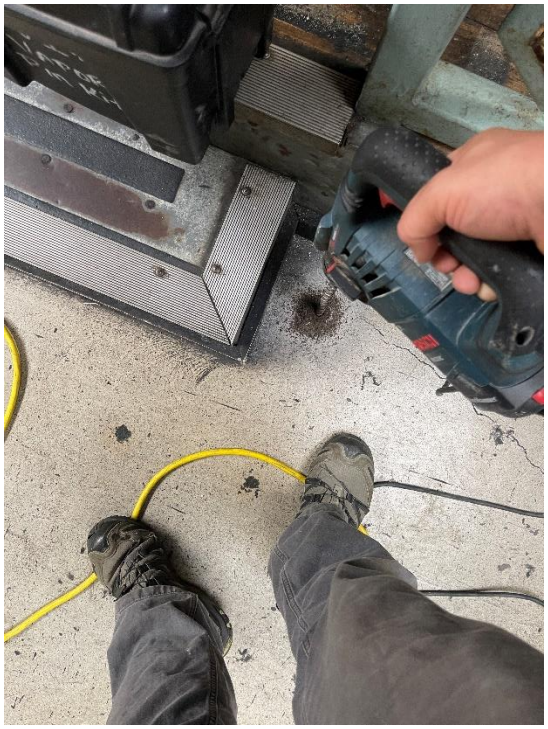
Photograph No. 15: View of typical pit and riser installation (9/14/22).



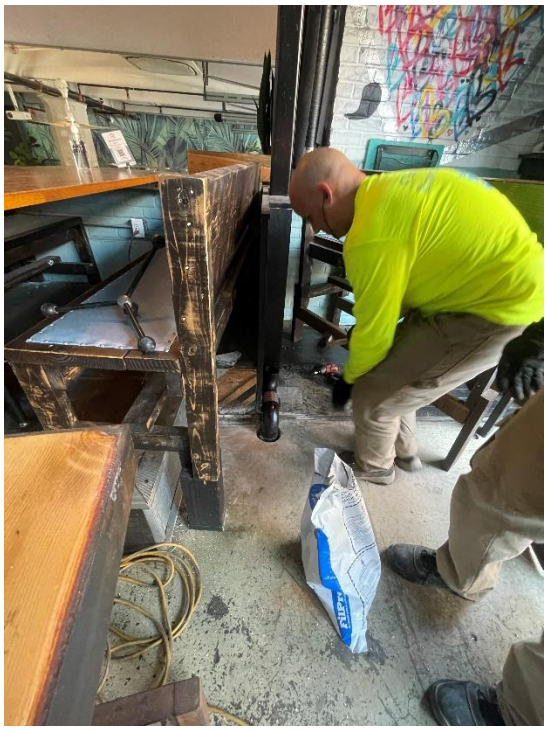
Photograph No. 16: View of riser and gate valve installed (9/14/22).

Photograph No. 17: View of typical horizontal piping (9/15/22).

Photograph No. 18: View of exterior wall penetration (9/15/22).

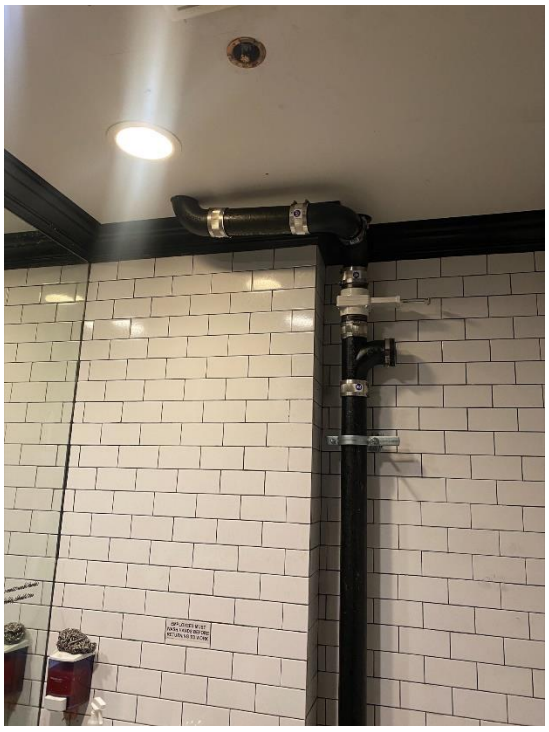


Photograph No. 19: View of installation of VMP-6 in 104 S 4th St. (9/19/22).



Photograph No. 20: View of installation of suction pit in 104 S 4th St. (9/19/22).

Photograph No. 21: View of completed pit in 104 S 4th St. (9/19/22).

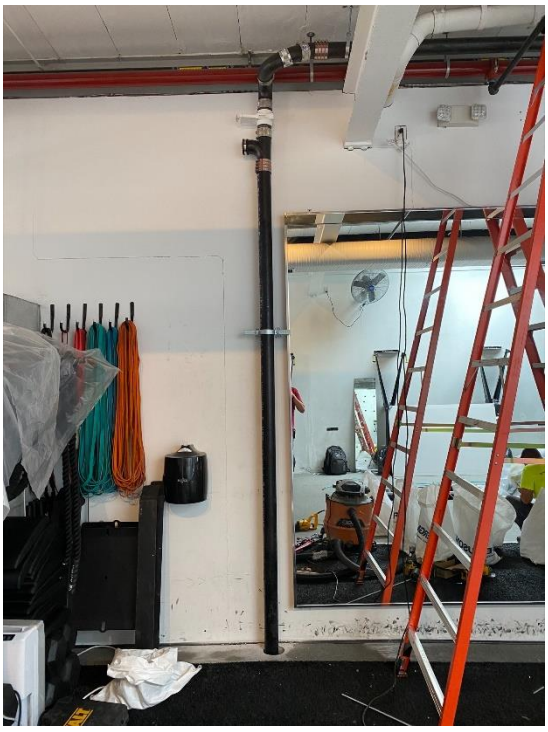


Photograph No. 22: View of riser piping and gate valve in104 S 4th St. (9/20/22).

Photograph No. 23: View of completed piping in 104 S 4th St. (9/21/22).

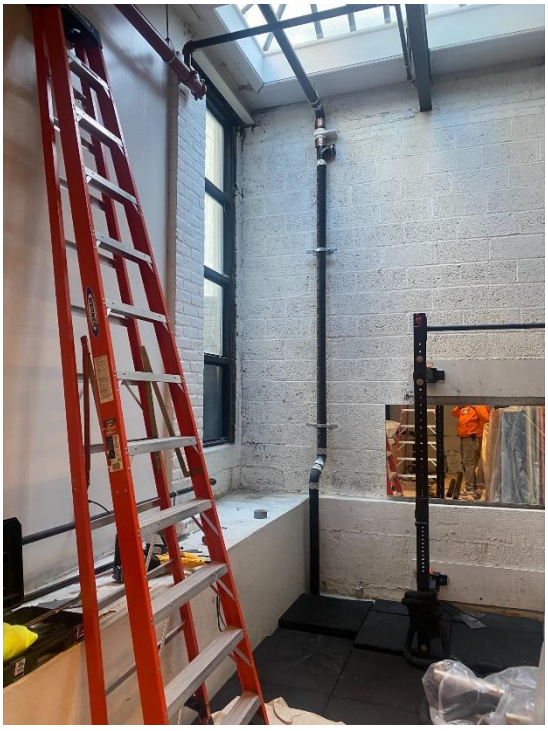
Photograph No. 24: View of exterior pipe penetration from104 S 4th St. (9/21/22).

Photograph No. 25: View of typical CAMP monitoring setup during pit installation (9/22/22).



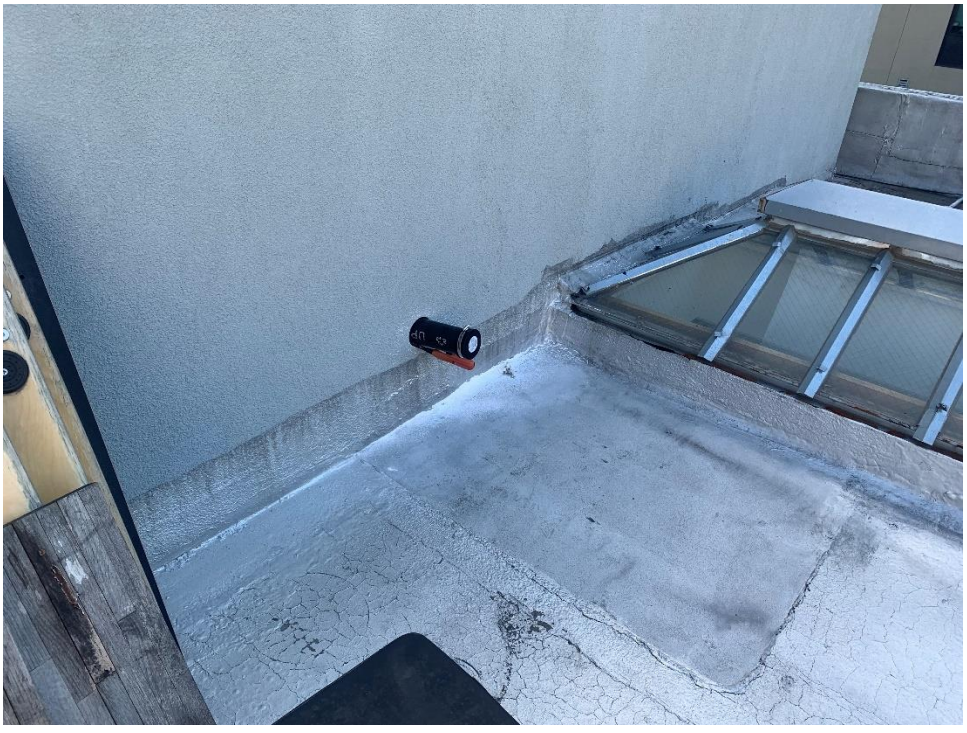
Photograph No. 26: View of pit and riser pipe installed in gym (9/22/22).

Photograph No. 27: View of typical pilot testing of suction pit apparatus (9/23/22).



Photograph No. 28: View of pit and riser pipe installed in gym (9/23/22).

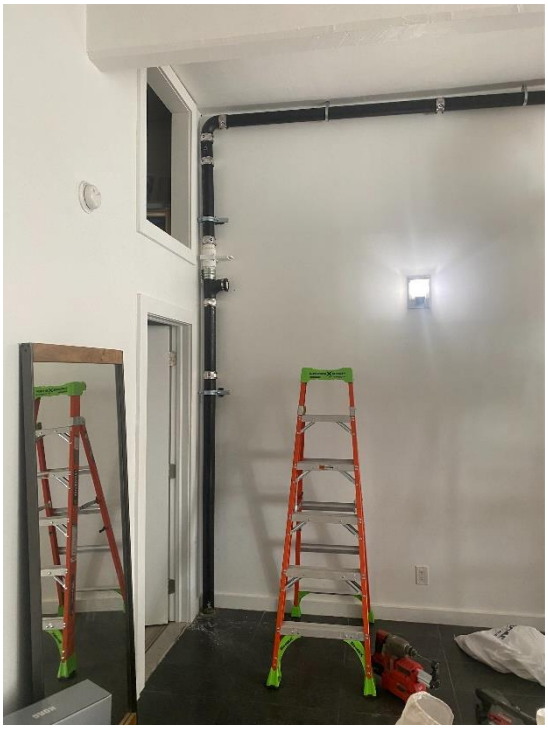
Photograph No. 29: View of piping penetration to roof (9/24/22).



Photograph No. 30: View of piping penetration to roof (9/24/22).

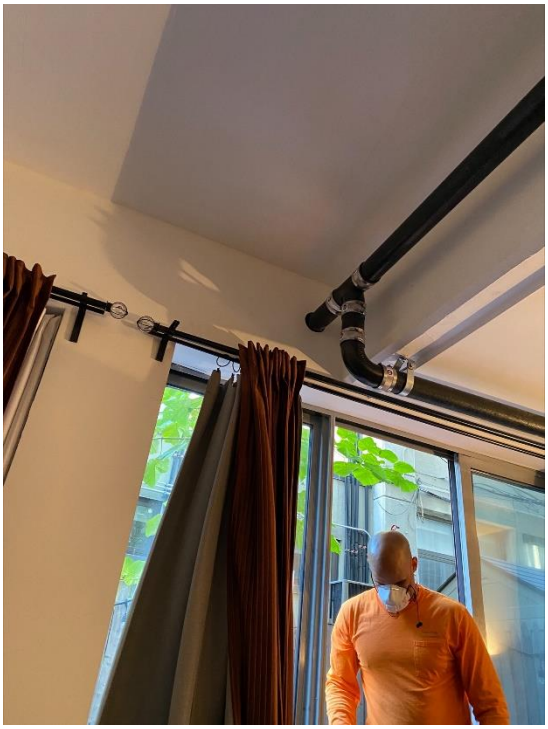
Photograph No. 31: View of SSDS pit (9/26/22).

Photograph No. 32: View of completed pit (9/26/22).



Photograph No. 33: View of SSDS pipe run (9/27/22).

Photograph No. 34: View of exterior pipe penetration (9/28/22).



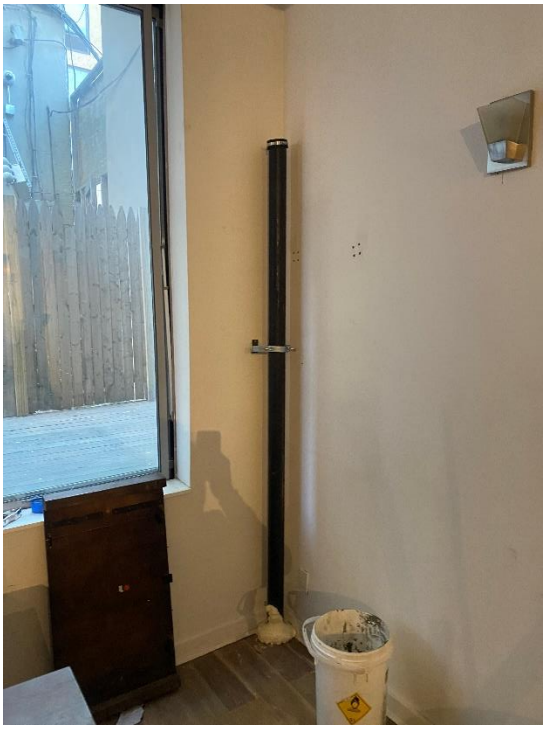
Photograph No. 35: View of SSDS pipe run (9/29/22).

Photograph No. 36: View of completed suction pit (10/3/22).

Photograph No. 37: View of SSDS pipe run in ceiling (10/4/22).

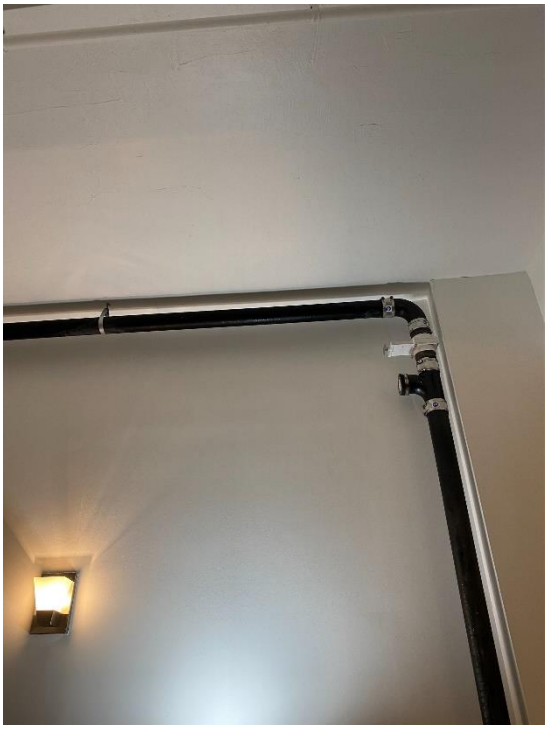
Photograph No. 38: View of pipe run along ceiling (10/5/22).

Photograph No. 39: View of SSDS pipe penetration (10/6/22).



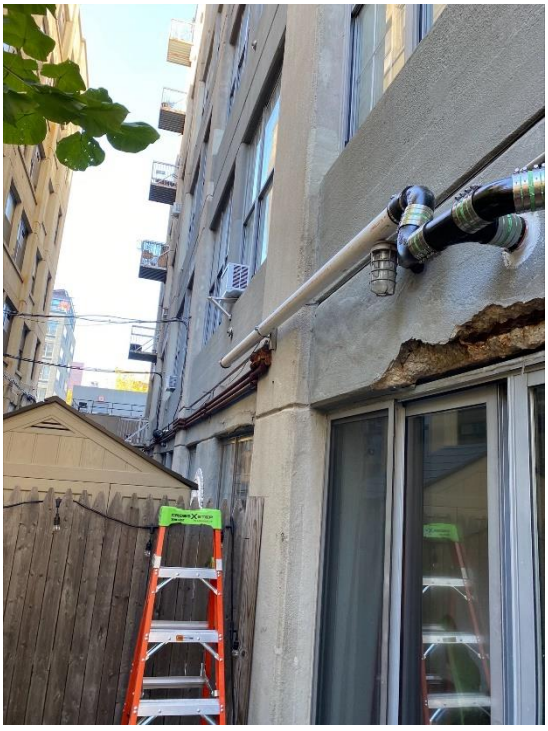
Photograph No. 40: View of completed pit (10/12/22).

Photograph No. 41: View of pit installation apparatus (10/25/22).



Photograph No. 42: View of completed pipe run and gate valve (10/25/22).

Photograph No. 43: View of exterior pipe installation(10/26/22).



Photograph No. 44: View of exterior pipe installation(10/27/22).

Photograph No. 45: View of exterior pipe installation(10/28/22).

Photograph No. 46: View of exterior pipe installation(11/1/22).

Photograph No. 47: View of SSDS failure alarm (11/1/22).

Photograph No. 48: View of SSDS blowers' pre-installation (11/2/22).

Photograph No. 49: View of typical rooftop pipe run (11/3/22).

Photograph No. 50: View of SSDS blowers after installation (11/4/22).

Photograph No. 51: View of typical installed failure alarm (11/7/22).

Photograph No. 52: View of typical installed failure alarm (11/7/22).

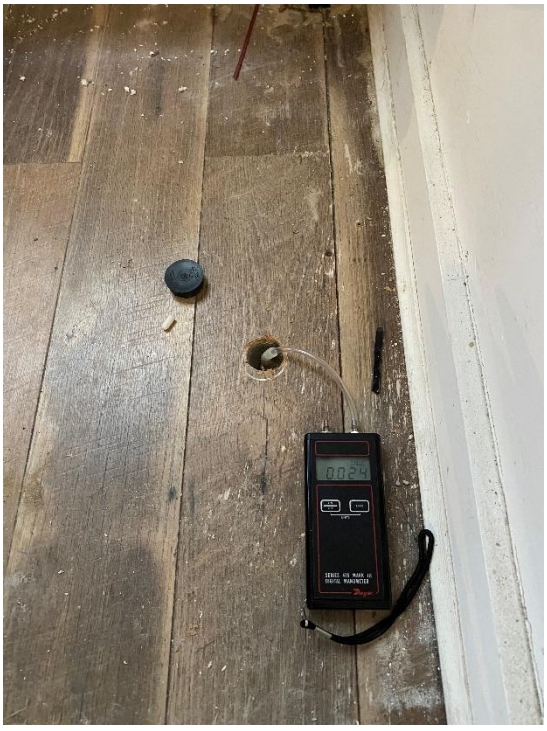
Photograph No. 53: View of installed blowers (11/7/22).

Photograph No. 54: View of typical inline manometer gauge (11/16/22).

Photograph No. 55: View of installed electrical supply for blowers (11/16/22).

Photograph No. 56: View of typical powered blower set to 50% power (11/17/22).

Photograph No. 57: View of collection of post startup effluent samples (11/17/22).



Photograph No. 58: View of typical post startup pressure readings (11/18/22).

IRM CCR

Appendix F

Laboratory Data

&

DUSR

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:42
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	21339				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58289

Project ID: 100 SOUTH 4TH
Client ID: IA-4E

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	31.3	*0.421*	0.421	74.3	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4E

Phoenix I.D.: CN58289

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.063		*0.032*	0.032	0.40	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.286		*0.205*	0.205	1.40	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.596		*0.485*	0.485	1.23	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.503		*0.202*	0.202	2.49	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	1160	E	*0.531*	0.531	2180	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	1.91		*0.278*	0.278	6.88	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	3.96		*0.407*	0.407	9.7	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.264		*0.230*	0.230	1.15	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.450		*0.339*	0.339	1.33	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	1.51		*0.037*	0.037	10.2	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	1.73		*0.266*	0.266	6.52	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.220		*0.178*	0.178	1.24	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	85		*%*	%	85	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	84		*%*	%	84	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	86		*%*	%	86	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4E

Phoenix I.D.: CN58289

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	9:35
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	18258				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58290

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	16.7	*0.421*	0.421	39.6	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 1

Phoenix I.D.: CN58290

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.050		*0.032*	0.032	0.31	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	0.184		*0.051*	0.051	0.73	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.469		*0.202*	0.202	2.32	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	355	E	*0.531*	0.531	668	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.290		*0.278*	0.278	1.04	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	15.6		*0.407*	0.407	38.3	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	1.23		*0.339*	0.339	3.63	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.104		*0.037*	0.037	0.70	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	2.95		*0.339*	0.339	8.69	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.358		*0.266*	0.266	1.35	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.272		*0.037*	0.037	1.46	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.216		*0.178*	0.178	1.21	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	102		*%*	%	102	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	80		*%*	%	80	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	79		*%*	%	79	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	83		*%*	%	83	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 1

Phoenix I.D.: CN58290

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	9:34
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	23340				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58291

Project ID: 100 SOUTH 4TH
Client ID: SV-2A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	15.3	*0.421*	0.421	36.3	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-2A

Phoenix I.D.: CN58291

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.049		*0.032*	0.032	0.31	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	0.227		*0.051*	0.051	0.90	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.475		*0.202*	0.202	2.35	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	345	E	*0.531*	0.531	650	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	15.8		*0.407*	0.407	38.8	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	1.13		*0.339*	0.339	3.33	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.114		*0.037*	0.037	0.77	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	2.77		*0.339*	0.339	8.16	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.359		*0.266*	0.266	1.35	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.299		*0.037*	0.037	1.61	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.222		*0.178*	0.178	1.25	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	82		*%*	%	82	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	81		*%*	%	81	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	83		*%*	%	83	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-2A

Phoenix I.D.: CN58291

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:10
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	488				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58292

Project ID: 100 SOUTH 4TH
Client ID: SV-1A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	0.694	*0.183*	0.183	3.78	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	0.656	*0.247*	0.247	2.65	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	7.63	*0.421*	0.421	18.1	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-1A

Phoenix I.D.: CN58292

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.048		*0.032*	0.032	0.30	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.397		*0.205*	0.205	1.94	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	0.794		*0.051*	0.051	3.15	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.466		*0.202*	0.202	2.30	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	35.2		*0.531*	0.531	66.3	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.353		*0.278*	0.278	1.27	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	82.4	E	*0.407*	0.407	202	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	0.932		*0.339*	0.339	2.75	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	0.299		*0.278*	0.278	1.08	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	2.32		*0.037*	0.037	15.7	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	1.73		*0.339*	0.339	5.10	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.346		*0.266*	0.266	1.30	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	11.4		*0.037*	0.037	61.2	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.220		*0.178*	0.178	1.24	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	82		*%*	%	82	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	80		*%*	%	80	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	84		*%*	%	84	*%*	%	03/14/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	9:45
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	365				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58293

Project ID: 100 SOUTH 4TH
Client ID: IA-2

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)											
1,1,1,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	0.246		*0.204*	0.204	1.21	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND		*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	75.2	E	*0.421*	0.421	179	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND		*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND		*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND		*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-2

Phoenix I.D.: CN58293

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.059		*0.032*	0.032	0.37	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.208		*0.205*	0.205	1.01	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.539		*0.485*	0.485	1.11	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.477		*0.202*	0.202	2.36	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	1600	E	*0.531*	0.531	3010	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	143	E	*0.407*	0.407	351	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.562		*0.339*	0.339	1.66	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.305		*0.037*	0.037	2.07	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	0.345		*0.339*	0.339	1.02	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.529		*0.266*	0.266	1.99	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.354		*0.037*	0.037	1.90	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.220		*0.178*	0.178	1.24	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	85		*%*	%	85	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	84		*%*	%	84	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	87		*%*	%	87	*%*	%	03/13/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:20
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28592				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58294

Project ID: 100 SOUTH 4TH
Client ID: IA-4H

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	9.85	*0.421*	0.421	23.4	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4H

Phoenix I.D.: CN58294

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.056		*0.032*	0.032	0.35	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.251		*0.205*	0.205	1.22	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.537		*0.485*	0.485	1.11	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.436		*0.202*	0.202	2.15	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	233	E	*0.531*	0.531	439	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.299		*0.278*	0.278	1.08	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	1.55		*0.407*	0.407	3.81	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.248		*0.230*	0.230	1.08	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.736		*0.339*	0.339	2.17	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.132		*0.037*	0.037	0.89	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	0.437		*0.339*	0.339	1.29	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.573		*0.266*	0.266	2.16	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.037		*0.037*	0.037	0.20	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.222		*0.178*	0.178	1.25	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	89		*%*	%	89	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	88		*%*	%	88	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	89		*%*	%	89	*%*	%	03/13/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

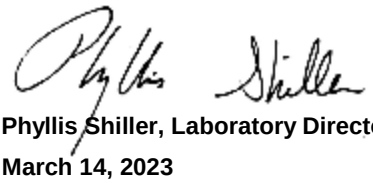
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:02
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28594				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58295

Project ID: 100 SOUTH 4TH
Client ID: SV-1B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	0.591	*0.183*	0.183	3.22	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	0.317	*0.247*	0.247	1.28	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	0.256	*0.204*	0.204	1.26	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	7.66	*0.421*	0.421	18.2	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-1B

Phoenix I.D.: CN58295

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.044	*0.032*	0.032	0.28	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.899	*0.205*	0.205	4.39	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	30.6	*0.051*	0.051	121	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.472	*0.202*	0.202	2.33	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	26.8	*0.531*	0.531	50.5	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.549	*0.278*	0.278	1.98	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	67.0	*6.11*	6.11	165	*15.0*	15.0	03/14/23	KCA	15	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.313	*0.230*	0.230	1.36	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	0.764	*0.339*	0.339	2.25	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	147	*0.553*	0.553	996	*3.75*	3.75	03/14/23	KCA	15	
Tetrahydrofuran	1.83	*0.339*	0.339	5.39	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.354	*0.266*	0.266	1.33	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	0.849	*0.252*	0.252	3.36	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	255	*0.555*	0.555	1370	*2.98*	2.98	03/14/23	KCA	15	
Trichlorofluoromethane	0.215	*0.178*	0.178	1.21	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	99	*%*	%	99	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	89	*%*	%	89	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	92	*%*	%	92	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	94	*%*	%	94	*%*	%	03/14/23	KCA	1	
% Bromofluorobenzene (15x)	99	*%*	%	99	*%*	%	03/14/23	KCA	15	
% IS-1,4-Difluorobenzene (15x)	85	*%*	%	85	*%*	%	03/14/23	KCA	15	
% IS-Bromochloromethane (15x)	88	*%*	%	88	*%*	%	03/14/23	KCA	15	
% IS-Chlorobenzene-d5 (15x)	87	*%*	%	87	*%*	%	03/14/23	KCA	15	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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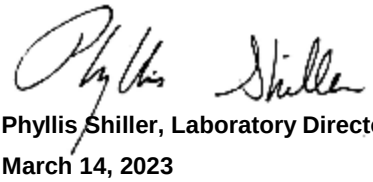


Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:10
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	16006				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58296

Project ID: 100 SOUTH 4TH
Client ID: IS-4D

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	3.11	*0.421*	0.421	7.38	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IS-4D

Phoenix I.D.: CN58296

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.052		*0.032*	0.032	0.33	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.527		*0.485*	0.485	1.09	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.451		*0.202*	0.202	2.23	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	45.6	E	*0.531*	0.531	85.9	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	1.09		*0.407*	0.407	2.68	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.582		*0.339*	0.339	1.72	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.102		*0.037*	0.037	0.69	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.319		*0.266*	0.266	1.20	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.210		*0.178*	0.178	1.18	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	88		*%*	%	88	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	87		*%*	%	87	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	90		*%*	%	90	*%*	%	03/13/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:22
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28622				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58297

Project ID: 100 SOUTH 4TH
Client ID: IA-5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	11.2	*0.421*	0.421	26.6	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	0.420	*0.313*	0.313	1.34	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-5

Phoenix I.D.: CN58297

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.060		*0.032*	0.032	0.38	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.906		*0.205*	0.205	4.42	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.587		*0.485*	0.485	1.21	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.490		*0.202*	0.202	2.42	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	1380	E	*0.531*	0.531	2600	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.948		*0.278*	0.278	3.41	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	0.290		*0.230*	0.230	1.26	*1.00*	1.00	03/13/23	KCA	1	
Heptane	0.262		*0.244*	0.244	1.07	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	0.302		*0.284*	0.284	1.06	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	4.83		*0.407*	0.407	11.9	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	1.07		*0.230*	0.230	4.64	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.563		*0.339*	0.339	1.66	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	0.344		*0.230*	0.230	1.49	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	0.944		*0.235*	0.235	4.02	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.054		*0.037*	0.037	0.37	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	1.04		*0.266*	0.266	3.92	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.569		*0.178*	0.178	3.19	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	98		*%*	%	98	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	85		*%*	%	85	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	88		*%*	%	88	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-5

Phoenix I.D.: CN58297

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:40
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	16014				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58298

Project ID: 100 SOUTH 4TH
Client ID: IA-4F

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	0.260	*0.247*	0.247	1.05	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	26.5	*0.421*	0.421	62.9	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4F

Phoenix I.D.: CN58298

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.072		*0.032*	0.032	0.45	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.536		*0.485*	0.485	1.11	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.458		*0.202*	0.202	2.26	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	66.7	E	*0.531*	0.531	126	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	1.52		*0.407*	0.407	3.73	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.415		*0.339*	0.339	1.22	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.046		*0.037*	0.037	0.31	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.430		*0.266*	0.266	1.62	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.222		*0.178*	0.178	1.25	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	91		*%*	%	91	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	94		*%*	%	94	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	93		*%*	%	93	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4F

Phoenix I.D.: CN58298

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:15
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	9486				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58299

Project ID: 100 SOUTH 4TH
Client ID: SV-5A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	4.67	*0.421*	0.421	11.1	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-5A

Phoenix I.D.: CN58299

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.078		*0.032*	0.032	0.49	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	1.43		*0.205*	0.205	6.98	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.510		*0.202*	0.202	2.52	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	46.4	E	*0.531*	0.531	87.4	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	4.99		*0.407*	0.407	12.3	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.276		*0.230*	0.230	1.20	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	1.05		*0.339*	0.339	3.09	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.084		*0.037*	0.037	0.57	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	1.88		*0.339*	0.339	5.54	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.466		*0.266*	0.266	1.76	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.143		*0.037*	0.037	0.77	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.297		*0.178*	0.178	1.67	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	86		*%*	%	86	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	89		*%*	%	89	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	90		*%*	%	90	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-5A

Phoenix I.D.: CN58299

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	9:00
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	19854				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58300

Project ID: 100 SOUTH 4TH
Client ID: IA-3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	0.209	*0.204*	0.204	1.03	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	25.3	*0.421*	0.421	60.1	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-3

Phoenix I.D.: CN58300

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.076		*0.032*	0.032	0.48	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.738		*0.205*	0.205	3.60	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.616		*0.485*	0.485	1.27	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.492		*0.202*	0.202	2.43	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	617	E	*0.531*	0.531	1160	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.424		*0.278*	0.278	1.53	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	55.0	E	*0.407*	0.407	135	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.616		*0.339*	0.339	1.82	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.440		*0.037*	0.037	2.98	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.438		*0.266*	0.266	1.65	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.640		*0.037*	0.037	3.44	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.411		*0.178*	0.178	2.31	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	89		*%*	%	89	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	90		*%*	%	90	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	90		*%*	%	90	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-3

Phoenix I.D.: CN58300

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:28
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	9487				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58301

Project ID: 100 SOUTH 4TH
Client ID: IA-4G

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	0.186	*0.182*	0.182	1.02	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	15.4	*0.421*	0.421	36.6	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4G

Phoenix I.D.: CN58301

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.076		*0.032*	0.032	0.48	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.959		*0.205*	0.205	4.68	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.744		*0.485*	0.485	1.54	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.466		*0.202*	0.202	2.30	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	187	E	*0.531*	0.531	352	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.358		*0.278*	0.278	1.29	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	3.13		*0.407*	0.407	7.69	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.304		*0.230*	0.230	1.32	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.676		*0.339*	0.339	1.99	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.077		*0.037*	0.037	0.52	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.631		*0.266*	0.266	2.38	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.260		*0.178*	0.178	1.46	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	91		*%*	%	91	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	94		*%*	%	94	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	93		*%*	%	93	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4G

Phoenix I.D.: CN58301

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:55
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28559				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58302

Project ID: 100 SOUTH 4TH
Client ID: SV-3A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	0.259	*0.183*	0.183	1.41	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	4.39	*0.421*	0.421	10.4	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-3A

Phoenix I.D.: CN58302

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.094	*0.032*	0.032	0.59	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	10.8	*0.205*	0.205	52.7	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	1.26	*0.051*	0.051	4.99	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.503	*0.202*	0.202	2.49	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	54.5	*2.66*	2.66	103	*5.01*	5.01	03/14/23	KCA	5	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	7.37	*0.407*	0.407	18.1	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	0.795	*0.339*	0.339	2.34	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	7.23	*0.037*	0.037	49.0	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	1.33	*0.339*	0.339	3.92	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.267	*0.266*	0.266	1.01	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	43.6	*0.185*	0.185	234	*0.99*	0.99	03/14/23	KCA	5	
Trichlorofluoromethane	0.444	*0.178*	0.178	2.49	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	100	%	%	100	%	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	88	%	%	88	%	%	03/14/23	KCA	1	
% IS-Bromochloromethane	90	%	%	90	%	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	90	%	%	90	%	%	03/14/23	KCA	1	
% Bromofluorobenzene (5x)	99	%	%	99	%	%	03/14/23	KCA	5	
% IS-1,4-Difluorobenzene (5x)	86	%	%	86	%	%	03/14/23	KCA	5	
% IS-Bromochloromethane (5x)	89	%	%	89	%	%	03/14/23	KCA	5	
% IS-Chlorobenzene-d5 (5x)	89	%	%	89	%	%	03/14/23	KCA	5	

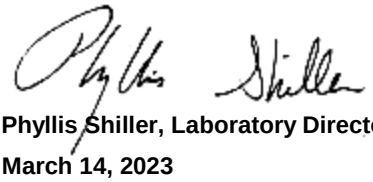
Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:35
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	12864				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58303

Project ID: 100 SOUTH 4TH
Client ID: SV-4

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	7.77	*0.421*	0.421	18.4	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-4

Phoenix I.D.: CN58303

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.081		*0.032*	0.032	0.51	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.962		*0.205*	0.205	4.69	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.495		*0.202*	0.202	2.45	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	79.7	E	*0.531*	0.531	150	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.430		*0.278*	0.278	1.55	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	3.07		*0.407*	0.407	7.54	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.350		*0.230*	0.230	1.52	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	2.10		*0.339*	0.339	6.19	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.136		*0.037*	0.037	0.92	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	4.38		*0.339*	0.339	12.9	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.646		*0.266*	0.266	2.43	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.448		*0.037*	0.037	2.41	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.243		*0.178*	0.178	1.36	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	87		*%*	%	87	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	89		*%*	%	89	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	89		*%*	%	89	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-4

Phoenix I.D.: CN58303

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:49
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28605				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58304

Project ID: 100 SOUTH 4TH
Client ID: SV-3B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	0.191	*0.183*	0.183	1.04	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	5.40	*0.421*	0.421	12.8	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-3B

Phoenix I.D.: CN58304

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.082		*0.032*	0.032	0.52	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	4.87		*0.205*	0.205	23.8	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	0.415		*0.051*	0.051	1.64	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.487		*0.202*	0.202	2.41	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	62.1	E	*0.531*	0.531	117	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.329		*0.278*	0.278	1.18	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	9.88		*0.407*	0.407	24.3	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	1.01		*0.339*	0.339	2.98	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	3.94		*0.037*	0.037	26.7	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	1.83		*0.339*	0.339	5.39	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.304		*0.266*	0.266	1.14	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	14.2		*0.037*	0.037	76.3	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.309		*0.178*	0.178	1.73	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	87		*%*	%	87	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	89		*%*	%	89	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	91		*%*	%	91	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-3B

Phoenix I.D.: CN58304

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:04
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	369				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58305

Project ID: 100 SOUTH 4TH
Client ID: IA-1

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)											
1,1,1,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	1.64		*0.204*	0.204	8.06	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	0.439		*0.204*	0.204	2.16	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND		*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	0.646		*0.204*	0.204	3.17	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	0.289		*0.182*	0.182	1.59	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	46.4	E	*0.421*	0.421	110	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND		*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND		*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND		*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-1

Phoenix I.D.: CN58305

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.075		*0.032*	0.032	0.47	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.608		*0.485*	0.485	1.25	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.476		*0.202*	0.202	2.35	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	246	E	*0.531*	0.531	463	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.820		*0.278*	0.278	2.95	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	711	E	*0.407*	0.407	1750	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.606		*0.230*	0.230	2.63	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.933		*0.339*	0.339	2.75	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	0.265		*0.230*	0.230	1.15	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	1.14		*0.235*	0.235	4.85	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.541		*0.037*	0.037	3.67	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	0.563		*0.339*	0.339	1.66	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.634		*0.266*	0.266	2.39	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.198		*0.037*	0.037	1.06	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.235		*0.178*	0.178	1.32	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	89		*%*	%	89	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	91		*%*	%	91	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	92		*%*	%	92	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-1

Phoenix I.D.: CN58305

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:15
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	19635				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58306

Project ID: 100 SOUTH 4TH
Client ID: IA-4A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	0.217	*0.204*	0.204	1.07	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	9.69	*0.421*	0.421	23.0	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4A

Phoenix I.D.: CN58306

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.080		*0.032*	0.032	0.50	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.684		*0.485*	0.485	1.41	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.493		*0.202*	0.202	2.44	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	61.4	E	*0.531*	0.531	116	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	2.08		*0.407*	0.407	5.11	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.495		*0.230*	0.230	2.15	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	2.11		*0.339*	0.339	6.22	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	0.486		*0.235*	0.235	2.07	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.094		*0.037*	0.037	0.64	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	0.524		*0.339*	0.339	1.54	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.927		*0.266*	0.266	3.49	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.125		*0.037*	0.037	0.67	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.231		*0.178*	0.178	1.30	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	102		*%*	%	102	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	89		*%*	%	89	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	91		*%*	%	91	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	91		*%*	%	91	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4A

Phoenix I.D.: CN58306

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:43
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28624				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58307

Project ID: 100 SOUTH 4TH
Client ID: OA-1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	1.70	*0.421*	0.421	4.04	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: OA-1

Phoenix I.D.: CN58307

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.074	*0.032*	0.032	0.47	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	ND	*0.205*	0.205	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	0.544	*0.485*	0.485	1.12	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.486	*0.202*	0.202	2.40	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	9.65	*0.531*	0.531	18.2	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	1.86	*0.407*	0.407	4.57	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	0.339	ND	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	ND	*0.037*	0.037	ND	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	ND	*0.339*	0.339	ND	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.313	*0.266*	0.266	1.18	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	ND	*0.037*	0.037	ND	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.226	*0.178*	0.178	1.27	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	100	*%*	%	100	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	86	*%*	%	86	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	90	*%*	%	90	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	87	*%*	%	87	*%*	%	03/14/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:03
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	19884				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58308

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 1

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)											
1,1,1,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	1.55		*0.204*	0.204	7.62	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND		*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	0.390		*0.204*	0.204	1.92	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND		*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	0.615		*0.204*	0.204	3.02	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	0.260		*0.182*	0.182	1.43	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	46.2	E	*0.421*	0.421	110	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND		*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND		*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND		*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 1

Phoenix I.D.: CN58308

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.055		*0.032*	0.032	0.35	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.536		*0.485*	0.485	1.11	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.453		*0.202*	0.202	2.24	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	260	E	*0.531*	0.531	490	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.886		*0.278*	0.278	3.19	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	650	E	*0.407*	0.407	1600	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	0.693		*0.230*	0.230	3.01	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	0.775		*0.339*	0.339	2.28	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	0.267		*0.230*	0.230	1.16	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	1.13		*0.235*	0.235	4.81	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.472		*0.037*	0.037	3.20	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	0.533		*0.339*	0.339	1.57	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.579		*0.266*	0.266	2.18	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.185		*0.037*	0.037	0.99	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.213		*0.178*	0.178	1.20	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	87		*%*	%	87	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	85		*%*	%	85	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	89		*%*	%	89	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 1

Phoenix I.D.: CN58308

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	8:16
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	28571				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58309

Project ID: 100 SOUTH 4TH
Client ID: SV-5B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	5.06	*0.421*	0.421	12.0	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-5B

Phoenix I.D.: CN58309

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.154		*0.032*	0.032	0.97	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	1.66		*0.205*	0.205	8.10	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.533		*0.202*	0.202	2.63	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	41.8	E	*0.531*	0.531	78.7	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	3.95		*0.407*	0.407	9.7	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.429		*0.230*	0.230	1.86	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	0.954		*0.339*	0.339	2.81	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	0.837		*0.581*	0.581	1.44	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.507		*0.037*	0.037	3.44	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	1.94		*0.339*	0.339	5.72	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.599		*0.266*	0.266	2.26	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.182		*0.037*	0.037	0.98	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.369		*0.178*	0.178	2.07	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	88		*%*	%	88	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	89		*%*	%	89	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	90		*%*	%	90	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-5B

Phoenix I.D.: CN58309

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:24
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	11289				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58310

Project ID: 100 SOUTH 4TH
Client ID: IA-4B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/13/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2,4-Trimethylbenzene	0.728	*0.204*	0.204	3.58	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/13/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/13/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Ethyltoluene	0.570	*0.204*	0.204	2.80	*1.00*	1.00	03/13/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Acetone	34.0	*0.421*	0.421	80.7	*1.00*	1.00	03/13/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/13/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4B

Phoenix I.D.: CN58310

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/13/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/13/23	KCA	1	
Carbon Tetrachloride	0.061		*0.032*	0.032	0.38	*0.20*	0.20	03/13/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/13/23	KCA	1	
Chloroform	0.553		*0.205*	0.205	2.70	*1.00*	1.00	03/13/23	KCA	1	
Chloromethane	0.635		*0.485*	0.485	1.31	*1.00*	1.00	03/13/23	KCA	1	
Cis-1,2-Dichloroethene	0.087		*0.051*	0.051	0.34	*0.20*	0.20	03/13/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/13/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/13/23	KCA	1	
Dichlorodifluoromethane	0.513		*0.202*	0.202	2.54	*1.00*	1.00	03/13/23	KCA	1	
Ethanol	142	E	*0.531*	0.531	267	*1.00*	1.00	03/13/23	KCA	1	1
Ethyl acetate	0.519		*0.278*	0.278	1.87	*1.00*	1.00	03/13/23	KCA	1	1
Ethylbenzene	0.591		*0.230*	0.230	2.56	*1.00*	1.00	03/13/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/13/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/13/23	KCA	1	
Isopropylalcohol	4.90		*0.407*	0.407	12.0	*1.00*	1.00	03/13/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/13/23	KCA	1	
m,p-Xylene	2.05		*0.230*	0.230	8.90	*1.00*	1.00	03/13/23	KCA	1	
Methyl Ethyl Ketone	1.44		*0.339*	0.339	4.24	*1.00*	1.00	03/13/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/13/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/13/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
o-Xylene	0.586		*0.230*	0.230	2.54	*1.00*	1.00	03/13/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/13/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/13/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/13/23	KCA	1	
Tetrachloroethene	0.330		*0.037*	0.037	2.24	*0.25*	0.25	03/13/23	KCA	1	
Tetrahydrofuran	1.24		*0.339*	0.339	3.65	*1.00*	1.00	03/13/23	KCA	1	1
Toluene	0.800		*0.266*	0.266	3.01	*1.00*	1.00	03/13/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/13/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/13/23	KCA	1	
Trichloroethene	0.513		*0.037*	0.037	2.76	*0.20*	0.20	03/13/23	KCA	1	
Trichlorofluoromethane	0.259		*0.178*	0.178	1.45	*1.00*	1.00	03/13/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/13/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/13/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	103		*%*	%	103	*%*	%	03/13/23	KCA	1	
% IS-1,4-Difluorobenzene	82		*%*	%	82	*%*	%	03/13/23	KCA	1	
% IS-Bromochloromethane	81		*%*	%	81	*%*	%	03/13/23	KCA	1	
% IS-Chlorobenzene-d5	83		*%*	%	83	*%*	%	03/13/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4B

Phoenix I.D.: CN58310

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:18
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	23330				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58311

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	10.1	*0.421*	0.421	24.0	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 2

Phoenix I.D.: CN58311

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.053		*0.032*	0.032	0.33	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.264		*0.205*	0.205	1.29	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	0.566		*0.485*	0.485	1.17	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.460		*0.202*	0.202	2.27	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	239	E	*0.531*	0.531	450	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.286		*0.278*	0.278	1.03	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	1.55		*0.407*	0.407	3.81	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.260		*0.230*	0.230	1.13	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	0.764		*0.339*	0.339	2.25	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.132		*0.037*	0.037	0.89	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	0.461		*0.339*	0.339	1.36	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.582		*0.266*	0.266	2.19	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.228		*0.178*	0.178	1.28	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	86		*%*	%	86	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	84		*%*	%	84	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	87		*%*	%	87	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-DUP 2

Phoenix I.D.: CN58311

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:04
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	4630				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58312

Project ID: 100 SOUTH 4TH
Client ID: IA-4C

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	0.213	*0.204*	0.204	1.05	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	25.9	*0.421*	0.421	61.5	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: IA-4C

Phoenix I.D.: CN58312

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.058		*0.032*	0.032	0.36	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.546		*0.205*	0.205	2.66	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	0.590		*0.485*	0.485	1.22	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.473		*0.202*	0.202	2.34	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	178	E	*0.531*	0.531	335	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	1.13		*0.278*	0.278	4.07	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	0.451		*0.244*	0.244	1.85	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	11.7		*0.407*	0.407	28.7	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.507		*0.230*	0.230	2.20	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	6.35		*0.339*	0.339	18.7	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.227		*0.037*	0.037	1.54	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	9.40		*0.339*	0.339	27.7	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.997		*0.266*	0.266	3.75	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.356		*0.037*	0.037	1.91	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.252		*0.178*	0.178	1.41	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	83		*%*	%	83	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	81		*%*	%	81	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	86		*%*	%	86	*%*	%	03/14/23	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 14, 2023

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	TS	03/10/23	10:36
Location Code:	IMPACT-ICL	Received by:	CP	03/13/23	15:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	357				

Laboratory Data

SDG ID: GCN58289
Phoenix ID: CN58313

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/14/23	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/14/23	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Acetone	7.89	*0.421*	0.421	18.7	*1.00*	1.00	03/14/23	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/14/23	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 2

Phoenix I.D.: CN58313

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/14/23	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/14/23	KCA	1	
Carbon Tetrachloride	0.077		*0.032*	0.032	0.48	*0.20*	0.20	03/14/23	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/14/23	KCA	1	
Chloroform	0.874		*0.205*	0.205	4.26	*1.00*	1.00	03/14/23	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/14/23	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/14/23	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/14/23	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/14/23	KCA	1	
Dichlorodifluoromethane	0.500		*0.202*	0.202	2.47	*1.00*	1.00	03/14/23	KCA	1	
Ethanol	81.6	E	*0.531*	0.531	154	*1.00*	1.00	03/14/23	KCA	1	1
Ethyl acetate	0.428		*0.278*	0.278	1.54	*1.00*	1.00	03/14/23	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/14/23	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/14/23	KCA	1	
Isopropylalcohol	3.25		*0.407*	0.407	7.98	*1.00*	1.00	03/14/23	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/14/23	KCA	1	
m,p-Xylene	0.294		*0.230*	0.230	1.28	*1.00*	1.00	03/14/23	KCA	1	
Methyl Ethyl Ketone	2.01		*0.339*	0.339	5.92	*1.00*	1.00	03/14/23	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/14/23	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/14/23	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/14/23	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/14/23	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/14/23	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/14/23	KCA	1	
Tetrachloroethene	0.133		*0.037*	0.037	0.90	*0.25*	0.25	03/14/23	KCA	1	
Tetrahydrofuran	4.24		*0.339*	0.339	12.5	*1.00*	1.00	03/14/23	KCA	1	1
Toluene	0.619		*0.266*	0.266	2.33	*1.00*	1.00	03/14/23	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/14/23	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/14/23	KCA	1	
Trichloroethene	0.418		*0.037*	0.037	2.24	*0.20*	0.20	03/14/23	KCA	1	
Trichlorofluoromethane	0.227		*0.178*	0.178	1.27	*1.00*	1.00	03/14/23	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/14/23	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/14/23	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/14/23	KCA	1	
% IS-1,4-Difluorobenzene	90		*%*	%	90	*%*	%	03/14/23	KCA	1	
% IS-Bromochloromethane	91		*%*	%	91	*%*	%	03/14/23	KCA	1	
% IS-Chlorobenzene-d5	92		*%*	%	92	*%*	%	03/14/23	KCA	1	

Project ID: 100 SOUTH 4TH
Client ID: SV-DUP 2

Phoenix I.D.: CN58313

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 14, 2023
Official Report Release To Follow

Sample Criteria Exceedances Report

GCN58289 - IMPACT-ICL

Criteria: NY: AIRIA, AIRSV

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN58289	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	1.51	0.037	0.443	0.443	ppbv
CN58289	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.063	0.032	0.032	0.032	ppbv
CN58289	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.40	0.2	0.2	0.2	ug/m3
CN58289	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	10.2	0	3	3	ug/m3
CN58290	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.050	0.032	0.032	0.032	ppbv
CN58290	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.184	0.051	0.051	0.051	ppbv
CN58290	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.272	0.037	0.037	0.037	ppbv
CN58290	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.73	0.2	0.2	0.2	ug/m3
CN58290	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.46	0.2	0.2	0.2	ug/m3
CN58290	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.31	0.2	0.2	0.2	ug/m3
CN58291	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.227	0.051	0.051	0.051	ppbv
CN58291	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.299	0.037	0.037	0.037	ppbv
CN58291	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.049	0.032	0.032	0.032	ppbv
CN58291	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.61	0.2	0.2	0.2	ug/m3
CN58291	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.31	0.2	0.2	0.2	ug/m3
CN58291	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.90	0.2	0.2	0.2	ug/m3
CN58292	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	11.4	0.037	0.037	0.037	ppbv
CN58292	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	2.32	0.037	0.443	0.443	ppbv
CN58292	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.794	0.051	0.051	0.051	ppbv
CN58292	$AIR_NYTO15	1,1,1-Trichloroethane	NY / Air Guideline Values / Indoor Air	0.694	0.183	0.55	0.55	ppbv
CN58292	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.048	0.032	0.032	0.032	ppbv
CN58292	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	11.4	0.037	1.12	1.12	ppbv
CN58292	$AIR_NYTO15	1,1,1-Trichloroethane	NY / Air Guideline Values / Indoor Air	3.78	1	3	3	ug/m3
CN58292	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.30	0.2	0.2	0.2	ug/m3
CN58292	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	3.15	0.2	0.2	0.2	ug/m3
CN58292	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	15.7	0	3	3	ug/m3
CN58292	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	61.2	0.2	0.2	0.2	ug/m3
CN58292	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	61.2	0	5	5	ug/m3
CN58293	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.059	0.032	0.032	0.032	ppbv
CN58293	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.354	0.037	0.037	0.037	ppbv
CN58293	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.90	0.2	0.2	0.2	ug/m3
CN58293	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.37	0.2	0.2	0.2	ug/m3
CN58294	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.056	0.032	0.032	0.032	ppbv
CN58294	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.35	0.2	0.2	0.2	ug/m3
CN58295	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	255	0.555	0.037	0.037	ppbv
CN58295	$AIR_NYTO15	1,1,1-Trichloroethane	NY / Air Guideline Values / Indoor Air	0.591	0.183	0.55	0.55	ppbv
CN58295	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.044	0.032	0.032	0.032	ppbv

Sample Criteria Exceedances Report

GCN58289 - IMPACT-ICL

Criteria: NY: AIRIA, AIRSV

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN58295	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	30.6	0.051	0.051	0.051	ppbv
CN58295	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	147	0.553	0.443	0.443	ppbv
CN58295	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Sub-Slab Vapor	147	0.553	14.8	14.8	ppbv
CN58295	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	30.6	0.051	1.51	1.51	ppbv
CN58295	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	255	0.555	1.12	1.12	ppbv
CN58295	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1370	3.0	0.2	0.2	ug/m3
CN58295	$AIR_NYTO15	1,1,1-Trichloroethane	NY / Air Guideline Values / Indoor Air	3.22	1	3	3	ug/m3
CN58295	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.28	0.2	0.2	0.2	ug/m3
CN58295	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	121	0.2	0.2	0.2	ug/m3
CN58295	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	996	4	3	3	ug/m3
CN58295	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Sub-Slab Vapor	996	4	100	100	ug/m3
CN58295	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	1370	3	5	5	ug/m3
CN58295	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	121	0	5	5	ug/m3
CN58296	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.052	0.032	0.032	0.032	ppbv
CN58296	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.33	0.2	0.2	0.2	ug/m3
CN58297	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.060	0.032	0.032	0.032	ppbv
CN58297	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.38	0.2	0.2	0.2	ug/m3
CN58298	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.072	0.032	0.032	0.032	ppbv
CN58298	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.45	0.2	0.2	0.2	ug/m3
CN58299	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.078	0.032	0.032	0.032	ppbv
CN58299	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.143	0.037	0.037	0.037	ppbv
CN58299	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.49	0.2	0.2	0.2	ug/m3
CN58299	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.77	0.2	0.2	0.2	ug/m3
CN58300	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.076	0.032	0.032	0.032	ppbv
CN58300	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.640	0.037	0.037	0.037	ppbv
CN58300	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.48	0.2	0.2	0.2	ug/m3
CN58300	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	3.44	0.2	0.2	0.2	ug/m3
CN58301	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.076	0.032	0.032	0.032	ppbv
CN58301	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.48	0.2	0.2	0.2	ug/m3
CN58302	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.094	0.032	0.032	0.032	ppbv
CN58302	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	1.26	0.051	0.051	0.051	ppbv
CN58302	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	7.23	0.037	0.443	0.443	ppbv
CN58302	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	43.6	0.185	0.037	0.037	ppbv
CN58302	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	43.6	0.185	1.12	1.12	ppbv
CN58302	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	4.99	0.2	0.2	0.2	ug/m3
CN58302	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	49.0	0	3	3	ug/m3

Sample Criteria Exceedances Report

GCN58289 - IMPACT-ICL

Criteria: NY: AIRIA, AIRSV

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN58302	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.59	0.2	0.2	0.2	ug/m3
CN58302	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	234	1.0	0.2	0.2	ug/m3
CN58302	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	234	1	5	5	ug/m3
CN58303	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.081	0.032	0.032	0.032	ppbv
CN58303	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.448	0.037	0.037	0.037	ppbv
CN58303	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.51	0.2	0.2	0.2	ug/m3
CN58303	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	2.41	0.2	0.2	0.2	ug/m3
CN58304	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.082	0.032	0.032	0.032	ppbv
CN58304	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	14.2	0.037	0.037	0.037	ppbv
CN58304	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.415	0.051	0.051	0.051	ppbv
CN58304	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	3.94	0.037	0.443	0.443	ppbv
CN58304	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	14.2	0.037	1.12	1.12	ppbv
CN58304	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.52	0.2	0.2	0.2	ug/m3
CN58304	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	1.64	0.2	0.2	0.2	ug/m3
CN58304	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	26.7	0	3	3	ug/m3
CN58304	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	76.3	0.2	0.2	0.2	ug/m3
CN58304	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	76.3	0	5	5	ug/m3
CN58305	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.075	0.032	0.032	0.032	ppbv
CN58305	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	0.541	0.037	0.443	0.443	ppbv
CN58305	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.198	0.037	0.037	0.037	ppbv
CN58305	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.47	0.2	0.2	0.2	ug/m3
CN58305	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	3.67	0	3	3	ug/m3
CN58305	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.06	0.2	0.2	0.2	ug/m3
CN58306	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.080	0.032	0.032	0.032	ppbv
CN58306	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.125	0.037	0.037	0.037	ppbv
CN58306	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.50	0.2	0.2	0.2	ug/m3
CN58306	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.67	0.2	0.2	0.2	ug/m3
CN58307	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.074	0.032	0.032	0.032	ppbv
CN58307	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.47	0.2	0.2	0.2	ug/m3
CN58308	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.185	0.037	0.037	0.037	ppbv
CN58308	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.055	0.032	0.032	0.032	ppbv
CN58308	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	0.472	0.037	0.443	0.443	ppbv
CN58308	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.99	0.2	0.2	0.2	ug/m3
CN58308	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.35	0.2	0.2	0.2	ug/m3
CN58308	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	3.20	0	3	3	ug/m3
CN58309	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.154	0.032	0.032	0.032	ppbv

Sample Criteria Exceedances Report

GCN58289 - IMPACT-ICL

Criteria: NY: AIRIA, AIRSV

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN58309	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	0.507	0.037	0.443	0.443	ppbv
CN58309	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.182	0.037	0.037	0.037	ppbv
CN58309	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	3.44	0	3	3	ug/m3
CN58309	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.98	0.2	0.2	0.2	ug/m3
CN58309	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.97	0.2	0.2	0.2	ug/m3
CN58310	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.061	0.032	0.032	0.032	ppbv
CN58310	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.087	0.051	0.051	0.051	ppbv
CN58310	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.513	0.037	0.037	0.037	ppbv
CN58310	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.38	0.2	0.2	0.2	ug/m3
CN58310	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.34	0.2	0.2	0.2	ug/m3
CN58310	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	2.76	0.2	0.2	0.2	ug/m3
CN58311	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.053	0.032	0.032	0.032	ppbv
CN58311	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.33	0.2	0.2	0.2	ug/m3
CN58312	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.356	0.037	0.037	0.037	ppbv
CN58312	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.058	0.032	0.032	0.032	ppbv
CN58312	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.36	0.2	0.2	0.2	ug/m3
CN58312	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.91	0.2	0.2	0.2	ug/m3
CN58313	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.077	0.032	0.032	0.032	ppbv
CN58313	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.418	0.037	0.037	0.037	ppbv
CN58313	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	2.24	0.2	0.2	0.2	ug/m3
CN58313	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.48	0.2	0.2	0.2	ug/m3

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

IMPACT

860-645-1102

email: greg@phoenixlabs.com

P.O. #

Data Delivery:
- ☐ Fax #:
- ☐ Email:
- ☐ Phone #:

Report to:	Chris Connolly	Project Name: 100 South 4th	Data Format: (Circle) Equis Excel Other:
Customer:	Impact Environmental	Invoice to: Impact Environmental	Requested Deliverable: RCP ASP CAT B
Address:	170 Keyland Court		MCP NJ Deliverables
14430	Bohemia NY 11716	Sampled by: T. Stone	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air (MATRIX)	Soil Gas (MATRIX)	Grab (G) Composite (C) (MATRIX)	TO-15 (ANALYSES)	APH (ANALYSES)
	THIS SECTION FOR LAB USE ONLY																
58289	IA-4F	16014	6.0L	-30	-5	7020	3.8	13:50	10:40	3/10/23	-32	-5	X		G	X	
58290	SV-5A	9486	6.0L	-30	-3	5648	3.6	09:11	08:15	3/10/23	-29	-1		X	G	X	
58291	IA-3	19854	6.0L	-30	-2	10552	3.8	09:45	09:00	3/10/23	-31	-2	X		G	X	
58292	IA-4G	9487	6.0L	-30	0	7018	3.6	11:03	10:28	3/10/23	-34	-4	X		G	X	
58293	SV-3A	28559	6.0L	-30	-5	10639	3.8	09:43	08:55	3/10/23	-31	-3		X	G	X	
58294	SV-4	12864	6.0L	-30	-1	3248	3.7	10:40	10:35	3/10/23	-31	-2		X	G	X	
58295	SV-3B	28605	6.0L	-30	0	7029	3.6	09:40	08:49	3/10/23	-32	-3		X	G	X	
58296	IA-1	369	6.0L	-30	0	7043	3.6	10:16	10:04	3/10/23	-32	-2	X		G	X	
★	IA-4A	19635	6.0L	-30		4484	3.6	12:56	10:15	3/10/23	-29	-2	X		G	X	
58297	OA-1	28624	6.0L	-30	-3	3513	3.8	09:38	08:43	3/10/23	-33	-5	X		G	X	

Relinquished by:	Accepted by:	Date:	Time:
T. Stone		3/13/23	1035
		3/13/23	15:15

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date: 3/10/23

State Where Samples Collected: NY

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

★ Returned

(26) - 6.0L 24 hr, 78ft Tubing, 26 Connectors

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☒

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	Indoor Air: Residential Ind/Commercial Soil Gas: Residential Ind/Commercial	Indoor Air: Residential Ind/Commercial Soil Gas: Residential Ind/Commercial	Vapor Intrusion	Indoor Air Residential Non-residential	Indoor Air Residential Industrial Sub-slab Residential Industrial

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
IMPACT

860-645-1102
email: greg@phoenixlabs.com

P.O. #

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to:	Chris Connolly	Project Name: 100 South 4th	Data Format: (Circle) Equis Excel Other:
Customer:	Impact Environmental	Invoice to: Impact Environmental	Requested Deliverable: RCP ASP CAT B
Address:	170 Keyland Court		MCP NJ Deliverables
14430	Bohemia NY 11716	Sampled by: T. Stone	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
58308	IA-Dup. 1	19884	6.0L	-30	-0	5238	3.8	10:15	10:03	3/10/23	-32	-1	X		G	X		
58309	SV-5B	28571	6.0L	-30	-0	10634	3.6	09:07	08:16	3/10/23	-31	-1		X	G	X		
58310	IA-4B	11289	6.0L	-30	-4	10648	3.7	11:12	10:24	3/10/23	-31	-5	X		G	X		
58311	IA-Dup. 2	23330	6.0L	-30	0	10632	3.7	10:46	10:18	3/10/23	-31	-2	X		G	X		
58312	IA-4C	4630	6.0L	-30	-4	10649	3.6	11:25	10:04	3/10/23	-30	-4	X		G	X		
58313	SV-Dup. 2	357	6.0L	-30	0	10650	3.6	10:42	10:36	3/10/23	-31	-1		X	G	X		

Relinquished by:	Accepted by:	Date:	Time:
T. Stone		3/13/23	1035
		3/13/23	15:15

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: _____ Date: 3/10/23

State Where Samples Collected: NY

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

(26) - 6.0L 24 hr, 78ft Tubing, 26 Connectors

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☒

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C	**Indoor Air:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial
TAC RES					
SVVC I/C					
SVVC RES	**Soil Gas:** Residential Ind/Commercial	**Soil Gas:** Residential Ind/Commercial			**Sub-slab** Residential Industrial
GWV I/C					
GWV CES					

GCN58289

Shannon Wilhelm

Subject: FW: Impact
Attachments: 20230313103250.pdf

From: Michael Lapman <michael@phoenixlabs.com>
Sent: Monday, March 13, 2023 11:42 AM
To: Shannon Wilhelm <shannon@phoenixlabs.com>
Subject: FW: Impact

Impact—ICL:

5-Day Rush TAT and compare to:

- NY Soil Vapor (IA and SS)

Thank you!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com

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CHAIN OF CUSTODY RECORD

AIR ANALYSES

860-645-1102

email: greg@phoenixlabs.com

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

IMPACT

P.O. #

Data Delivery:
- ☐ Fax #:
- ☐ Email:
- ☐ Phone #:

Report to:	Chris Connolly	Project Name: 100 South 4th	Data Format: (Circle) Equis Excel Other:
Customer:	Impact Environmental	Invoice to: Impact Environmental	Requested Deliverable: RCP ASP CAT B
Address:	170 Keyland Court		MCP NJ Deliverables
14430	Bohemia NY 11716	Sampled by: T. Stone	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES	
58298	IA-4E	21339	6.0L	-30	-5	10661	3.6	12:50	10:42	3/10/23	-30	-5	X		G	X	
58299	SV-Dup. 1	18258	6.0L	-30	-4	10551	3.6	12:30	09:35	3/10/23	-27	-1		X	G	X	
58300	SV-2A	23340	6.0L	-30	0	5395	3.8	12:25	09:34	3/10/23	-33	-3		X	G	X	
58301	SV-1A	488	6.0L	-30	0	5658	3.8	10:22	10:10	3/10/23	-30	-1		X	G	X	
58302	IA-2	365	6.0L	-30	0	10651	3.7	12:33	09:45	3/10/23	-31	-5	X		G	X	
58303	IA-4H	28592	6.0L	-30	0	10654	3.8	10:45	10:20	3/10/23	-30	-2	X		G	X	
58304	SV-1B	28594	6.0L	-30	0	3500	22.8	10:28	10:02	3/10/23	-32	-2		X	G	X	
58305	IA-4D	16006	6.0L	-30	0	10558	3.8	11:20	10:10	3/10/23	-31	-3	X		G	X	
58304	SV-2B ★	9767	6.0L	-30	-5	10642	3.7							X	G	X	
58305	IA-5	28622	6.0L	-30	0	10657	3.6	09:09	08:22	3/10/23	-31	-3	X		G	X	

Relinquished by:	Accepted by:	Date:	Time:
T. Stone		3/13/23	1035
		3/13/23	15:15

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date: 3/10/23

State Where Samples Collected: NY

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

(26) - 6.0L 24 hr, 78ft Tubing, 26 Connectors

★ SV-2B Unused

Turnaround Time:
- ☐ 1 Day*
- ☐ 2 Day*
- ☐ 3 Day*
- ☐ 4 Day*
- ☐ 5 Day*
- ☒ Standard

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C	Indoor Air: Residential Ind/Commercial	Indoor Air: Residential Ind/Commercial	Vapor Intrusion	Indoor Air Residential Non-residential	Indoor Air Residential Industrial
TAC RES	Soil Gas: Residential Ind/Commercial	Soil Gas: Residential Ind/Commercial			Sub-slab Residential Industrial
SVVC I/C					
SVVC RES					
GWV I/C					
GWV CES					

ANALYTICAL REPORT

Lab Number:	L2265474
Client:	Impact Environmental 170 Keyland Ct Bohemia, NY 11716
ATTN:	Christopher Connolly
Phone:	(631) 269-8800
Project Name:	100 SOUTH 4TH ST.
Project Number:	13817
Report Date:	12/05/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2265474-01	SSVS LEG 1 STACK EFFLUENT	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	11/17/22 14:40	11/18/22
L2265474-02	SSVS LEG 2 STACK EFFLUENT	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	11/17/22 12:45	11/18/22
L2265474-03	SSVS LEG 3 STACK EFFLUENT	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	11/17/22 10:41	11/18/22
L2265474-04	SSVS LEG 4 STACK EFFLUENT	SOIL_VAPOR	100 SOUTH 4TH ST, BROOKLYN	11/17/22 11:56	11/18/22

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2265474
Project Number:	13817	**Report Date:**	12/05/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 100 SOUTH 4TH ST. **Lab Number:** L2265474
Project Number: 13817 **Report Date:** 12/05/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 11, 2022. The canister certification results are provided as an addendum.

L2265474-01D, -02D, and -04D: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 12/05/22

AIR

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-01 D
Client ID: SSVS LEG 1 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 14:40
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/05/22 03:17
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.588	--	ND	2.91	--		2.941
Chloromethane	ND	0.588	--	ND	1.21	--		2.941
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.588	--	ND	4.11	--		2.941
Vinyl chloride	ND	0.588	--	ND	1.50	--		2.941
1,3-Butadiene	ND	0.588	--	ND	1.30	--		2.941
Bromomethane	ND	0.588	--	ND	2.28	--		2.941
Chloroethane	ND	0.588	--	ND	1.55	--		2.941
Ethyl Alcohol	27.4	14.7	--	51.6	27.7	--		2.941
Vinyl bromide	ND	0.588	--	ND	2.57	--		2.941
Acetone	12.0	2.94	--	28.5	6.98	--		2.941
Trichlorofluoromethane	ND	0.588	--	ND	3.30	--		2.941
iso-Propyl Alcohol	ND	1.47	--	ND	3.61	--		2.941
1,1-Dichloroethene	ND	0.588	--	ND	2.33	--		2.941
tert-Butyl Alcohol	ND	1.47	--	ND	4.46	--		2.941
Methylene chloride	ND	1.47	--	ND	5.11	--		2.941
3-Chloropropene	ND	0.588	--	ND	1.84	--		2.941
Carbon disulfide	ND	0.588	--	ND	1.83	--		2.941
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.588	--	ND	4.51	--		2.941
trans-1,2-Dichloroethene	ND	0.588	--	ND	2.33	--		2.941
1,1-Dichloroethane	ND	0.588	--	ND	2.38	--		2.941
Methyl tert butyl ether	ND	0.588	--	ND	2.12	--		2.941
2-Butanone	27.5	1.47	--	81.1	4.34	--		2.941
cis-1,2-Dichloroethene	9.14	0.588	--	36.2	2.33	--		2.941

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-01 D
Client ID: SSVS LEG 1 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 14:40
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.47	--	ND	5.30	--		2.941
Chloroform	3.03	0.588	--	14.8	2.87	--		2.941
Tetrahydrofuran	203	1.47	--	599	4.34	--		2.941
1,2-Dichloroethane	ND	0.588	--	ND	2.38	--		2.941
n-Hexane	ND	0.588	--	ND	2.07	--		2.941
1,1,1-Trichloroethane	2.62	0.588	--	14.3	3.21	--		2.941
Benzene	ND	0.588	--	ND	1.88	--		2.941
Carbon tetrachloride	ND	0.588	--	ND	3.70	--		2.941
Cyclohexane	ND	0.588	--	ND	2.02	--		2.941
1,2-Dichloropropane	ND	0.588	--	ND	2.72	--		2.941
Bromodichloromethane	ND	0.588	--	ND	3.94	--		2.941
Xylene (Total)	ND	0.588	--	ND	2.55	--		2.941
1,4-Dioxane	ND	0.588	--	ND	2.12	--		2.941
Trichloroethene	167	0.588	--	897	3.16	--		2.941
2,2,4-Trimethylpentane	ND	0.588	--	ND	2.75	--		2.941
Heptane	ND	0.588	--	ND	2.41	--		2.941
cis-1,3-Dichloropropene	ND	0.588	--	ND	2.67	--		2.941
4-Methyl-2-pentanone	ND	1.47	--	ND	6.02	--		2.941
trans-1,3-Dichloropropene	ND	0.588	--	ND	2.67	--		2.941
1,1,2-Trichloroethane	ND	0.588	--	ND	3.21	--		2.941
Toluene	ND	0.588	--	ND	2.22	--		2.941
1,2-Dichloroethene (total)	9.14	0.588	--	36.2	2.33	--		2.941
2-Hexanone	ND	0.588	--	ND	2.41	--		2.941
Dibromochloromethane	ND	0.588	--	ND	5.01	--		2.941
1,3-Dichloropropene, Total	ND	0.588	--	ND	2.67	--		2.941
1,2-Dibromoethane	ND	0.588	--	ND	4.52	--		2.941

Project Name: 100 SOUTH 4TH ST. ***Lab Number:*** L2265474

Project Number: 13817 ***Report Date:*** 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-01 D
Client ID: SSVS LEG 1 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 14:40
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	134	0.588	--	909	3.99	--		2.941
Chlorobenzene	ND	0.588	--	ND	2.71	--		2.941
Ethylbenzene	ND	0.588	--	ND	2.55	--		2.941
p/m-Xylene	ND	1.18	--	ND	5.13	--		2.941
Bromoform	ND	0.588	--	ND	6.08	--		2.941
Styrene	ND	0.588	--	ND	2.50	--		2.941
1,1,2,2-Tetrachloroethane	ND	0.588	--	ND	4.04	--		2.941
o-Xylene	ND	0.588	--	ND	2.55	--		2.941
4-Ethyltoluene	ND	0.588	--	ND	2.89	--		2.941
1,3,5-Trimethylbenzene	ND	0.588	--	ND	2.89	--		2.941
1,2,4-Trimethylbenzene	ND	0.588	--	ND	2.89	--		2.941
Benzyl chloride	ND	0.588	--	ND	3.04	--		2.941
1,3-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,4-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,2-Dichlorobenzene	ND	0.588	--	ND	3.54	--		2.941
1,2,4-Trichlorobenzene	ND	0.588	--	ND	4.36	--		2.941
Hexachlorobutadiene	ND	0.588	--	ND	6.27	--		2.941

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	107		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-02 D
Client ID: SSVS LEG 2 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 12:45
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/05/22 04:00
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	4.11	--	ND	20.3	--		20.56
Chloromethane	ND	4.11	--	ND	8.49	--		20.56
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	4.11	--	ND	28.7	--		20.56
Vinyl chloride	ND	4.11	--	ND	10.5	--		20.56
1,3-Butadiene	ND	4.11	--	ND	9.09	--		20.56
Bromomethane	ND	4.11	--	ND	16.0	--		20.56
Chloroethane	ND	4.11	--	ND	10.8	--		20.56
Ethyl Alcohol	ND	103	--	ND	194	--		20.56
Vinyl bromide	ND	4.11	--	ND	18.0	--		20.56
Acetone	ND	20.6	--	ND	48.9	--		20.56
Trichlorofluoromethane	ND	4.11	--	ND	23.1	--		20.56
iso-Propyl Alcohol	ND	10.3	--	ND	25.3	--		20.56
1,1-Dichloroethene	ND	4.11	--	ND	16.3	--		20.56
tert-Butyl Alcohol	ND	10.3	--	ND	31.2	--		20.56
Methylene chloride	ND	10.3	--	ND	35.8	--		20.56
3-Chloropropene	ND	4.11	--	ND	12.9	--		20.56
Carbon disulfide	ND	4.11	--	ND	12.8	--		20.56
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	4.11	--	ND	31.5	--		20.56
trans-1,2-Dichloroethene	ND	4.11	--	ND	16.3	--		20.56
1,1-Dichloroethane	ND	4.11	--	ND	16.6	--		20.56
Methyl tert butyl ether	ND	4.11	--	ND	14.8	--		20.56
2-Butanone	34.7	10.3	--	102	30.4	--		20.56
cis-1,2-Dichloroethene	ND	4.11	--	ND	16.3	--		20.56

Project Name: 100 SOUTH 4TH ST. ***Lab Number:*** L2265474

Project Number: 13817 ***Report Date:*** 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-02 D
Client ID: SSVS LEG 2 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 12:45
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	10.3	--	ND	37.1	--		20.56
Chloroform	ND	4.11	--	ND	20.1	--		20.56
Tetrahydrofuran	1750	10.3	--	5160	30.4	--		20.56
1,2-Dichloroethane	ND	4.11	--	ND	16.6	--		20.56
n-Hexane	ND	4.11	--	ND	14.5	--		20.56
1,1,1-Trichloroethane	ND	4.11	--	ND	22.4	--		20.56
Benzene	ND	4.11	--	ND	13.1	--		20.56
Carbon tetrachloride	ND	4.11	--	ND	25.9	--		20.56
Cyclohexane	ND	4.11	--	ND	14.1	--		20.56
1,2-Dichloropropane	ND	4.11	--	ND	19.0	--		20.56
Bromodichloromethane	ND	4.11	--	ND	27.5	--		20.56
Xylene (Total)	ND	4.11	--	ND	17.9	--		20.56
1,4-Dioxane	ND	4.11	--	ND	14.8	--		20.56
Trichloroethene	ND	4.11	--	ND	22.1	--		20.56
2,2,4-Trimethylpentane	ND	4.11	--	ND	19.2	--		20.56
Heptane	ND	4.11	--	ND	16.8	--		20.56
cis-1,3-Dichloropropene	ND	4.11	--	ND	18.7	--		20.56
4-Methyl-2-pentanone	ND	10.3	--	ND	42.2	--		20.56
trans-1,3-Dichloropropene	ND	4.11	--	ND	18.7	--		20.56
1,1,2-Trichloroethane	ND	4.11	--	ND	22.4	--		20.56
Toluene	ND	4.11	--	ND	15.5	--		20.56
1,2-Dichloroethene (total)	ND	4.11	--	ND	16.3	--		20.56
2-Hexanone	ND	4.11	--	ND	16.8	--		20.56
Dibromochloromethane	ND	4.11	--	ND	35.0	--		20.56
1,3-Dichloropropene, Total	ND	4.11	--	ND	18.7	--		20.56
1,2-Dibromoethane	ND	4.11	--	ND	31.6	--		20.56

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-02 D
Client ID: SSVS LEG 2 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 12:45
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	15.1	4.11	--	102	27.9	--		20.56
Chlorobenzene	ND	4.11	--	ND	18.9	--		20.56
Ethylbenzene	ND	4.11	--	ND	17.9	--		20.56
p/m-Xylene	ND	8.22	--	ND	35.7	--		20.56
Bromoform	ND	4.11	--	ND	42.5	--		20.56
Styrene	ND	4.11	--	ND	17.5	--		20.56
1,1,2,2-Tetrachloroethane	ND	4.11	--	ND	28.2	--		20.56
o-Xylene	ND	4.11	--	ND	17.9	--		20.56
4-Ethyltoluene	ND	4.11	--	ND	20.2	--		20.56
1,3,5-Trimethylbenzene	ND	4.11	--	ND	20.2	--		20.56
1,2,4-Trimethylbenzene	ND	4.11	--	ND	20.2	--		20.56
Benzyl chloride	ND	4.11	--	ND	21.3	--		20.56
1,3-Dichlorobenzene	ND	4.11	--	ND	24.7	--		20.56
1,4-Dichlorobenzene	ND	4.11	--	ND	24.7	--		20.56
1,2-Dichlorobenzene	ND	4.11	--	ND	24.7	--		20.56
1,2,4-Trichlorobenzene	ND	4.11	--	ND	30.5	--		20.56
Hexachlorobutadiene	ND	4.11	--	ND	43.8	--		20.56

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	108		60-140
Bromochloromethane	110		60-140
chlorobenzene-d5	108		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-03
Client ID: SSVS LEG 3 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 10:41
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/05/22 04:43
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	0.283	0.200	--	0.584	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.30	1.00	--	22.1	2.38	--		1
Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	20.6	0.500	--	60.8	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-03
Client ID: SSVS LEG 3 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 10:41
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.22	0.200	--	5.96	0.977	--		1
Tetrahydrofuran	18.9	0.500	--	55.7	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Xylene (Total)	ND	0.200	--	ND	0.869	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	7.56	0.200	--	40.6	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.212	0.200	--	0.799	0.754	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-03
Client ID: SSVS LEG 3 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 10:41
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	1.25	0.200	--	8.48	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	108		60-140
Bromochloromethane	110		60-140
chlorobenzene-d5	110		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-04 D
Client ID: SSVS LEG 4 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 11:56
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/05/22 05:26
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--		6.25
Chloromethane	ND	1.25	--	ND	2.58	--		6.25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.25	--	ND	8.74	--		6.25
Vinyl chloride	ND	1.25	--	ND	3.20	--		6.25
1,3-Butadiene	ND	1.25	--	ND	2.77	--		6.25
Bromomethane	ND	1.25	--	ND	4.85	--		6.25
Chloroethane	ND	1.25	--	ND	3.30	--		6.25
Ethyl Alcohol	ND	31.2	--	ND	58.8	--		6.25
Vinyl bromide	ND	1.25	--	ND	5.47	--		6.25
Acetone	14.8	6.25	--	35.2	14.8	--		6.25
Trichlorofluoromethane	ND	1.25	--	ND	7.02	--		6.25
iso-Propyl Alcohol	3.59	3.12	--	8.82	7.67	--		6.25
1,1-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
tert-Butyl Alcohol	ND	3.12	--	ND	9.46	--		6.25
Methylene chloride	ND	3.12	--	ND	10.8	--		6.25
3-Chloropropene	ND	1.25	--	ND	3.91	--		6.25
Carbon disulfide	ND	1.25	--	ND	3.89	--		6.25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.25	--	ND	9.58	--		6.25
trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
1,1-Dichloroethane	ND	1.25	--	ND	5.06	--		6.25
Methyl tert butyl ether	ND	1.25	--	ND	4.51	--		6.25
2-Butanone	17.2	3.12	--	50.7	9.20	--		6.25
cis-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-04 D
Client ID: SSVS LEG 4 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 11:56
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	3.12	--	ND	11.2	--		6.25
Chloroform	5.04	1.25	--	24.6	6.10	--		6.25
Tetrahydrofuran	371	3.12	--	1090	9.20	--		6.25
1,2-Dichloroethane	ND	1.25	--	ND	5.06	--		6.25
n-Hexane	ND	1.25	--	ND	4.41	--		6.25
1,1,1-Trichloroethane	ND	1.25	--	ND	6.82	--		6.25
Benzene	ND	1.25	--	ND	3.99	--		6.25
Carbon tetrachloride	ND	1.25	--	ND	7.86	--		6.25
Cyclohexane	ND	1.25	--	ND	4.30	--		6.25
1,2-Dichloropropane	ND	1.25	--	ND	5.78	--		6.25
Bromodichloromethane	ND	1.25	--	ND	8.37	--		6.25
Xylene (Total)	ND	1.25	--	ND	5.43	--		6.25
1,4-Dioxane	ND	1.25	--	ND	4.50	--		6.25
Trichloroethene	2.58	1.25	--	13.9	6.72	--		6.25
2,2,4-Trimethylpentane	ND	1.25	--	ND	5.84	--		6.25
Heptane	ND	1.25	--	ND	5.12	--		6.25
cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--		6.25
4-Methyl-2-pentanone	ND	3.12	--	ND	12.8	--		6.25
trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--		6.25
1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--		6.25
Toluene	ND	1.25	--	ND	4.71	--		6.25
1,2-Dichloroethene (total)	ND	1.25	--	ND	4.96	--		6.25
2-Hexanone	ND	1.25	--	ND	5.12	--		6.25
Dibromochloromethane	ND	1.25	--	ND	10.6	--		6.25
1,3-Dichloropropene, Total	ND	1.25	--	ND	5.67	--		6.25
1,2-Dibromoethane	ND	1.25	--	ND	9.61	--		6.25

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

SAMPLE RESULTS

Lab ID: L2265474-04 D
Client ID: SSVS LEG 4 STACK EFFLUENT
Sample Location: 100 SOUTH 4TH ST, BROOKLYN

Date Collected: 11/17/22 11:56
Date Received: 11/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	7.61	1.25	--	51.6	8.48	--		6.25
Chlorobenzene	ND	1.25	--	ND	5.76	--		6.25
Ethylbenzene	ND	1.25	--	ND	5.43	--		6.25
p/m-Xylene	ND	2.50	--	ND	10.9	--		6.25
Bromoform	ND	1.25	--	ND	12.9	--		6.25
Styrene	ND	1.25	--	ND	5.32	--		6.25
1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--		6.25
o-Xylene	ND	1.25	--	ND	5.43	--		6.25
4-Ethyltoluene	ND	1.25	--	ND	6.15	--		6.25
1,3,5-Trimethylbenzene	ND	1.25	--	ND	6.15	--		6.25
1,2,4-Trimethylbenzene	ND	1.25	--	ND	6.15	--		6.25
Benzyl chloride	ND	1.25	--	ND	6.47	--		6.25
1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--		6.25
Hexachlorobutadiene	ND	1.25	--	ND	13.3	--		6.25

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	110		60-140
Bromochloromethane	112		60-140
chlorobenzene-d5	112		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/04/22 15:40

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1719167-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/04/22 15:40

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1719167-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylene (Total)	ND	0.200	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/04/22 15:40

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1719167-4								
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/04/22 15:40

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1719167-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/04/22 15:40

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1719167-4								
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1719167-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	**47**	Q	-		70-130	-		
Propane	**38**	Q	-		70-130	-		
Dichlorodifluoromethane	99		-		70-130	-		
Chloromethane	94		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97		-		70-130	-		
Methanol	80		-		70-130	-		
Vinyl chloride	99		-		70-130	-		
1,3-Butadiene	99		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	96		-		70-130	-		
Ethyl Alcohol	94		-		40-160	-		
Dichlorofluoromethane	83		-		70-130	-		
Vinyl bromide	96		-		70-130	-		
Acrolein	89		-		60-113	-		
Acetone	107		-		40-160	-		
Acetonitrile	90		-		70-130	-		
Trichlorofluoromethane	97		-		70-130	-		
iso-Propyl Alcohol	106		-		40-160	-		
Acrylonitrile	90		-		70-130	-		
Pentane	92		-		70-130	-		
Ethyl ether	80		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1719167-3								
1,1-Dichloroethene	100		-		70-130	-		
tert-Butyl Alcohol	101		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	101		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	100		-		70-130	-		
Methyl tert butyl ether	103		-		70-130	-		
Vinyl acetate	96		-		70-130	-		
2-Butanone	101		-		70-130	-		
cis-1,2-Dichloroethene	102		-		70-130	-		
Ethyl Acetate	120		-		70-130	-		
Chloroform	102		-		70-130	-		
Tetrahydrofuran	100		-		70-130	-		
2,2-Dichloropropane	93		-		70-130	-		
1,2-Dichloroethane	96		-		70-130	-		
n-Hexane	103		-		70-130	-		
Isopropyl Ether	86		-		70-130	-		
Ethyl-Tert-Butyl-Ether	92		-		70-130	-		
1,2-Dichloroethene (total)	100		-			-		
1,2-Dichloroethene (total)	100		-			-		
1,1,1-Trichloroethane	100		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 100 SOUTH 4TH ST.

Project Number: 13817

Lab Number: L2265474

Report Date: 12/05/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1719167-3								
1,1-Dichloropropene	93		-		70-130	-		
Benzene	93		-		70-130	-		
Carbon tetrachloride	104		-		70-130	-		
Cyclohexane	103		-		70-130	-		
Tertiary-Amyl Methyl Ether	98		-		70-130	-		
Dibromomethane	90		-		70-130	-		
1,2-Dichloropropane	101		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	114		-		70-130	-		
Trichloroethene	101		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Methyl Methacrylate	101		-		40-160	-		
Heptane	102		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	106		-		70-130	-		
trans-1,3-Dichloropropene	94		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	90		-		70-130	-		
2-Hexanone	103		-		70-130	-		
Dibromochloromethane	111		-		70-130	-		
1,2-Dibromoethane	103		-		70-130	-		
Butyl Acetate	93		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 100 SOUTH 4TH ST.

Project Number: 13817

Lab Number: L2265474

Report Date: 12/05/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1719167-3								
Octane	91		-		70-130	-		
Tetrachloroethene	104		-		70-130	-		
1,1,1,2-Tetrachloroethane	96		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	105		-		70-130	-		
p/m-Xylene	110		-		70-130	-		
Bromoform	113		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	114		-		70-130	-		
o-Xylene	108		-		70-130	-		
1,2,3-Trichloropropane	95		-		70-130	-		
Nonane (C9)	94		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	95		-		70-130	-		
o-Chlorotoluene	95		-		70-130	-		
n-Propylbenzene	98		-		70-130	-		
p-Chlorotoluene	95		-		70-130	-		
4-Ethyltoluene	109		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
tert-Butylbenzene	98		-		70-130	-		
1,2,4-Trimethylbenzene	111		-		70-130	-		
Decane (C10)	98		-		70-130	-		
Benzyl chloride	127		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817
Lab Number: L2265474
Report Date: 12/05/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1719167-3								
1,3-Dichlorobenzene	110		-		70-130	-		
1,4-Dichlorobenzene	113		-		70-130	-		
sec-Butylbenzene	95		-		70-130	-		
p-Isopropyltoluene	94		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
n-Butylbenzene	104		-		70-130	-		
1,2-Dibromo-3-chloropropane	111		-		70-130	-		
Undecane	104		-		70-130	-		
Dodecane (C12)	96		-		70-130	-		
1,2,4-Trichlorobenzene	123		-		70-130	-		
Naphthalene	117		-		70-130	-		
1,2,3-Trichlorobenzene	121		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Project Name: 100 SOUTH 4TH ST.

Lab Number: L2265474

Project Number: 13817

Report Date: 12/05/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2265474-01	SSVS LEG 1 STACK EFFLUENT	110	2.7L Can	11/11/22	405816	L2262508-06	Pass	-28.7	-3.0	-	-	-	-
L2265474-02	SSVS LEG 2 STACK EFFLUENT	2424	2.7L Can	11/11/22	405816	L2262508-06	Pass	-28.7	-5.3	-	-	-	-
L2265474-03	SSVS LEG 3 STACK EFFLUENT	510	2.7L Can	11/11/22	405816	L2262508-06	Pass	-28.9	-4.0	-	-	-	-
L2265474-04	SSVS LEG 4 STACK EFFLUENT	209	2.7L Can	11/11/22	405816	L2262508-06	Pass	-28.9	-1.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 11/09/22 03:43
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2262508

Project Number: CANISTER QC BAT **Report Date:** 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 11/09/22 03:43
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2262508
Report Date: 12/05/22

Air Canister Certification Results

Lab ID: L2262508-06
Client ID: CAN 2990 SHELF 10
Sample Location:

Date Collected: 11/08/22 11:00
Date Received: 11/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	102		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	93		60-140

Project Name: 100 SOUTH 4TH ST.
Project Number: 13817

Lab Number: L2265474
Report Date: 12/05/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2265474-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2265474-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2265474-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2265474-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2265474
Project Number:	13817	**Report Date:**	12/05/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2265474
Project Number:	13817	**Report Date:**	12/05/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	100 SOUTH 4TH ST.	**Lab Number:**	L2265474
Project Number:	13817	**Report Date:**	12/05/22

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:12052213:05

AIR ANALYSIS

PAGE 1 OF 1

Date Rec'd in Lab: 11/19/22

ALPHA Job #: L2216474

ALPHA ANALYTICAL

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: IMPACT
Address: 1000 PAGE AVE
Lyndhurst, NJ
Phone:
Fax:
Email: CConnolly@impactenvironmental.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 100 South 4th Street
Project Location: 100 S 4th street Brooklyn NY
Project #: 13817
Project Manager: Chris Connolly
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager) Chris Connolly

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-15 -LL	TO-15 SIM	APH Subset Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
2474-01	SSDS Leg 1 Stack effluent	11-17-22	1439	1440	-7.43	-.28	SV	TS	2.7L	110	GRB0110	X					
-02	SSDS Leg 2 Stack effluent	11-17-22	1244	1245	-19.83	-5.60	SV	TS	↓	2424	GRB 0042	X					
-03	SSDS Leg 3 Stack effluent	11-17-22	1040	1041	-22.21	-4.95	SV	TS	↓	510	GRB 0143	X					
-04	SSDS Leg 4 Stack effluent	11-16-22	1155	1156	-20.57	-5.46	SV	TS	↓	209	GRB 0142	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
	11/17/22 18:35	LQAT AAL	11/18 1204
LQAT Paul Mazzella	11/18 1742	Paul Mazzella	11/18/22 2030
CLAAL Paul Mazzella 11/18/22	11/19/22 0600	CLAAL Sam Aldrid	11/19/22 0330

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact
170 Keyland Court
Bohemia, NY 11716
Attn: Mr. Christopher Connolly
CConnolly@impactenvironmental.com

November 6, 2024

SUBJECT: 100 S 4th Street, Brooklyn, NY - Data Validation

Dear Mr. Connolly,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on October 14, 2024. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #59898:

SDG #	**Fraction**
GNC58289	VOC
L2265474	

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Analysis of Volatile Organic Compounds in Air Contained Canisters, SOP HW-31, Revision 6 (September 2016)
- USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005 (November 2020)

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
pgeng@lab-data.com
Project Manager/Senior Chemist

159 pages-ADV

Attachment 1

Category B EDD DUSR **LDC# 59898 (Impact Enviromental, Bohemia, NY / 100 S 4th Street, Brooklyn, NY)**

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (TO-15)																																	
Matrix:	Air/Water/Soil			A	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	GNC58289	10/14/24	11/04/24	25	0																																
B	L2265474	10/14/24	11/04/24	4	0																																
Total	TR/PG			29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29

Shaded cells indicate Category B review (all other cells are Category A review).

V:\LOGIN\Impact Environmental\100 S 4th Street\59898ST.wpd

Site:	100 South 4th Street, Brooklyn, NY
Laboratory:	Phoenix Environmental Laboratories, Inc., Manchester, CT
SDG:	GCN58289
Reviewer:	Josephine Go and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date:	November 6, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
IA-4E	CN58289	VOC
SV-DUP 1	CN58290	VOC
SV-2A	CN58291	VOC
SV-1A	CN58292	VOC
IA-2	CN58293	VOC
IA-4H	CN58294	VOC
SV-1B	CN58295	VOC
IS-4D	CN58296	VOC
IA-5	CN58297	VOC
IA-4F	CN58298	VOC
SV-5A	CN58299	VOC
IA-3	CN58300	VOC
IA-4G	CN58301	VOC
SV-3A	CN58302	VOC
SV-4	CN58303	VOC
SV-3B	CN58304	VOC
IA-1	CN58305	VOC
IA-4A	CN58306	VOC
OA-1	CN58307	VOC
IA-DUP 1	CN58308	VOC
SV-5B	CN58309	VOC
IA-4B	CN58310	VOC
IA-DUP 2	CN58311	VOC
IA-4C	CN58312	VOC
SV-DUP 2	CN58313	VOC

Associated QC Samples(s):

Field/Trip Blanks:	None Associated
Field Duplicate pair:	SV-2A and SV-DUP 1
	IA-4H and IA-DUP 2
	SV-4 and SV-DUP 2
	IA-1 and IA-DUP 1

The above-listed air samples were collected on March 10, 2023 and were analyzed for volatile organic compounds (VOC) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blank Analysis Results
- Surrogate Recoveries
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Target Analyte Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

The percent relative standard deviations (%RSD) were less than or equal to 30.0% for all analytes.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all analytes.

Continuing calibration:

The percent differences (%D) were less than or equal to 30.0% for all analytes.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

Although surrogates were not required by the method, surrogate analysis was performed by the laboratory. Surrogate recoveries (%R) were within QC limits.

Laboratory Duplicate Results

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

LCS Results

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Analyte	%R (70-130)	Validation Action
CN58105 LCS (SV-1B IA-4F SV-5A IA-3 IA-4G SV-3A SV-4 SV-3B IA-1 IA-4A OA-1 SV-5B SV-DUP 2)	Ethanol	136	J (all detects)
CN58105 LCS (SV-1B IA-4F SV-5A IA-3 IA-4G SV-3A SV-4 SV-3B IA-1 IA-4A OA-1 SV-5B SV-DUP 2)	1,2,4-Trichlorobenzene	135	None

No data were qualified due to high %Rs when the associated results were non-detected.

Internal Standards

All internal standard areas and retention times were within QC limits.

Field Duplicate Results

Samples SV-2A and SV-DUP 1, samples IA-4H and IA-DUP 2, samples SV-4 and SV-DUP 2, and samples IA-1 and IA-DUP 1 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Analyte	Concentration (ug/m³)		RPD
	SV-2A	SV-DUP 1	
Acetone	36.3	39.6	9
Carbon tetrachloride	0.31	0.31	0
cis-1,2-Dichloroethene	0.90	0.73	21
Dichlorodifluoromethane	2.35	2.32	1
Ethanol	650	668	3
Ethyl acetate	1.0U	1.04	Not comparable

Analyte	Concentration (ug/m³)		RPD
	SV-2A	SV-DUP 1	
Isopropyl alcohol	38.8	38.63	0
Methyl ethyl ketone	3.33	3.63	9
Tetrachloroethene	0.77	0.70	10
Tetrahydrofuran	8.16	8.69	6
Toluene	1.35	1.35	0
Trichloroethene	1.61	1.46	10
Trichlorofluoromethane	1.25	1.21	3

Analyte	Concentration (ug/m³)		RPD
	IA-4H	IA-DUP 2	
Acetone	23.4	24.0	3
Carbon tetrachloride	0.35	0.33	6
Chloroform	1.22	1.29	6
Chloromethane	1.11	1.17	5
Dichlorodifluoromethane	2.15	2.27	5
Ethanol	439	450	2
Ethyl acetate	1.08	1.03	5
Isopropyl alcohol	3.81	3.81	0
m,p-Xylenes	1.08	1.13	5
Methyl ethyl ketone	2.17	2.25	4
Tetrachloroethene	0.89	0.89	0
Tetrahydrofuran	1.29	1.36	5
Toluene	2.16	2.19	1
Trichloroethene	0.20	0.20U	Not comparable
Trichlorofluoromethane	0.222	1.28	141

Analyte	Concentration (ug/m³)		RPD
	SV-4	SV-DUP 2	
Acetone	18.4	18.7	2
Carbon tetrachloride	0.51	0.48	6
Chloroform	4.69	4.26	10
Dichlorodifluoromethane	2.45	2.47	1
Ethanol	150	154	3
Ethyl acetate	1.55	1.54	1
Isopropyl alcohol	7.54	7.98	6
m,p-Xylenes	1.52	1.28	17
Methyl ethyl ketone	6.19	5.92	4
Tetrachloroethene	0.92	0.90	2
Tetrahydrofuran	12.9	12.5	3
Toluene	2.43	2.33	4
Trichloroethene	2.41	2.24	7
Trichlorofluoromethane	1.36	1.27	7

Analyte	Concentration (ug/m³)		RPD
	IA-1	IA-DUP 1	
1,2,4-Trimethylbenzene	8.06	7.62	6
1,3,5-Trimethylbenzene	2.16	1.92	12

Analyte	Concentration (ug/m³)		RPD
	IA-1	IA-DUP 1	
4-Ethyltoluene	3.17	3.02	5
p-Isopropyltoluene	1.59	1.43	11
Acetone	110	110	0
Carbon tetrachloride	0.47	0.35	29
Chloromethane	1.25	1.11	12
Dichlorodifluoromethane	2.35	2.24	5
Ethanol	463	490	6
Ethyl acetate	2.95	3.19	8
Isopropyl alcohol	1750	1600	9
m,p-Xylenes	2.63	3.01	13
Methyl ethyl ketone	2.75	2.28	19
o-Xylene	1.15	1.16	1
Styrene	4.85	4.81	1
Tetrachloroethene	3.67	3.20	14
Tetrahydrofuran	1.66	1.57	6
Toluene	2.39	2.18	9
Trichloroethene	1.06	0.99	7
Trichlorofluoromethane	1.32	1.20	10

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SV-1B	15-fold dilution due to nature of sample matrix for isopropyl alcohol, tetrachloroethene, and trichloroethene

Sample Quantitation and Target Analyte Identification

Calculations were spot-checked; no discrepancies were noted.

All target analyte quantitations met validation criteria with the following exceptions:

Sample	Analyte	Finding	Criteria	Validation Action
IA-4E SV-DUP 1 SV-2A IA-4H IS-4D IA-5 IA-4F SV-5A IA-4G SV-4 SV-3B IA-4A SV-5B IA-4B IA-DUP 2 IA-4C SV-DUP 2	Ethanol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)
SV-1A	Isopropyl alcohol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)
IA-2 IA-1 IA-DUP 1	Acetone Ethanol Isopropyl alcohol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)
IA-3	Ethanol Isopropyl alcohol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of an analyte that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 59898A48a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/31/24
SDG #: GCN58289 Category B Page: 1 of 2
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: MG
2nd Reviewer: CL

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD ≤ 30% ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks (canisters	A / A	(by batch)
VI.	Field blanks	N	
VII.	Surrogate spikes	~~N~~ A	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	SW	LCS
X.	Field duplicates	SW	D = 2/3, 6/23, 15/25, 17/20
XI.	Internal standards	A	
XII.	Target analyte quantitation	SW	
XIII.	Target analyte identification	A	
XIV.	Leak Check Compounds	-	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

		Client ID		Lab ID	Matrix	Date
1	2	IA-4E		CN58289	Air	03/10/23
2	2	SV-DUP 1	D1	CN58290	Air	03/10/23
3	2	SV-2A	D1	CN58291	Air	03/10/23
4	2	SV-1A		CN58292	Air	03/10/23
5	2	IA-2		CN58293	Air	03/10/23
6	2	IA-4H	D2	CN58294	Air	03/10/23
7	1	SB-1B	15X - DDDD, AA, S	CN58295	Air	03/10/23
8	2	IS-4D		CN58296	Air	03/10/23
9	2	IA-5		CN58297	Air	03/10/23
10	1	IA-4F		CN58298	Air	03/10/23
11	1	SV-5A		CN58299	Air	03/10/23
12	1	IA-3		CN58300	Air	03/10/23
13	1	IA-4G		CN58301	Air	03/10/23
14	1	SV-3A	5X - WWW	CN58302	Air	03/10/23

LDC #: 59898A48a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/31/24
SDG #: GCN58289 Category B Page: 2 of 2
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: SVG
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15)

	Client ID		Lab ID	Matrix	Date
15 1	SV-4	D3	CN58303	Air	03/10/23
16 1	SV-3B		CN58304	Air	03/10/23
17 1	IA-1	D4	CN58305	Air	03/10/23
18 1	IA-4A		CN58306	Air	03/10/23
19 1	OA-1		CN58307	Air	03/10/23
20 2	IA-DUP 1	D4	CN58308	Air	03/10/23
21 1	SV-5B		CN58309	Air	03/10/23
22 2	IA-4B		CN58310	Air	03/10/23
23 2	IA-DUP 2	D2	CN58311	Air	03/10/23
24 2	IA-4C		CN58312	Air	03/10/23
25 1	SV-DUP 2	D3	CN58313	Air	03/10/23
26					
27					
28					

Notes:

1	667924 Blk (CN58105)						
2	617920 " (CN58109)						

(RL = MDL)

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Was canister pressure criteria met?	√			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	√			
Were all samples analyzed within the 24 hour clock criteria?	√			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 30%?	√			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?		√		
Was a canister blank analyzed for every canister?	√			
Was there contamination in the canister blanks?		√		
VI. Field Blanks				
Were field blanks identified in this SDG?		√		
Were target analytes detected in the field blanks?			√	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	√			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			√	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?		√		
Were the relative percent differences (RPD) within the QC limits?			√	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		√		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	√			
Were target analytes detected in the field duplicates?	√			
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	√			
Were retention times within ± 20.0 seconds from the associated calibration standard?	√			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	√			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the analyte?	√			
Were analyte quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	√			
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	√			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	√			
Were chromatogram peaks verified and accounted for?	√			
Were manual integrations reviewed and found acceptable?			√	
Did the laboratory provide before and after integration printouts?			√	
XIII. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?			√	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			√	
X1V. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. n-Octane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2. n-Propyl alcohol
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2. n-Pentane
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2. n-Decane
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2. Chlorodifluoromethane
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2. cis-Decahydronaphthalene
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2. trans-Decahydronaphthalene
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2. n-Nonane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2. n-Undecane
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2. Chloroprene
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2. n-Butanol
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2. n-Butyl acetate
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2. Nitrobenzene
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2. Methyl bromide
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2. Methyl chloride
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2. Methyl iodide
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylene	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane	R2. Methylene bromide
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2. Methyl isobutyl ketone
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2. 3-Chloro-1-propene
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2. 1,2-Dichloro-1,1,2-trifluoroethane
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

LDC #: 59898A48q

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed in this SDG?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Associated Samples	Qualifications
	CN58105 LCS	WWW	136		70-130	( )	7, 10-19, 21, 25, MB1 (Det)	J dets/p
		KKK	135			( )	(ND)	
						( )		
						( )		
						( )		
						( )		
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METHOD: GCMS VOA (EPA Method TO15)

Compound	Concentration (ug/m3)		RPD (≤35%)
	3	2	
F	36.3	39.6	9
O	0.31	0.31	0
QQQ	0.90	0.73	21
JJ	2.35	2.32	1
WWW	650	668	3
RRRR	1.0U	1.04	NC
DDDD	38.8	38.63	0
NN	3.33	3.63	9
AA	0.77	.70	10
PPPP	8.16	8.69	6
CC	1.35	1.35	0
S	1.61	1.46	10
KK	1.25	1.21	3

Compound	Concentration (ug/m3)		RPD (≤35%)
	6	23	
F	23.4	24.0	3
O	0.35	0.33	6
K	1.22	1.29	6
A	1.11	1.17	5
JJ	2.15	2.27	5
WWW	439	450	2
RRRR	1.08	1.03	5
DDDD	3.81	3.81	0
RRR	1.08	1.13	5
NN	2.17	2.25	4
AA	0.89	0.89	0
PPPP	1.29	1.36	5
CC	2.16	2.19	1
S	0.20	0.20U	NC
KK	0.222	1.28	141

Compound	Concentration (ug/m3)		RPD (≤35%)
	15	25	
F	18.4	18.7	2
O	0.51	0.48	6
K	4.69	4.26	10

METHOD: GCMS VOA (EPA Method TO15)

Compound	Concentration (ug/m3)		RPD (≤35%)
	15	25	
JJ	2.45	2.47	1
WWW	150	154	3
RRRR	1.55	1.54	1
DDDD	7.54	7.98	6
RRR	1.52	1.28	17
NN	6.19	5.92	4
AA	0.92	0.90	2
PPPP	12.9	12.5	3
CC	2.43	2.33	4
S	2.41	2.24	7
KK	1.36	1.27	7

Compound	Concentration (ug/m3)		RPD (≤35%)
	17	20	
DDD	8.06	7.62	6
AAA	2.16	1.92	12
VVV	3.17	3.02	5
GGG	1.59	1.43	11
F	110	110	0
O	0.47	0.35	29
A	1.25	1.11	12
JJ	2.35	2.24	5
WWW	463	490	6
RRRR	2.95	3.19	8
DDDD	1750	1600	9
RRR	2.63	3.01	13
NN	2.75	2.28	19
SSS	1.15	1.16	1
FF	4.85	4.81	1
AA	3.67	3.20	14
PPPP	1.66	1.57	6
CC	2.39	2.18	9
S	1.06	0.99	7
KK	1.32	1.20	10

LDC #: 59898A48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation and RLs

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the analyte?

(Y) N N/A Were analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Compound	Findings	Qualifications
		1, 2, 3, 6, 8, 9, 10, 11, 13,	WWW	> cal range	J dets /P
		15, 16, 18, 21, 22, 23, 24, 25			
		4	DDDD		
		5, 17, 20	F, WWW, DDDD		
		12	WWW, DDDD	✓	✓

Comments: No further dilutions provided.

LDC #: 59898A48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA Method TO15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$ — A_x = Area of Compound — A_{is} = Area of associated internal standard

average RRF = sum of the RRFs/number of standards — C_x = Concentration of compound, — C_{is} = Concentration of internal standard

%RSD = 100 * (S/X) — S= Standard deviation of the RRFs, — X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL CHEM 20	3/9/2023	Ethanol (BCM)	0.168	0.168	0.183	0.183	15.37	15.32
			Tetrachloroethene (DFB)	0.538	0.538	0.548	0.548	6.40	6.39
			Chlorobenzene (CBZ)	1.666	1.666	1.706	1.706	11.60	11.61
2	ICAL CHEM 39	3/13/2023	Ethanol (BCM)	0.177	0.177	0.172	0.172	9.81	9.77
			Tetrachloroethene (DFB)	0.661	0.661	0.652	0.652	5.09	5.07
			Chlorobenzene (CBZ)	2.011	2.011	1.973	1.973	5.07	5.07

LDC # 59898A48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	(IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	0313_02.D	0:00	Ethanol	(BCM)	0.183	0.196	0.196	7.1	7.1
	CHEM 20	13:32	Tetrachloroethene	(DFB)	0.548	0.498	0.498	9.1	9.1
			Chlorobenzene	(CBZ)	1.706	1.745	1.745	2.3	2.3
2	0313_02.D	03/13/23	Ethanol	(BCM)	0.172	0.166	0.166	3.5	3.5
	CHEM 39	13:44	Tetrachloroethene	(DFB)	0.652	0.594	0.594	8.9	8.9
			Chlorobenzene	(CBZ)	1.973	1.940	1.940	1.7	1.7

LDC # 59898A48a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The percent recoveries (%R) of surrogate compounds were recalculated for the compounds identified below using the following calculation:

Surrogate Found = (Area surr) (Conc IS) / (Area IS) (average RRF surr)
%Recovery: Surrogate Found/Surrogate Spiked * 100

Sample: 3

Surrogate	Surrogate Spiked (ug/L)	Surrogate Found (ug/L)	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
1,2-Dichloroethane-d4					
Toluene-d8					
4-Bromofluorobenzene	10.000	10.1250	101	101.3	0

LDC # 59898A48a

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 140-91250/1002,4

Compound	SA (ppbv)		SSC (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	10.00		10.31		103	103				
Trichloroethene	10.00		10.26		103	103				
Benzene	10.00		10.26		103	103				
Toluene	10.00		10.56		106	106				
Chlorobenzene	10.00		10.30		103	103				

LCS - full scan

LDC# 59898A48a

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

METHOD: GC/MS VOA (EPA Method TO15)

Analyte results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)(Is)(Vo)(MW)(DF)}{(Ais)(RRF)(Vi)(MV)}$$

Ax	Area of the analyte to be measured
Ais	Area of the internal standard
Is	Amount of internal standard added
Vi	Initial volume or weight of sample
Vo	Volume analyzed
RRF	Relative Response Factor (average) from the initial calibration
Df	Dilution Factor.
MW	Molecular weight
MV	Molar volume (24.45 at 25 deg C and 1 atm P; 22.4 at 20 deg C and 1 atm)

Sample #	Compound	Ax	Ai	Ci (ppbv)	RRF	DF	Vo (L)	Vi (L)	MW (g/mole)	MV (L)	Calculated Concentration (ug/m3)	Reported Concentration (ug/m3)	% Diff
1	Ethanol	6371448	300872	10.00	0.1830	1.00	-	-	46.07	24.45	2180.442	2180.00	0
									ppbv = 1157.192				

Site:	100 South 4th Street, Brooklyn, NY
Laboratory:	Alpha Analytical, Inc., Westborough, MA
SDG:	L2265474
Reviewer:	Josephine Go and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date:	November 6, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SSVS LEG 1 STACK EFFLUENT	L2265474-01	VOC
SSVS LEG 2 STACK EFFLUENT	L2265474-02	VOC
SSVS LEG 3 STACK EFFLUENT	L2265474-03	VOC
SSVS LEG 4 STACK EFFLUENT	L2265474-04	VOC

Associated QC Samples(s):

Field/Trip Blanks:	None Associated
Field Duplicate pair:	None Associated

The above-listed air samples were collected on November 17, 2022 and were analyzed for volatile organic compounds (VOC) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.
The organic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blank Analysis Results
- Surrogate Recoveries
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Target Analyte Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

The percent relative standard deviations (%RSD) were less than or equal to 30.0% for all analytes with the following exceptions:

Date	Standard ID	Analyte	%RSD	Associated Samples	Validation Action
11/30/22	ICAL19537	Benzyl chloride	30.88	SSVS LEG 1 STACK EFFLUENT SSVS LEG 2 STACK EFFLUENT SSVS LEG 3 STACK EFFLUENT SSVS LEG 4 STACK EFFLUENT	UJ (all non-detects)

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all analytes with the following exceptions:

Date	Standard ID	Analyte	%RSD	Associated Samples	Validation Action
12/01/22	R1918558	Benzyl chloride	31.1	SSVS LEG 1 STACK EFFLUENT SSVS LEG 2 STACK EFFLUENT SSVS LEG 3 STACK EFFLUENT SSVS LEG 4 STACK EFFLUENT	UJ (all non-detects)

Continuing calibration:

The percent differences (%D) were less than or equal to 30.0% for all analytes.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

Surrogates were not required by the method.

Laboratory Duplicate Results

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

LCS Results

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

Internal Standards

All internal standard areas and retention times were within QC limits.

Field Duplicate Results

No field duplicates were identified in this SDG.

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SSVS LEG 1 STACK EFFLUENT	2.941-fold dilution due to nature of sample matrix
SSVS LEG 2 STACK EFFLUENT	20.56-fold dilution due to nature of sample matrix
SSVS LEG 4 STACK EFFLUENT	6.25-fold dilution due to nature of sample matrix

Sample Quantitation and Target Analyte Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of an analyte that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 59898B48a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/31/24
SDG #: L2265474 Category B Page: 1 of 1
Laboratory: Alpha Analytical, Inc., Westborough, MA Reviewer: NV
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	SW/SW	RSD ≤ 30% ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks (canister	A/A	(by batch)
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	
XIII.	Target analyte identification	A	
XIV.	~~Leak Check Compounds~~	—	
XV.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
SW = See worksheet FB = Field blank EB = Equipment blank

	Client ID		Lab ID	Matrix	Date
1	SSVS LEG 1 STACK EFFLUENT	2.941X	L2265474-01	Air	11/17/22
2	SSVS LEG 2 STACK EFFLUENT	20.56X	L2265474-02	Air	11/17/22
3	SSVS LEG 3 STACK EFFLUENT		L2265474-03	Air	11/17/22
4	SSVS LEG 4 STACK EFFLUENT	6.25X	L2265474-04	Air	11/17/22
5					
6					
7					
8					
9					

Notes:

—	WG1719167-4 BLANKS						

(No results < RL, results reported to RL)

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Was canister pressure criteria met?	√			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	√			
Were all samples analyzed within the 24 hour clock criteria?	√			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 30%?		√		
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	√			
Were all percent differences (%D) ≤ 30%?		√		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?		√		
Was a canister blank analyzed for every canister?	√			
Was there contamination in the canister blanks?		√		
VI. Field Blanks				
Were field blanks identified in this SDG?		√		
Were target analytes detected in the field blanks?			√	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?			√	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			√	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?		√		
Were the relative percent differences (RPD) within the QC limits?			√	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		√		
Were target analytes detected in the field duplicates?			√	
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	√			
Were retention times within ± 20.0 seconds from the associated calibration standard?	√			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	√			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the analyte?	√			
Were analyte quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	√			
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	√			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	√			
Were chromatogram peaks verified and accounted for?	√			
Were manual integrations reviewed and found acceptable?			√	
Did the laboratory provide before and after integration printouts?			√	
XIII. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?			√	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			√	
X1V. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. n-Octane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2. n-Propyl alcohol
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2. n-Pentane
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2. n-Decane
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2. Chlorodifluoromethane
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2. cis-Decahydronaphthalene
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2. trans-Decahydronaphthalene
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2. n-Nonane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2. n-Undecane
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2. Chloroprene
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2. n-Butanol
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2. n-Butyl acetate
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2. Nitrobenzene
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2. Methyl bromide
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2. Methyl chloride
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2. Methyl iodide
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylene	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane	R2. Methylene bromide
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2. Methyl isobutyl ketone
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2. 3-Chloro-1-propene
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2. 1,2-Dichloro-1,1,2-trifluoroethane
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

LDC #: 59898 B48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?

(Y) N N/A Were all percent relative standard deviations (%RSD) ≤ 30%?

#	Date	Standard ID	Compound	Finding %RSD (Limit: <30.0%)	Associated Samples	Qualifications
	11/30/22	ICAL19537	MMMM	30.88	All (ND)	J/UJ/P

LDC #: 59898 B48Q

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all %D within the validation criteria of ≤30 %D?

#	Date	Standard ID	Compound	Finding %D (Limit: <30.0%)	Associated Samples	Qualifications
	12/01/22	R 1918558	MMMM	31.1	All (ND)	J/UJ/P

LDC #: 59898B48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (STD 10)	Recalculated RRF (STD 10)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL AIRLAB19	11/30/2022	Ethanol (BCM)	0.4070	0.4068	0.3982	0.3982	14.90	14.87
			Trichloroethene (DFB)	0.1980	0.1983	0.2039	0.2039	8.27	8.31
			Tetrachloroethene (CBZ)	1.2230	1.2229	1.2334	1.2334	8.89	8.91

LDC # 59898B48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	(IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	R1918638	12/04/22	Ethanol	(BCM)	0.398	0.413	0.413	3.8	3.8
	AIRLAB19		Trichloroethene	(DFB)	0.204	0.192	0.192	5.9	5.9
			Tetrachloroethene	(CBZ)	1.233	1.179	1.179	4.4	4.4

LDC # 59898B48a

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA Method TO15)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 140-91250/1002,4

Compound	SA (ppbv)		SSC (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	10.00		9.98		100	100				
Trichloroethene	10.00		10.10		101	101				
Benzene	10.00		9.34		93	93				
Toluene	10.00		9.70		97	97				
Chlorobenzene	10.00		10.40		104	104				

LCS - full scan

LDC# 59898B48a

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

METHOD: GC/MS VOA (EPA Method TO15)

Analyte results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)(Is)(Vo)(MW)(DF)}{(Ais)(RRF)(Vi)(MV)}$$

Ax	Area of the analyte to be measured
Ais	Area of the internal standard
Is	Amount of internal standard added
Vi	Initial volume or weight of sample
Vo	Volume analyzed
RRF	Relative Response Factor (average) from the initial calibration
Df	Dilution Factor.
MW	Molecular weight
MV	Molar volume (24.45 at 25 deg C and 1 atm P; 22.4 at 20 deg C and 1 atm)

Sample #	Compound	Ax	Ai	Ci (ppbv)	RRF	DF	Vo (L)	Vi (L)	MW (g/mole)	MV (L)	Calculated Concentration (ug/m3)	Reported Concentration (ug/m3)	% Diff
1	TCE	1030928	889624	10.00	0.2039	2.94	250.00	0.085	131.39	24.47	897.487	897.00	0
									ppbv = 167.147				

PHOENIX
Environmental Laboratories, Inc.

Tuesday, April 16, 2024

Attn: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ39454**
Sample ID#s: CQ39454

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ39454

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 16, 2024

SDG I.D.: GCQ39454

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 16, 2024

SDG I.D.: GCQ39454

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ39454	Volatiles (TO15)	03/26/24	03/30/24	03/30/24	KCA	Y

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

April 16, 2024

SDG I.D.: GCQ39454

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Sample Id Cross Reference

April 16, 2024

SDG I.D.: GCQ39454

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
OA-1	CQ39454	AIR

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 16, 2024

FOR: Attn: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:30
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	244				

Laboratory Data

SDG ID: GCQ39454
Phoenix ID: CQ39454

Project ID: 100 S 4TH ST
Client ID: OA-1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	2.35	*0.421*	0.421	5.58	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: OA-1

Phoenix I.D.: CQ39454

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.070	*0.032*	0.032	0.44	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	ND	*0.205*	0.205	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	0.491	*0.485*	0.485	1.01	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.420	*0.202*	0.202	2.08	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	7.66	*0.531*	0.531	14.4	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND	*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	1.22	*0.407*	0.407	3.00	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND	*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	ND	*0.037*	0.037	ND	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND	*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	0.390	*0.266*	0.266	1.47	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	ND	*0.037*	0.037	ND	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.199	*0.178*	0.178	1.12	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	105	*%*	%	105	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	96	*%*	%	96	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	98	*%*	%	98	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	97	*%*	%	97	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: OA-1

Phoenix I.D.: CQ39454

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 16, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Canister Sampling Information

April 16, 2024

FOR: Attn: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ39454

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
OA-1	CQ39454	244	6.0L	3513	03/22/24	-30	-4	3	3.12	3.9	-30	-5	03/26/24 12:05	03/26/24 12:30

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 16, 2024

QA/QC Data

SDG I.D.: GCQ39454

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724676 (ppbv), QC Sample No: CQ39155 (CQ39454)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	98	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	100	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	101	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	125	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	115	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	99	5.73	5.82	1.24	1.26	1.6	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	111	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	102	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	113	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	96	18.7	18.2	7.87	7.67	2.6	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	112	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	103	0.47	0.47	0.074	0.075	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	100	1.57	1.45	0.321	0.297	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	104	2.83	2.73	0.715	0.690	3.6	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	104	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	106	2.05	2.14	0.415	0.433	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ39454

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethanol	ND	0.530	ND	1.00	75	337 E	339	179 E	180	0.6	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	104	1.47	1.47	0.409	0.407	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	85	8.28	8.18	3.37	3.33	1.2	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	103	1.93	1.90	0.655	0.643	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	98	ND	ND	ND	ND	NC	70 - 130	25
Naphthalene	ND	0.200	ND	1.05	126	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	101	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	111	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	101	270	266	39.9	39.2	1.8	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	103	5.45	5.45	1.85	1.85	0.0	70 - 130	25
Toluene	ND	0.270	ND	1.02	106	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	102	2.39	2.37	0.445	0.442	0.7	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	102	1.62	1.60	0.288	0.285	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	101	%	101	%	103	108	107	108	107	NC	70 - 130	25
% IS-1,4-Difluorobenzene	106	%	106	%	98	99	99	99	99	NC	60 - 140	25
% IS-Bromochloromethane	105	%	105	%	95	100	100	100	100	NC	60 - 140	25
% IS-Chlorobenzene-d5	106	%	106	%	105	98	98	98	98	NC	60 - 140	25

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 16, 2024

Tuesday, April 16, 2024

Criteria: NY: AIRIA, AIRSV

State: NY

Sample Criteria Exceedances Report

GCQ39454 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CQ39454	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.070	0.032	0.032	0.032	ppbv

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

24hr Outdoor Air

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817. Page 1 of 1

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to: Chris Connolly	Project Name: 100 S 4th St.	Data Format: (Circle) (Equis) (Excel) Other:
Customer: Impact Env.	Invoice to: Impact.	Requested Deliverable: RCP (ASP CAT B)
Address: 170 Keyland Ct.		MCP NJ Deliverables
Bohemia, NY 11716	Sampled by: CJC	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES		
39454	OA-1	244	6L	-30	-4	3513	3	1205	1230	3/26	-30	-5	✓			✓		

Relinquished by:	Accepted by:	Date:	Time:	
		3/29/24	1228	I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:
		3/29/24	17:00	Signature: Date:

State Where Samples Collected:

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☐

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle) CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial **Sub-slab** Residential Industrial

GCQ39454

Shannon Wilhelm

From: Michael Lapman
Sent: Friday, March 29, 2024 2:03 PM
To: Shannon Wilhelm
Subject: FW: Impact
Attachments: 20240329115651.pdf; 20240329115636.pdf

Impact—ICL:

3-Day Rush TAT and compare to:

- NY Restricted
- NY Unrestricted
- NY Commercial

Thank you!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com

This message, including any attachments hereto, may contain privileged or confidential information and is sent solely for the attention and use of the intended addressee(s). If you are not an intended addressee, you may neither use this message nor copy or deliver it to anyone. In such case, you should immediately destroy this message and kindly notify the sender by reply email. Thank you.

From: Shannon Wilhelm <shannon@phoenixlabs.com>
Date: Friday, March 29, 2024 at 1:00 PM
To: Michael Lapman <michael@phoenixlabs.com>
Subject: Impact

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester CT 06040
860-645-1102

Wednesday, April 17, 2024

Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ38540**
Sample ID#s: CQ38540 - CQ38541

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ38540

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 17, 2024

SDG I.D.: GCQ38540

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 17, 2024

SDG I.D.: GCQ38540

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ38540	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38541	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

April 17, 2024

SDG I.D.: GCQ38540

Version 2: Data package was added on.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Sample Id Cross Reference

April 17, 2024

SDG I.D.: GCQ38540

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
SV-4	CQ38540	AIR
SV-DUP	CQ38541	AIR

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 17, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	7:30
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28576				

Laboratory Data

SDG ID: GCQ38540
Phoenix ID: CQ38540

Project ID: 100 S 4TH ST
Client ID: SV-4

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	22.8	*2.11*	2.11	54.1	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-4

Phoenix I.D.: CQ38540

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	126	*2.66*	2.66	237	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	3.53	*1.15*	1.15	15.3	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	40.0	*2.04*	2.04	98.3	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	14.6	*1.15*	1.15	63.4	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	3.85	*1.15*	1.15	16.7	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	ND	*0.184*	0.184	ND	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	ND	*0.185*	0.185	ND	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	104	*%*	%	104	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	91	*%*	%	91	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	94	*%*	%	94	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	94	*%*	%	94	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-4

Phoenix I.D.: CQ38540

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 17, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 17, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	49251				

Laboratory Data

SDG ID: GCQ38540
Phoenix ID: CQ38541

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	25.6	*2.11*	2.11	60.8	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Phoenix I.D.: CQ38541

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	149	*2.66*	2.66	281	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	3.93	*1.15*	1.15	17.1	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	47.2	*2.04*	2.04	116	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	15.6	*1.15*	1.15	67.7	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	2.16	*1.70*	1.70	6.37	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	4.22	*1.15*	1.15	18.3	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	ND	*0.184*	0.184	ND	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	ND	*0.185*	0.185	ND	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	100	*%*	%	100	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	101	*%*	%	101	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	98	*%*	%	98	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	96	*%*	%	96	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Phoenix I.D.: CQ38541

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 17, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Canister Sampling Information

April 17, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ38540

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SV-4	CQ38540	28576	6.0L	4965	03/23/24	-30	-1	7.5	8.0	6.5	-28	-1	03/26/24 11:40	03/26/24 07:30
SV-DUP	CQ38541	49251	6.0L	4965	03/23/24	-30	-1	7.5			-28		03/26/24 00:00	03/26/24 00:00

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 17, 2024

QA/QC Data

SDG I.D.: GCQ38540

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724512 (ppbv), QC Sample No: CQ37765 (CQ38541 (5X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.010	ND	0.07	92	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.100	ND	0.55	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.005	ND	0.03	95	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.010	ND	0.05	97	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.100	ND	0.40	97	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.010	ND	0.04	99	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.067	ND	0.50	73	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.102	ND	0.50	88	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.005	ND	0.04	99	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.100	ND	0.60	92	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.018	ND	0.07	95	0.08	0.08	0.021	0.020	NC	70 - 130	25
1,2-dichloropropane	ND	0.013	ND	0.06	99	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.072	ND	0.50	99	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.102	ND	0.50	93	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.226	ND	0.50	99	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.100	ND	0.60	93	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.100	ND	0.60	92	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.139	ND	0.50	86	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.100	ND	0.47	98	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.122	ND	0.50	96	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.102	ND	0.50	95	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.091	ND	0.50	85	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.122	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.211	ND	0.50	95	13.4	13.7	5.63	5.77	2.5	70 - 130	25
Acrylonitrile	ND	0.231	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.157	ND	0.50	96	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.097	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.010	ND	0.07	98	0.07	0.07	0.011	0.011	NC	70 - 130	25
Bromoform	ND	0.050	ND	0.52	92	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.100	ND	0.39	94	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.161	ND	0.50	99	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.050	ND	0.31	96	0.43	0.45	0.069	0.071	NC	70 - 130	25
Chlorobenzene	ND	0.100	ND	0.46	96	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.100	ND	0.26	94	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.100	ND	0.49	96	0.50	0.53	0.103	0.108	NC	70 - 130	25
Chloromethane	ND	0.100	ND	0.21	100	1.21	1.26	0.585	0.609	4.0	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.025	ND	0.10	99	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.100	ND	0.45	99	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.145	ND	0.50	94	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.005	ND	0.04	96	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.100	ND	0.49	101	2.44	2.39	0.493	0.483	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ38540

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethanol	ND	0.266	ND	0.50	76	234	218	124	116	6.7	70 - 130	25
Ethyl acetate	ND	0.139	ND	0.50	97	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.115	ND	0.50	96	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.122	ND	0.50	101	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.047	ND	0.50	102	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.142	ND	0.50	101	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.204	ND	0.50	78	388	403	158	164	3.7	70 - 130	25
Isopropylbenzene	ND	0.102	ND	0.50	92	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.115	ND	0.50	99	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.170	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.139	ND	0.50	96	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.100	ND	0.35	99	0.38	0.37	0.110	0.108	NC	70 - 130	25
Naphthalene	ND	2.50	ND	13.1	64	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.091	ND	0.50	82	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.115	ND	0.50	94	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.291	ND	0.50	100	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.091	ND	0.50	90	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.118	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.100	ND	0.68	96	ND	ND	ND	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.170	ND	0.50	98	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.133	ND	0.50	99	0.68	0.71	0.180	0.188	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.100	ND	0.40	99	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.100	ND	0.45	99	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.025	ND	0.13	94	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.100	ND	0.56	100	1.10	1.12	0.196	0.199	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.100	ND	0.77	98	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.010	ND	0.03	100	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	104	%	104	%	98	102	104	102	104	NC	70 - 130	25
% IS-1,4-Difluorobenzene	107	%	107	%	96	96	94	96	94	NC	60 - 140	25
% IS-Bromochloromethane	106	%	106	%	94	92	89	92	89	NC	60 - 140	25
% IS-Chlorobenzene-d5	106	%	106	%	102	98	95	98	95	NC	60 - 140	25
QA/QC Batch 724507 (ppbv), QC Sample No: CQ38152 (CQ38540 (5X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	100	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	101	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	98	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	123	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	115	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	107	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	100	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	107	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	111	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	104	0.99	1.01	0.212	0.217	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ38540

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
2-Hexanone(MBK)	ND	0.240	ND	0.98	109	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	113	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	103	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	98	36.1	36.3	15.2	15.3	0.7	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	105	2.79	2.79	0.875	0.873	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	114	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	102	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	102	0.49	0.48	0.078	0.077	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	100	2.71	2.77	0.556	0.568	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	105	ND	1.04	ND	0.505	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	105	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	105	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	106	1.87	2.04	0.379	0.412	NC	70 - 130	25
Ethanol	ND	0.530	ND	1.00	77	49.7	51.2	26.4	27.2	3.0	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	102	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	122	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	108	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	85	2.04	2.05	0.831	0.834	NC	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	114	1.58	1.58	0.363	0.364	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	100	ND	ND	ND	ND	NC	70 - 130	25
Naphthalene	ND	0.200	ND	1.05	128	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	110	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	101	0.39	0.39	0.058	0.057	NC	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.270	ND	1.02	107	3.99	4.07	1.06	1.08	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	103	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	105	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	103	1.11	1.12	0.198	0.200	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	100	%	100	%	102	105	105	105	105	NC	70 - 130	25
% IS-1,4-Difluorobenzene	101	%	101	%	99	95	91	95	91	NC	60 - 140	25
% IS-Bromochloromethane	100	%	100	%	94	94	92	94	92	NC	60 - 140	25
% IS-Chlorobenzene-d5	103	%	103	%	104	96	93	96	93	NC	60 - 140	25

QA/QC Data

SDG I.D.: GCQ38540

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 17, 2024

Wednesday, April 17, 2024

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCQ38540 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

24hr Sub-Slab.

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817 Page of

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to: Chris Connolly	Project Name: 100 S 4M St.	Data Format: (Circle) Equis Excel Other:	
Customer: Impact Env.	Invoice to: Impact.	Requested Deliverable: RCP ASP CAT B	
Address: 170 Keyland Ct.		MCP NJ Deliverables	
Bohemia, NY 11716	Sampled by: CJC.	Quote Number:	

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES	
38540	SV-4	28576	6L	-30	-1	4965	7.5	11:40	07:30	3/26	-28	-1		✓		✓	
38541	SV-DUP	49251	6L	-30	-1									✓		✓	

Relinquished by:	Accepted by:	Date:	Time:	
		3/28/24	1340	I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:
3/28/24		3/28/24	17:30	Signature: Date:

State Where Samples Collected:

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☐

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C	Indoor Air: Residential	Indoor Air: Residential	Vapor Intrusion	Indoor Air Residential	Indoor Air Residential
TAC RES	Ind/Commercial	Ind/Commercial		Non-residential	Industrial
SVVC I/C	Soil Gas: Residential	Soil Gas: Residential			Sub-slab Residential
SVVC RES	Ind/Commercial	Ind/Commercial			Industrial
GWV I/C					
GWV CES					

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 18, 2024

Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ39445**
Sample ID#s: CQ39445 - CQ39448

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ39445

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 18, 2024

SDG I.D.: GCQ39445

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 18, 2024

SDG I.D.: GCQ39445

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ39445	Volatiles (TO15)	03/26/24	03/30/24	03/30/24	KCA	Y
CQ39446	Volatiles (TO15)	03/26/24	03/30/24	03/30/24	KCA	Y
CQ39447	Volatiles (TO15)	03/26/24	03/30/24	03/30/24	KCA	Y
CQ39448	Volatiles (TO15)	03/26/24	03/30/24	03/30/24	KCA	Y

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

April 18, 2024

SDG I.D.: GCQ39445

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 18, 2024

SDG I.D.: GCQ39445

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
SSDS STACK #1	CQ39445	AIR
SSDS STACK #2	CQ39446	AIR
SSDS STACK #3	CQ39447	AIR
SSDS STACK #4	CQ39448	AIR

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 18, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC/HB	03/26/24	9:35
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0682				

Laboratory Data

SDG ID: GCQ39445
Phoenix ID: CQ39445

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	2.72	*0.183*	0.183	14.8	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	1.84	*0.421*	0.421	4.37	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST

Client ID: SSDS STACK #1

Phoenix I.D.: CQ39445

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.105	*0.032*	0.032	0.66	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	2.87	*0.205*	0.205	14.0	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	5.91	*0.051*	0.051	23.4	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.424	*0.202*	0.202	2.10	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	2.54	*0.531*	0.531	4.78	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND	*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	0.605	*0.407*	0.407	1.49	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	1.31	*0.339*	0.339	3.86	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND	*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	135	*0.184*	0.184	915	*1.25*	1.25	03/30/24	KCA	5	
Tetrahydrofuran	1.00	*0.339*	0.339	2.95	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	ND	*0.266*	0.266	ND	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	193	*0.185*	0.185	1040	*0.99*	0.99	03/30/24	KCA	5	
Trichlorofluoromethane	0.221	*0.178*	0.178	1.24	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	98	*%*	%	98	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	95	*%*	%	95	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	98	*%*	%	98	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	102	*%*	%	102	*%*	%	03/30/24	KCA	1	
% Bromofluorobenzene (5x)	98	*%*	%	98	*%*	%	03/30/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	87	*%*	%	87	*%*	%	03/30/24	KCA	5	

Ver 2

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #1

Phoenix I.D.: CQ39445

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
% IS-Bromochloromethane (5x)	90	%	%	90	%	%	03/30/24	KCA	5
% IS-Chlorobenzene-d5 (5x)	91	%	%	91	%	%	03/30/24	KCA	5

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 18, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 18, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC/HB	03/26/24	9:45
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0647				

Laboratory Data

SDG ID: GCQ39445
Phoenix ID: CQ39446

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	4.37	*0.421*	0.421	10.4	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST

Client ID: SSDS STACK #2

Phoenix I.D.: CQ39446

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.080	*0.032*	0.032	0.50	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	0.460	*0.205*	0.205	2.24	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	0.074	*0.051*	0.051	0.29	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.488	*0.202*	0.202	2.41	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	13.2	*0.531*	0.531	24.9	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND	*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	2.45	*0.407*	0.407	6.02	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	0.356	*0.339*	0.339	1.05	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND	*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	1.96	*0.037*	0.037	13.3	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	0.390	*0.339*	0.339	1.15	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	0.347	*0.266*	0.266	1.31	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	5.09	*0.037*	0.037	27.3	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.228	*0.178*	0.178	1.28	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	101	*%*	%	101	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	89	*%*	%	89	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	93	*%*	%	93	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	92	*%*	%	92	*%*	%	03/30/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #2

Phoenix I.D.: CQ39446

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 18, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 18, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC/HB	03/26/24	10:55
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0678				

Laboratory Data

SDG ID: GCQ39445
Phoenix ID: CQ39447

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	6.87	*0.421*	0.421	16.3	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST

Client ID: SSDS STACK #3

Phoenix I.D.: CQ39447

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.078	*0.032*	0.032	0.49	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	0.692	*0.205*	0.205	3.38	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.472	*0.202*	0.202	2.33	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	37.8	*0.531*	0.531	71.2	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND	*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	3.73	*0.407*	0.407	9.16	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	0.489	*0.339*	0.339	1.44	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND	*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.467	*0.037*	0.037	3.17	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND	*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	ND	*0.266*	0.266	ND	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	1.37	*0.037*	0.037	7.36	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.223	*0.178*	0.178	1.25	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	100	*%*	%	100	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	90	*%*	%	90	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	94	*%*	%	94	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	92	*%*	%	92	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #3

Phoenix I.D.: CQ39447

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 18, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 18, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC/HB	03/26/24	11:05
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0681				

Laboratory Data

SDG ID: GCQ39445
Phoenix ID: CQ39448

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #4

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	10.2	*0.421*	0.421	24.2	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST

Client ID: SSDS STACK #4

Phoenix I.D.: CQ39448

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.086		*0.032*	0.032	0.54	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	4.38		*0.205*	0.205	21.4	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.487		*0.202*	0.202	2.41	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	103	E	*0.531*	0.531	194	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	3.24		*0.407*	0.407	7.96	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	0.456		*0.339*	0.339	1.34	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.377		*0.037*	0.037	2.56	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	ND		*0.266*	0.266	ND	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	0.555		*0.037*	0.037	2.98	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.488		*0.178*	0.178	2.74	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	92		*%*	%	92	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	94		*%*	%	94	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	95		*%*	%	95	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: SSDS STACK #4

Phoenix I.D.: CQ39448

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

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Phyllis Shiller, Laboratory Director

April 18, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Canister Sampling Information

April 18, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ39445

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SSDS STACK #1	CQ39445	0682	6.0L		03/22/24	-30	-2				-30	-4	03/26/24 09:30	03/26/24 09:35
SSDS STACK #2	CQ39446	0647	6.0L		03/22/24	-30	-4				-30	-4	03/26/24 09:40	03/26/24 09:45
SSDS STACK #3	CQ39447	0678	6.0L		03/22/24	-30	-3				-30	-4	03/26/24 10:50	03/26/24 10:55
SSDS STACK #4	CQ39448	0681	6.0L		03/22/24	-30	-2				-30	-4	03/26/24 11:08	03/26/24 01:15

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

April 18, 2024

QA/QC Data

SDG I.D.: GCQ39445

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724683 (ppbv), QC Sample No: CQ39160 (CQ39445 (5X))												
Volatiles												
Tetrachloroethene	ND	0.037	ND	0.25	100	15.0	15.9	2.22	2.35	5.7	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	103	0.39	0.40	0.073	0.074	NC	70 - 130	25
% Bromofluorobenzene	98	%	98	%	99	103	102	103	102	NC	70 - 130	25
% IS-1,4-Difluorobenzene	94	%	94	%	103	87	82	87	82	NC	60 - 140	25
% IS-Bromochloromethane	94	%	94	%	97	90	86	90	86	NC	60 - 140	25
% IS-Chlorobenzene-d5	93	%	93	%	109	91	89	91	89	NC	60 - 140	25
QA/QC Batch 724711 (ppbv), QC Sample No: CQ39445 (CQ39445, CQ39446, CQ39447, CQ39448)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	104	14.8	15.4	2.72	2.82	3.6	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	102	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	105	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	118	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	119	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	99	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	114	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	108	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	111	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	63	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	109	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	103	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	117	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	93	4.37	4.46	1.84	1.88	NC	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	115	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	104	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	103	0.66	0.68	0.105	0.108	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ39445

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Chloroethane	ND	0.380	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
Chloroform	ND	0.200	ND	0.98	101	14.0	14.0	2.87	2.86	0.3	70 - 130	25	
Chloromethane	ND	0.480	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25	
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	105	23.4	23.3	5.91	5.88	0.5	70 - 130	25	
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25	
Cyclohexane	ND	0.290	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25	
Dibromochloromethane	ND	0.120	ND	1.02	102	ND	ND	ND	ND	NC	70 - 130	25	
Dichlorodifluoromethane	ND	0.200	ND	0.99	108	2.10	2.22	0.424	0.450	NC	70 - 130	25	
Ethanol	ND	0.530	ND	1.00	45	4.78	4.90	2.54	2.60	NC	70 - 130	25	I
Ethyl acetate	ND	0.280	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.240	ND	0.98	114	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.280	ND	0.99	115	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.410	ND	1.01	66	1.49	1.50	0.605	0.612	NC	70 - 130	25	I
Isopropylbenzene	ND	0.200	ND	0.98	102	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.340	ND	1.00	103	3.86	3.92	1.31	1.33	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	111	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.860	ND	2.99	110	ND	ND	ND	ND	NC	70 - 130	25	
Naphthalene	ND	0.200	ND	1.05	122	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.180	ND	0.99	109	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25	
Propylene	ND	0.580	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.230	ND	0.98	120	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	102	1150	1210	169	178	5.2	70 - 130	25	
Tetrahydrofuran	ND	0.340	ND	1.00	113	2.95	2.93	1.00	0.994	NC	70 - 130	25	
Toluene	ND	0.270	ND	1.02	110	ND	ND	ND	ND	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	103	1270	1340	237	249	4.9	70 - 130	25	
Trichlorofluoromethane	ND	0.180	ND	1.01	103	1.24	1.18	0.221	0.211	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.130	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.078	ND	0.20	103	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	97	%	97	%	95	98	98	98	98	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	95	%	95	%	108	95	91	95	91	NC	60 - 140	25	
% IS-Bromochloromethane	98	%	98	%	104	98	97	98	97	NC	60 - 140	25	
% IS-Chlorobenzene-d5	95	%	95	%	115	102	98	102	98	NC	60 - 140	25	

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 18, 2024

Thursday, April 18, 2024

Criteria: NY: AIRIA, AIRSV

State: NY

Sample Criteria Exceedances Report

GCQ39445 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CQ39445	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.105	0.032	0.032	0.032	ppbv
CQ39445	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	5.91	0.051	0.051	0.051	ppbv
CQ39445	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	135	0.184	0.443	0.443	ppbv
CQ39445	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	193	0.185	0.037	0.037	ppbv
CQ39445	$AIR_NYTO15	1,1,1-Trichloroethane	NY / Air Guideline Values / Indoor Air	2.72	0.183	0.55	0.55	ppbv
CQ39445	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	5.91	0.051	1.51	1.51	ppbv
CQ39445	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Sub-Slab Vapor	135	0.184	14.8	14.8	ppbv
CQ39445	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	193	0.185	1.12	1.12	ppbv
CQ39445	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1040	1.0	0.2	0.2	ug/m3
CQ39446	$AIR_NYTO15	Cis-1,2-Dichloroethene	NY / Air Guideline Values / Indoor Air	0.074	0.051	0.051	0.051	ppbv
CQ39446	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	1.96	0.037	0.443	0.443	ppbv
CQ39446	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	5.09	0.037	0.037	0.037	ppbv
CQ39446	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.080	0.032	0.032	0.032	ppbv
CQ39446	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	5.09	0.037	1.12	1.12	ppbv
CQ39447	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.078	0.032	0.032	0.032	ppbv
CQ39447	$AIR_NYTO15	Tetrachloroethene	NY / Air Guideline Values / Indoor Air	0.467	0.037	0.443	0.443	ppbv
CQ39447	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	1.37	0.037	0.037	0.037	ppbv
CQ39447	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Sub-Slab Vapor	1.37	0.037	1.12	1.12	ppbv
CQ39448	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.555	0.037	0.037	0.037	ppbv
CQ39448	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.086	0.032	0.032	0.032	ppbv

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Effluent Stack Grabs

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817. Page of

Data Delivery:
- ☐ Fax #:
- ☐ Email:
- ☐ Phone #:

Report to: Chris Connolly	**Project Name:** 100 S 4th St.	**Data Format:** (Circle) (Equis) (Excel) Other:
Customer: Impact Env.	**Invoice to:** Impact	**Requested Deliverable:** RCP (ASP CAT B)
Address: 170 Keyland Ct.		MCP NJ Deliverables
Bohemia, NY 11716	**Sampled by:** CJC / HB.	**Quote Number:**

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
39445	SSDS Stack #1	0682	6L	-30	-2	NA	G	09:30	09:35	3/26	-30	-4.			G	✓		
39446	SSDS Stack #2	0647	6L	-30	-4	NA	G	09:40	09:45	3/26	-30	-4			G	✓		
39447	SSDS Stack #3	0678	6L	-30	-3	NA	G	10:50	10:55	3/26	-30	-4			G	✓		
39448	SSDS Stack #4	0681	6L	-30	-2	NA	G	11:00	11:05	3/26	-30	-4.			G	✓		

Relinquished by:	Accepted by:	Date:	Time:	
		3/29/24	1200	*I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:*
		3/24/29	17:00	Signature: Date:

State Where Samples Collected:

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☐

*SURCHARGES MAY APPLY

Requested Criteria: CT:	(Please Circle) MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial **Sub-slab** Residential Industrial

6CQ39445

Shannon Wilhelm

From: Michael Lapman
Sent: Friday, March 29, 2024 2:03 PM
To: Shannon Wilhelm
Subject: FW: Impact
Attachments: 20240329115651.pdf; 20240329115636.pdf

Impact—ICL:

3-Day Rush TAT and compare to:

- NY Restricted
- NY Unrestricted
- NY Commercial

Thank you!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com

PHOENIX
Environmental Laboratories, Inc

This message, including any attachments hereto, may contain privileged or confidential information and is sent solely for the attention and use of the intended addressee(s). If you are not an intended addressee, you may neither use this message nor copy or deliver it to anyone. In such case, you should immediately destroy this message and kindly notify the sender by reply email. Thank you.

From: Shannon Wilhelm <shannon@phoenixlabs.com>
Date: Friday, March 29, 2024 at 1:00 PM
To: Michael Lapman <michael@phoenixlabs.com>
Subject: Impact

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester CT 06040
860-645-1102

PHOENIX
Environmental Laboratories, Inc.

Friday, April 19, 2024

Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ39449**
Sample ID#s: CQ39450 - CQ39453

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ39449

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 19, 2024

SDG I.D.: GCQ39449

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 19, 2024

SDG I.D.: GCQ39449

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ39449	On Hold	03/27/24	04/02/24	04/02/24		Y
CQ39450	Volatiles (TO15)	03/27/24	03/30/24	03/30/24	KCA	Y
CQ39451	Volatiles (TO15)	03/27/24	03/30/24	03/30/24	KCA	Y
CQ39452	Volatiles (TO15)	03/27/24	03/30/24	03/30/24	KCA	Y
CQ39453	Volatiles (TO15)	03/27/24	03/30/24	03/30/24	KCA	Y

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

SDG Comments

April 19, 2024

SDG I.D.: GCQ39449

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 19, 2024

SDG I.D.: GCQ39449

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
IA-2	CQ39450	AIR
IA-3	CQ39451	AIR
IA-5	CQ39452	AIR
IA-DUP	CQ39453	AIR

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:35
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28620				

Laboratory Data

SDG ID: GCQ39449
Phoenix ID: CQ39450

Project ID: 100 S 4TH ST
Client ID: IA-2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	0.545	*0.204*	0.204	2.68	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	0.621	*0.204*	0.204	3.05	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	0.254	*0.244*	0.244	1.04	*1.00*	1.00	03/30/24	KCA	1	
Acetone	18.6	*0.421*	0.421	44.2	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	0.375	*0.313*	0.313	1.20	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-2

Phoenix I.D.: CQ39450

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.081		*0.032*	0.032	0.51	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	0.489		*0.205*	0.205	2.39	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	0.494		*0.485*	0.485	1.02	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.395		*0.202*	0.202	1.95	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	1190	E	*0.531*	0.531	2240	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	10.8		*0.407*	0.407	26.5	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	0.888		*0.230*	0.230	3.85	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	1.30		*0.339*	0.339	3.83	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	0.290		*0.230*	0.230	1.26	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.160		*0.037*	0.037	1.08	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	2.06		*0.266*	0.266	7.76	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	0.069		*0.037*	0.037	0.37	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.196		*0.178*	0.178	1.10	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	106		*%*	%	106	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	90		*%*	%	90	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	92		*%*	%	92	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	96		*%*	%	96	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-2

Phoenix I.D.: CQ39450

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 19, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:20
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	21345				

Laboratory Data

SDG ID: GCQ39449
Phoenix ID: CQ39451

Project ID: 100 S 4TH ST
Client ID: IA-3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	0.584	*0.204*	0.204	2.87	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	0.758	*0.204*	0.204	3.72	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	10.1	*0.421*	0.421	24.0	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	0.361	*0.313*	0.313	1.15	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-3

Phoenix I.D.: CQ39451

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.070		*0.032*	0.032	0.44	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	0.268		*0.205*	0.205	1.31	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	0.497		*0.485*	0.485	1.03	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.422		*0.202*	0.202	2.09	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	222	E	*0.531*	0.531	418	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	8.50		*0.407*	0.407	20.9	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	0.938		*0.230*	0.230	4.07	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	4.44		*0.339*	0.339	13.1	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	0.227		*0.200*	0.200	1.19	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	0.319		*0.230*	0.230	1.38	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.144		*0.037*	0.037	0.98	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	5.32		*0.266*	0.266	20.0	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	0.051		*0.037*	0.037	0.27	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.211		*0.178*	0.178	1.18	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	104		*%*	%	104	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	96		*%*	%	96	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	98		*%*	%	98	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	100		*%*	%	100	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-3

Phoenix I.D.: CQ39451

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

The canister was received under no vacuum, therefore sample results may not be representative.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 19, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	16:00
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28550				

Laboratory Data

SDG ID: GCQ39449
Phoenix ID: CQ39452

Project ID: 100 S 4TH ST
Client ID: IA-5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	19.1	*0.421*	0.421	45.3	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	0.386	*0.313*	0.313	1.23	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-5

Phoenix I.D.: CQ39452

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.077		*0.032*	0.032	0.48	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	0.212		*0.205*	0.205	1.03	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	0.535		*0.485*	0.485	1.10	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.431		*0.202*	0.202	2.13	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	215	E	*0.531*	0.531	405	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	0.784		*0.278*	0.278	2.82	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	0.984		*0.230*	0.230	4.27	*1.00*	1.00	03/30/24	KCA	1	
Heptane	0.258		*0.244*	0.244	1.06	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	19.5		*0.407*	0.407	47.9	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	4.76		*0.230*	0.230	20.7	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	0.400		*0.339*	0.339	1.18	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	1.38		*0.230*	0.230	5.99	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	0.263		*0.235*	0.235	1.12	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.106		*0.037*	0.037	0.72	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	0.965		*0.266*	0.266	3.63	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.267		*0.178*	0.178	1.50	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	105		*%*	%	105	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	96		*%*	%	96	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	97		*%*	%	97	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	100		*%*	%	100	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-5

Phoenix I.D.: CQ39452

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
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Phyllis Shiller, Laboratory Director

April 19, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	
Location Code:	IMPACT-ICL	Received by:	SW	03/29/24	17:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	492				

Laboratory Data

SDG ID: GCQ39449
Phoenix ID: CQ39453

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2,4-Trimethylbenzene	0.841	*0.204*	0.204	4.13	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3,5-Trimethylbenzene	0.232	*0.204*	0.204	1.14	*1.00*	1.00	03/30/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/30/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/30/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Ethyltoluene	1.30	*0.204*	0.204	6.39	*1.00*	1.00	03/30/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Acetone	13.6	*0.421*	0.421	32.3	*1.00*	1.00	03/30/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/30/24	KCA	1	
Benzene	0.351	*0.313*	0.313	1.12	*1.00*	1.00	03/30/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Phoenix I.D.: CQ39453

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/30/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/30/24	KCA	1	
Carbon Tetrachloride	0.072		*0.032*	0.032	0.45	*0.20*	0.20	03/30/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/30/24	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	03/30/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/30/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/30/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/30/24	KCA	1	
Dichlorodifluoromethane	0.421		*0.202*	0.202	2.08	*1.00*	1.00	03/30/24	KCA	1	
Ethanol	376	E	*0.531*	0.531	708	*1.00*	1.00	03/30/24	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/30/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/30/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/30/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/30/24	KCA	1	
Isopropylalcohol	56.0	E	*0.407*	0.407	138	*1.00*	1.00	03/30/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/30/24	KCA	1	
m,p-Xylene	0.907		*0.230*	0.230	3.94	*1.00*	1.00	03/30/24	KCA	1	
Methyl Ethyl Ketone	0.434		*0.339*	0.339	1.28	*1.00*	1.00	03/30/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/30/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/30/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/30/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
o-Xylene	0.346		*0.230*	0.230	1.50	*1.00*	1.00	03/30/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/30/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/30/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/30/24	KCA	1	
Tetrachloroethene	0.216		*0.037*	0.037	1.46	*0.25*	0.25	03/30/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/30/24	KCA	1	1
Toluene	1.12		*0.266*	0.266	4.22	*1.00*	1.00	03/30/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/30/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/30/24	KCA	1	
Trichloroethene	0.086		*0.037*	0.037	0.46	*0.20*	0.20	03/30/24	KCA	1	
Trichlorofluoromethane	0.192		*0.178*	0.178	1.08	*1.00*	1.00	03/30/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/30/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/30/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	102		*%*	%	102	*%*	%	03/30/24	KCA	1	
% IS-1,4-Difluorobenzene	96		*%*	%	96	*%*	%	03/30/24	KCA	1	
% IS-Bromochloromethane	98		*%*	%	98	*%*	%	03/30/24	KCA	1	
% IS-Chlorobenzene-d5	103		*%*	%	103	*%*	%	03/30/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Phoenix I.D.: CQ39453

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 19, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Canister Sampling Information

April 19, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ39449

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
IA-2	CQ39450	28620	6.0L	10589	03/22/24	-30	-9	11.2	11.4	1.8	-30	-9	03/27/24 08:55	03/27/24 15:35
IA-3	CQ39451	21345	6.0L	10675	03/22/24	-30	0	23.5	25.6	8.6	-30	-10	03/27/24 09:10	03/27/24 15:20
IA-5	CQ39452	28550	6.0L	2932	03/22/24	-30	-14	10.5	10.7	1.9	-30	-14	03/27/24 09:20	03/27/24 16:00
IA-DUP	CQ39453	492	6.0L		03/22/24	-30	-10				-30		03/27/24 00:00	03/27/24 00:00

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 19, 2024

QA/QC Data

SDG I.D.: GCQ39449

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724676 (ppbv), QC Sample No: CQ39155 (CQ39450, CQ39451, CQ39452, CQ39453)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	98	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	100	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	101	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	125	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	115	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	99	5.73	5.82	1.24	1.26	1.6	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	111	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	102	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	113	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	96	18.7	18.2	7.87	7.67	2.6	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	112	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	103	0.47	0.47	0.074	0.075	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	100	1.57	1.45	0.321	0.297	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	104	2.83	2.73	0.715	0.690	3.6	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	104	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	106	2.05	2.14	0.415	0.433	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ39449

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethanol	ND	0.530	ND	1.00	75	337 E	339	179 E	180	0.6	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	104	1.47	1.47	0.409	0.407	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	85	8.28	8.18	3.37	3.33	1.2	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	103	1.93	1.90	0.655	0.643	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	98	ND	ND	ND	ND	NC	70 - 130	25
Naphthalene	ND	0.200	ND	1.05	126	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	101	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	111	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	101	270	266	39.9	39.2	1.8	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	103	5.45	5.45	1.85	1.85	0.0	70 - 130	25
Toluene	ND	0.270	ND	1.02	106	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	102	2.39	2.37	0.445	0.442	0.7	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	102	1.62	1.60	0.288	0.285	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	101	%	101	%	103	108	107	108	107	NC	70 - 130	25
% IS-1,4-Difluorobenzene	106	%	106	%	98	99	99	99	99	NC	60 - 140	25
% IS-Bromochloromethane	105	%	105	%	95	100	100	100	100	NC	60 - 140	25
% IS-Chlorobenzene-d5	106	%	106	%	105	98	98	98	98	NC	60 - 140	25

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 19, 2024

Friday, April 19, 2024

Criteria: NY: AIRIA, AIRSV

State: NY

Sample Criteria Exceedances Report

GCQ39449 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CQ39450	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.069	0.037	0.037	0.037	ppbv
CQ39450	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.081	0.032	0.032	0.032	ppbv
CQ39451	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.051	0.037	0.037	0.037	ppbv
CQ39451	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.070	0.032	0.032	0.032	ppbv
CQ39452	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.077	0.032	0.032	0.032	ppbv
CQ39453	$AIR_NYTO15	Trichloroethene	NY / Air Guideline Values / Indoor Air	0.086	0.037	0.037	0.037	ppbv
CQ39453	$AIR_NYTO15	Carbon Tetrachloride	NY / Air Guideline Values / Indoor Air	0.072	0.032	0.032	0.032	ppbv

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

8hr Indoor Air

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817. Page 1 of 1

Data Delivery:
☐ Fax #: _____
☐ Email: _____
☐ Phone #: _____

Report to: Chris Connolly	**Project Name:** 100 S 4th St.	**Data Format:** (Circle) (Equis) (Excel) Other:
Customer: Impact Env.	**Invoice to:** Impact.	**Requested Deliverable:** RCP (ASP CAT B)
Address: 170 Keyland Ct.		MCP NJ Deliverables
Bohemia NY 11716	**Sampled by:** CJC	**Quote Number:**

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
39449	IA-1	28622	6L	-30	-30	10675	23.5	8:45	3:05	3/27	-30	-0	✓			✓		
39450	IA-2	28620	6L	-30	-9	10589	11.2	8:55	3:35	3/27	-30	-9	✓			✓		
39451	IA-3	21345	6L	-30	0	7001	11	9:10	3:20	3/27	-30	-10	✓			✓		
39452	IA-5	28550	6L	-30	-14	2932	10.5	9:20	4:00	3/27	-30	-14	✓			✓		
39453	IA-DUP	492	6L	-30	-10								✓			✓		

Relinquished by:	Accepted by:	Date:	Time:	*I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:*
		3/29/24	1220	
		3/29/24	17:00	Signature: _____ Date: _____

State Where Samples Collected: _____

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☒

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C	**Indoor Air:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential (Non-residential)	**Indoor Air** Residential Industrial
TAC RES	**Soil Gas:** Residential Ind/Commercial	**Soil Gas:** Residential Ind/Commercial			**Sub-slab** Residential Industrial
SVVC I/C					
SVVC RES					
GWV I/C					
GWV CES					

6CQ 39449

Shannon Wilhelm

From: Michael Lapman
Sent: Friday, March 29, 2024 2:03 PM
To: Shannon Wilhelm
Subject: FW: Impact
Attachments: 20240329115651.pdf; 20240329115636.pdf

Impact—ICL:

3-Day Rush TAT and compare to:

- NY Restricted
- NY Unrestricted
- NY Commercial

Thank you!

Regards,
Michael Lapman
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, CT 06040
Direct Line: 917.449.0850
www.phoenixlabs.com

This message, including any attachments hereto, may contain privileged or confidential information and is sent solely for the attention and use of the intended addressee(s). If you are not an intended addressee, you may neither use this message nor copy or deliver it to anyone. In such case, you should immediately destroy this message and kindly notify the sender by reply email. Thank you.

From: Shannon Wilhelm <shannon@phoenixlabs.com>
Date: Friday, March 29, 2024 at 1:00 PM
To: Michael Lapman <michael@phoenixlabs.com>
Subject: Impact

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester CT 06040
860-645-1102

Greg Lawrence

From: Greg Lawrence
Sent: Tuesday, April 2, 2024 10:11 AM
To: Michael Lapman
Subject: Air Samples
Attachments: SKM_80824040209400.pdf

Good morning,

Please refer to the attached COC.

The incoming pressure for sample IA-1 is -30" of Hg, this means no sample was collected at this location. The incoming pressure for sample IA-3 is 0" of Hg.

The most likely cause for this is the client mixed up the flow controllers. Also I am not sure why they re-wrote the chain-of-custody.

Canister 28622 was boxed with controller 7001, on the rewritten COC 28622 indicates flow controller 10675 was used. This flow controller was set at twice the flow rate for the duplicate samples

Canister 21345 was boxed with controller 10675, on the rewritten COC 21345 indicates flow controller 7001 was used.

I believe the handwritten COC is not correct and canister 28622 and controller 7001 were used for IA-1, but not connected. Canister 21345 and controller 10675 was used for IA-3 and with the flow set a 23.5 mls/min filled the canister in 4 hours and that is why the incoming vacuum is 0" of Hg.

Please ask the client to not rewrite the COC.

If you have any questions, please give me a call. Thank you

Gregory Lawrence
Assistant Laboratory Director
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike | Manchester, CT 06040
Direct Line: (860)-812-0812
www.phoenixlabs.com

PHOENIX
Environmental Laboratories, Inc.

Monday, April 08, 2024

Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ38524**
Sample ID#s: CQ38524 - CQ38532

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ38524

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 08, 2024

SDG I.D.: GCQ38524

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 08, 2024

SDG I.D.: GCQ38524

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ38524	Volatiles (TO15)	03/26/24	03/28/24	03/28/24	KCA	Y
CQ38525	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38526	Volatiles (TO15)	03/26/24	03/28/24	03/28/24	KCA	Y
CQ38527	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38528	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38529	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38530	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38531	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y
CQ38532	Volatiles (TO15)	03/26/24	03/29/24	03/29/24	KCA	Y

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

April 08, 2024

SDG I.D.: GCQ38524

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.
Compounds that are detected above MDL but below RL are qualified with a J flag.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 08, 2024

SDG I.D.: GCQ38524

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
IA-4A	CQ38524	AIR
IA-4B	CQ38525	AIR
IA-4C	CQ38526	AIR
IA-4D	CQ38527	AIR
IA-4E	CQ38528	AIR
IA-4F	CQ38529	AIR
IA-4G	CQ38530	AIR
IA-4I	CQ38531	AIR
IA-DUP	CQ38532	AIR

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:15
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	497				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38524

Project ID: 100 S 4TH ST
Client ID: IA-4A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/28/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/28/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2,4-Trimethylbenzene	0.207	*0.204*	0.204	1.02	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/28/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/28/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/28/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/28/24	KCA	1	
Acetone	30.0	*0.421*	0.421	71.2	*1.00*	1.00	03/28/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/28/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/28/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/28/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4A

Phoenix I.D.: CQ38524

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/28/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/28/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/28/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/28/24	KCA	1	
Carbon Tetrachloride	0.079		*0.032*	0.032	0.50	*0.20*	0.20	03/28/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloromethane	0.692		*0.485*	0.485	1.43	*1.00*	1.00	03/28/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/28/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/28/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/28/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/28/24	KCA	1	
Dichlorodifluoromethane	0.505		*0.202*	0.202	2.50	*1.00*	1.00	03/28/24	KCA	1	
Ethanol	92.7	E	*0.531*	0.531	175	*1.00*	1.00	03/28/24	KCA	1	1
Ethyl acetate	2.07		*0.278*	0.278	7.45	*1.00*	1.00	03/28/24	KCA	1	1
Ethylbenzene	2.14		*0.230*	0.230	9.29	*1.00*	1.00	03/28/24	KCA	1	
Heptane	0.676		*0.244*	0.244	2.77	*1.00*	1.00	03/28/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/28/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/28/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/28/24	KCA	1	
Isopropylalcohol	12.6		*0.407*	0.407	31.0	*1.00*	1.00	03/28/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/28/24	KCA	1	
m,p-Xylene	11.4		*0.230*	0.230	49.5	*1.00*	1.00	03/28/24	KCA	1	
Methyl Ethyl Ketone	0.658		*0.339*	0.339	1.94	*1.00*	1.00	03/28/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/28/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/28/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/28/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
o-Xylene	3.04		*0.230*	0.230	13.2	*1.00*	1.00	03/28/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/28/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
Styrene	0.879		*0.235*	0.235	3.74	*1.00*	1.00	03/28/24	KCA	1	
Tetrachloroethene	0.058		*0.037*	0.037	0.39	*0.25*	0.25	03/28/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/28/24	KCA	1	1
Toluene	1.95		*0.266*	0.266	7.34	*1.00*	1.00	03/28/24	KCA	1	
Trans-1,2-Dichloroethene	0.266		*0.252*	0.252	1.05	*1.00*	1.00	03/28/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/28/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/28/24	KCA	1	
Trichlorofluoromethane	0.236		*0.178*	0.178	1.33	*1.00*	1.00	03/28/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/28/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/28/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	103		*%*	%	103	*%*	%	03/28/24	KCA	1	
% IS-1,4-Difluorobenzene	81		*%*	%	81	*%*	%	03/28/24	KCA	1	
% IS-Bromochloromethane	85		*%*	%	85	*%*	%	03/28/24	KCA	1	
% IS-Chlorobenzene-d5	89		*%*	%	89	*%*	%	03/28/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4A

Phoenix I.D.: CQ38524

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:00
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	9494				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38525

Project ID: 100 S 4TH ST
Client ID: IA-4B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	0.220	*0.204*	0.204	1.08	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	27.5	*0.421*	0.421	65.3	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4B

Phoenix I.D.: CQ38525

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.065		*0.032*	0.032	0.41	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	0.329		*0.205*	0.205	1.61	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.657		*0.485*	0.485	1.36	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.435		*0.202*	0.202	2.15	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	119	E	*0.531*	0.531	224	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	0.516		*0.278*	0.278	1.86	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	1.09		*0.230*	0.230	4.73	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	24.7		*0.407*	0.407	60.7	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	4.29		*0.230*	0.230	18.6	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	0.825		*0.339*	0.339	2.43	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	1.15		*0.230*	0.230	4.99	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.073		*0.037*	0.037	0.49	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	1.06		*0.266*	0.266	3.99	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	0.043		*0.037*	0.037	0.23	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.217		*0.178*	0.178	1.22	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	102		*%*	%	102	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	90		*%*	%	90	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	90		*%*	%	90	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	95		*%*	%	95	*%*	%	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4B

Phoenix I.D.: CQ38525

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:05
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	456				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38526

Project ID: 100 S 4TH ST
Client ID: IA-4C

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/28/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/28/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/28/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2,4-Trimethylbenzene	0.432	*0.204*	0.204	2.12	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/28/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/28/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/28/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/28/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/28/24	KCA	1	1
4-Ethyltoluene	0.417	*0.204*	0.204	2.05	*1.00*	1.00	03/28/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/28/24	KCA	1	
Acetone	16.5	*0.421*	0.421	39.2	*1.00*	1.00	03/28/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/28/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/28/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/28/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4C

Phoenix I.D.: CQ38526

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/28/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/28/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/28/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/28/24	KCA	1	
Carbon Tetrachloride	0.082		*0.032*	0.032	0.52	*0.20*	0.20	03/28/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/28/24	KCA	1	
Chloromethane	0.896		*0.485*	0.485	1.85	*1.00*	1.00	03/28/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/28/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/28/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/28/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/28/24	KCA	1	
Dichlorodifluoromethane	0.494		*0.202*	0.202	2.44	*1.00*	1.00	03/28/24	KCA	1	
Ethanol	99.0	E	*0.531*	0.531	186	*1.00*	1.00	03/28/24	KCA	1	1
Ethyl acetate	1.43		*0.278*	0.278	5.15	*1.00*	1.00	03/28/24	KCA	1	1
Ethylbenzene	0.386		*0.230*	0.230	1.68	*1.00*	1.00	03/28/24	KCA	1	
Heptane	0.547		*0.244*	0.244	2.24	*1.00*	1.00	03/28/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/28/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/28/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/28/24	KCA	1	
Isopropylalcohol	33.5		*0.407*	0.407	82.3	*1.00*	1.00	03/28/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/28/24	KCA	1	
m,p-Xylene	1.77		*0.230*	0.230	7.68	*1.00*	1.00	03/28/24	KCA	1	
Methyl Ethyl Ketone	1.40		*0.339*	0.339	4.13	*1.00*	1.00	03/28/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/28/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/28/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/28/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
o-Xylene	0.536		*0.230*	0.230	2.33	*1.00*	1.00	03/28/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/28/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/28/24	KCA	1	1
Styrene	0.296		*0.235*	0.235	1.26	*1.00*	1.00	03/28/24	KCA	1	
Tetrachloroethene	0.051		*0.037*	0.037	0.35	*0.25*	0.25	03/28/24	KCA	1	
Tetrahydrofuran	0.769		*0.339*	0.339	2.27	*1.00*	1.00	03/28/24	KCA	1	1
Toluene	1.51		*0.266*	0.266	5.69	*1.00*	1.00	03/28/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/28/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/28/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/28/24	KCA	1	
Trichlorofluoromethane	0.245		*0.178*	0.178	1.38	*1.00*	1.00	03/28/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/28/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/28/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	104		*%*	%	104	*%*	%	03/28/24	KCA	1	
% IS-1,4-Difluorobenzene	83		*%*	%	83	*%*	%	03/28/24	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/28/24	KCA	1	
% IS-Chlorobenzene-d5	88		*%*	%	88	*%*	%	03/28/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4C

Phoenix I.D.: CQ38526

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

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Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:05
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	21369				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38527

Project ID: 100 S 4TH ST
Client ID: IA-4D

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	14.2	*0.421*	0.421	33.7	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4D

Phoenix I.D.: CQ38527

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.075		*0.032*	0.032	0.47	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.638		*0.485*	0.485	1.32	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.521		*0.202*	0.202	2.57	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	563	E	*0.531*	0.531	1060	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	1.82		*0.278*	0.278	6.55	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	0.458		*0.230*	0.230	1.99	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	51.8	E	*0.407*	0.407	127	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	1.96		*0.230*	0.230	8.51	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	0.541		*0.230*	0.230	2.35	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.074		*0.037*	0.037	0.50	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	0.534		*0.266*	0.266	2.01	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.226		*0.178*	0.178	1.27	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	100		*%*	%	100	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	83		*%*	%	83	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	89		*%*	%	89	*%*	%	03/29/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-4D

Phoenix I.D.: CQ38527

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:15
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	17162				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38528

Project ID: 100 S 4TH ST
Client ID: IA-4E

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	4.20	*0.421*	0.421	10.0	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4E

Phoenix I.D.: CQ38528

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.072	*0.032*	0.032	0.45	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	ND	*0.205*	0.205	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.568	*0.485*	0.485	1.17	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.488	*0.202*	0.202	2.41	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	26.2	*0.531*	0.531	49.3	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND	*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	4.10	*0.407*	0.407	10.1	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	0.404	*0.230*	0.230	1.75	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND	*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND	*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	ND	*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND	*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.052	*0.037*	0.037	0.35	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND	*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	0.320	*0.266*	0.266	1.21	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	ND	*0.037*	0.037	ND	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.223	*0.178*	0.178	1.25	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND	*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals										
% Bromofluorobenzene	100	*%*	%	100	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	85	*%*	%	85	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	87	*%*	%	87	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	91	*%*	%	91	*%*	%	03/29/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-4E

Phoenix I.D.: CQ38528

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	13:10
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	7647				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38529

Project ID: 100 S 4TH ST
Client ID: IA-4F

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	15.8	*0.421*	0.421	37.5	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4F

Phoenix I.D.: CQ38529

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.070		*0.032*	0.032	0.44	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.593		*0.485*	0.485	1.22	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.454		*0.202*	0.202	2.24	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	109	E	*0.531*	0.531	205	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	11.9		*0.407*	0.407	29.2	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	0.417		*0.230*	0.230	1.81	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	0.244		*0.200*	0.200	1.28	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.052		*0.037*	0.037	0.35	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	0.368		*0.266*	0.266	1.39	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.217		*0.178*	0.178	1.22	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	101		*%*	%	101	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	86		*%*	%	86	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	89		*%*	%	89	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	91		*%*	%	91	*%*	%	03/29/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-4F

Phoenix I.D.: CQ38529

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:25
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0239				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38530

Project ID: 100 S 4TH ST
Client ID: IA-4G

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	23.6	*0.421*	0.421	56.0	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4G

Phoenix I.D.: CQ38530

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.074		*0.032*	0.032	0.47	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	0.355		*0.205*	0.205	1.73	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.625		*0.485*	0.485	1.29	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.512		*0.202*	0.202	2.53	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	505	E	*0.531*	0.531	951	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	0.800		*0.278*	0.278	2.88	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	35.9		*0.407*	0.407	88.2	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	0.338		*0.230*	0.230	1.47	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	0.458		*0.339*	0.339	1.35	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	ND		*0.230*	0.230	ND	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.095		*0.037*	0.037	0.64	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	ND		*0.266*	0.266	ND	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	0.040		*0.037*	0.037	0.21	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.322		*0.178*	0.178	1.81	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	99		*%*	%	99	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	81		*%*	%	81	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	85		*%*	%	85	*%*	%	03/29/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-4G

Phoenix I.D.: CQ38530

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 08, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	12:20
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28601				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38531

Project ID: 100 S 4TH ST
Client ID: IA-4I

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	19.5	*0.421*	0.421	46.3	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4I

Phoenix I.D.: CQ38531

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.075		*0.032*	0.032	0.47	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.631		*0.485*	0.485	1.30	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.492		*0.202*	0.202	2.43	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	165	E	*0.531*	0.531	311	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	0.589		*0.278*	0.278	2.12	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	2.80		*0.230*	0.230	12.2	*1.00*	1.00	03/29/24	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	51.5	E	*0.407*	0.407	127	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	13.6		*0.230*	0.230	59.0	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	3.52		*0.230*	0.230	15.3	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.048		*0.037*	0.037	0.33	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	0.613		*0.266*	0.266	2.31	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	0.268		*0.252*	0.252	1.06	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.251		*0.178*	0.178	1.41	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	103		*%*	%	103	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	81		*%*	%	81	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	87		*%*	%	87	*%*	%	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-4I

Phoenix I.D.: CQ38531

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/26/24	
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	9486				

Laboratory Data

SDG ID: GCQ38524
Phoenix ID: CQ38532

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,1-Dichloroethene	ND	*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2,4-Trimethylbenzene	0.384	*0.204*	0.204	1.89	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	03/29/24	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	03/29/24	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Ethyltoluene	0.382	*0.204*	0.204	1.88	*1.00*	1.00	03/29/24	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	03/29/24	KCA	1	
Acetone	16.6	*0.421*	0.421	39.4	*1.00*	1.00	03/29/24	KCA	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	03/29/24	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	03/29/24	KCA	1	

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Phoenix I.D.: CQ38532

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	03/29/24	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	03/29/24	KCA	1	
Carbon Tetrachloride	0.078		*0.032*	0.032	0.49	*0.20*	0.20	03/29/24	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	03/29/24	KCA	1	
Chloromethane	0.853		*0.485*	0.485	1.76	*1.00*	1.00	03/29/24	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	0.051	ND	*0.20*	0.20	03/29/24	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	03/29/24	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	03/29/24	KCA	1	
Dichlorodifluoromethane	0.505		*0.202*	0.202	2.50	*1.00*	1.00	03/29/24	KCA	1	
Ethanol	100	E	*0.531*	0.531	188	*1.00*	1.00	03/29/24	KCA	1	1
Ethyl acetate	1.54		*0.278*	0.278	5.55	*1.00*	1.00	03/29/24	KCA	1	1
Ethylbenzene	0.368		*0.230*	0.230	1.60	*1.00*	1.00	03/29/24	KCA	1	
Heptane	0.557		*0.244*	0.244	2.28	*1.00*	1.00	03/29/24	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	03/29/24	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	03/29/24	KCA	1	
Isooctane	ND		*0.215*	0.215	ND	*1.00*	1.00	03/29/24	KCA	1	
Isopropylalcohol	34.6		*0.407*	0.407	85.0	*1.00*	1.00	03/29/24	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	03/29/24	KCA	1	
m,p-Xylene	1.73		*0.230*	0.230	7.51	*1.00*	1.00	03/29/24	KCA	1	
Methyl Ethyl Ketone	1.39		*0.339*	0.339	4.10	*1.00*	1.00	03/29/24	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	03/29/24	KCA	1	
Methylene Chloride	ND		*0.863*	0.863	ND	*3.00*	3.00	03/29/24	KCA	1	
Naphthalene	ND		*0.200*	0.200	ND	*1.05*	1.05	03/29/24	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
o-Xylene	0.519		*0.230*	0.230	2.25	*1.00*	1.00	03/29/24	KCA	1	
Propylene	ND		*0.581*	0.581	ND	*1.00*	1.00	03/29/24	KCA	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	03/29/24	KCA	1	1
Styrene	0.240		*0.235*	0.235	1.02	*1.00*	1.00	03/29/24	KCA	1	
Tetrachloroethene	0.048		*0.037*	0.037	0.33	*0.25*	0.25	03/29/24	KCA	1	
Tetrahydrofuran	0.786		*0.339*	0.339	2.32	*1.00*	1.00	03/29/24	KCA	1	1
Toluene	1.50		*0.266*	0.266	5.65	*1.00*	1.00	03/29/24	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	03/29/24	KCA	1	
Trichloroethene	ND		*0.037*	0.037	ND	*0.20*	0.20	03/29/24	KCA	1	
Trichlorofluoromethane	0.227		*0.178*	0.178	1.27	*1.00*	1.00	03/29/24	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	03/29/24	KCA	1	
Vinyl Chloride	ND		*0.078*	0.078	ND	*0.20*	0.20	03/29/24	KCA	1	
QA/QC Surrogates/Internals											
% Bromofluorobenzene	103		*%*	%	103	*%*	%	03/29/24	KCA	1	
% IS-1,4-Difluorobenzene	82		*%*	%	82	*%*	%	03/29/24	KCA	1	
% IS-Bromochloromethane	83		*%*	%	83	*%*	%	03/29/24	KCA	1	
% IS-Chlorobenzene-d5	87		*%*	%	87	*%*	%	03/29/24	KCA	1	

Ver 2

Project ID: 100 S 4TH ST
Client ID: IA-DUP

Phoenix I.D.: CQ38532

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

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Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Canister Sampling Information

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ38524

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
IA-4A	CQ38524	497	6.0L	5398	03/23/24	-30	-5	3.19	3.25	1.9	-30	-5	03/26/24 11:45	03/26/24 12:15
IA-4B	CQ38525	9494	6.0L	3963	03/23/24	-30	-13	3.3	3.1	6.2	-30	-13	03/26/24 11:50	03/26/24 12:00
IA-4C	CQ38526	456	6.0L	7009	03/23/24	-30	-5	3.17	3.4	7.0	-30	-5	03/26/24 11:55	03/26/24 12:05
IA-4D	CQ38527	21369	6.0L	10552	03/23/24	-30	-5	3.26	3.28	0.6	-30	-5	03/26/24 12:00	03/26/24 12:05
IA-4E	CQ38528	17162	6.0L	2938	03/23/24	-30	-3	3.29	3.15	4.3	-30	-4	03/26/24 12:10	03/26/24 12:15
IA-4F	CQ38529	7647	6.0L	5380	03/23/24	-30	-4	3.3	3.26	1.2	-30	-4	03/26/24 12:30	03/26/24 13:10
IA-4G	CQ38530	0239	6.0L	10566	03/23/24	-30	-6	3.3	3.15	4.7	-28	-6	03/26/24 12:20	03/26/24 12:25
IA-4I	CQ38531	28601	6.0L	10656	03/23/24	-30	-6	3.22	3.23	0.3	-30	-5	03/26/24 12:15	03/26/24 12:20
IA-DUP	CQ38532	9486	6.0L		03/23/24	-30		3.21	3.02	6.1	-30		03/26/24 00:00	03/26/24 00:00

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 08, 2024

QA/QC Data

SDG I.D.: GCQ38524

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724520 (ppbv), QC Sample No: CQ38155 (CQ38524, CQ38525, CQ38526, CQ38527, CQ38528, CQ38529, CQ38530, CQ38531, CQ38532)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	98	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	104	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	124	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	120	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	106	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	98	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	106	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	112	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	95	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	111	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	90	3.47	3.70	1.46	1.56	NC	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	104	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	104	0.47	0.51	0.075	0.081	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	104	1.22	1.28	0.591	0.621	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	106	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	102	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ38524

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Dichlorodifluoromethane	ND	0.200	ND	0.99	108	2.40	2.74	0.485	0.554	NC	70 - 130	25	
Ethanol	ND	0.530	ND	1.00	63	3.56	3.88	1.89	2.06	NC	70 - 130	25	I
Ethyl acetate	ND	0.280	ND	1.01	108	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.240	ND	0.98	112	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.280	ND	0.99	117	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.410	ND	1.01	86	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylbenzene	ND	0.200	ND	0.98	103	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.340	ND	1.00	104	ND	1.03	ND	0.349	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	114	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.860	ND	2.99	99	ND	ND	ND	ND	NC	70 - 130	25	
Naphthalene	ND	0.200	ND	1.05	126	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25	
Propylene	ND	0.580	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.230	ND	0.98	121	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	102	ND	ND	ND	ND	NC	70 - 130	25	
Tetrahydrofuran	ND	0.340	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.270	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	106	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.180	ND	1.01	103	1.30	1.40	0.232	0.250	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.130	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	98	%	98	%	98	103	110	103	110	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	91	%	91	%	100	82	67	82	67	NC	60 - 140	25	
% IS-Bromochloromethane	91	%	91	%	93	85	77	85	77	NC	60 - 140	25	
% IS-Chlorobenzene-d5	91	%	91	%	106	84	74	84	74	NC	60 - 140	25	

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 08, 2024

Monday, April 08, 2024

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCQ38524 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

24hr Indoor Air

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817 Page of

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to: Chris Comolly	Project Name: 100 S 4th St.	Data Format: (Circle) Equis Excel Other:
Customer: Impact Env.	Invoice to: Impact.	Requested Deliverable: RCP ASP CAT B
Address: 170 Keyland Ct.		MCP NJ Deliverables
Bohemia, NY 11716	Sampled by: CJC	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
38524	IA-4a	497	6L	-30	-5	5398	3.19	11:45	12:15	3/26	-30	-5	✓			✓		
38525	IA-4b	9494	6L	-30	-13	3963	3.3	11:50	12:00	3/26	-30	-13	✓			✓		
38526	IA-4c	456	6L	-30	-5	7009	3.17	11:55	12:05	3/26	-30	-5	✓			✓		
38527	IA-4d	21369	6L	-30	-5	10552	3.26	12:00	12:05	3/26	-30	-5	✓			✓		
38528	IA-4e	17162	6L	-30	-3	2938	3.29	12:10	12:15	3/26	-30	-4	✓			✓		
38529	IA-4f	7647	6L	-30	-4	5308	3.3	12:30	13:10	3/26	-30	-4	✓			✓		
38530	IA-4g	0239	6L	-30	-6	10566	3.3	12:20	12:25	3/26	-28	-6	✓			✓		
38531	IA-4i	28601	6L	-30	-6	10656	3.22	12:15	12:20	3/26	-30	-5	✓			✓		
38532	IA-DUP	9486	6L	-30	-6								✓			✓		

Relinquished by:	Accepted by:	Date:	Time:
3/28/24		3/28/24	1340
		3/28/24	17:30

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: _____ Date: _____

State Where Samples Collected: _____

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☐

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial **Sub-slab** Residential Industrial

PHOENIX
Environmental Laboratories, Inc.

Monday, April 08, 2024

Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Project ID: **100 S 4TH ST**
SDG ID: **GCQ38533**
Sample ID#s: CQ38533 - CQ38539

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client:

Project: 100 S 4TH ST

Laboratory Project: GCQ38533

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 08, 2024

SDG I.D.: GCQ38533

100 S 4TH ST

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Analytical Services Protocol Format

April 08, 2024

SDG I.D.: GCQ38533

100 S 4TH ST

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CQ38533	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38534	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38535	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38536	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38537	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38538	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y
CQ38539	Volatiles (TO15)	03/27/24	03/29/24	03/29/24	KCA	Y

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 08, 2024

SDG I.D.: GCQ38533

Project ID: 100 S 4TH ST

Client Id	Lab Id	Matrix
SV-1A	CQ38533	AIR
SV-1B	CQ38534	AIR
SV-2A	CQ38535	AIR
SV-3A	CQ38536	AIR
SV-5A	CQ38537	AIR
SV-5B	CQ38538	AIR
SV-DUP	CQ38539	AIR

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	16:10
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28586				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38533

Project ID: 100 S 4TH ST
Client ID: SV-1A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	1.33	*0.917*	0.917	7.25	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	6.87	*2.11*	2.11	16.3	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-1A

Phoenix I.D.: CQ38533

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	0.435	*0.252*	0.252	1.72	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	126	*2.66*	2.66	237	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	23.3	*2.04*	2.04	57.2	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	3.16	*1.70*	1.70	9.31	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	4.65	*0.184*	0.184	31.5	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	8.25	*0.185*	0.185	44.3	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	96	*%*	%	96	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	85	*%*	%	85	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	88	*%*	%	88	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	92	*%*	%	92	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-1A

Phoenix I.D.: CQ38533

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 08, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:00
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	28599				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38534

Project ID: 100 S 4TH ST
Client ID: SV-1B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	6.48	*2.11*	2.11	15.4	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-1B

Phoenix I.D.: CQ38534

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	15.6	*0.252*	0.252	61.8	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	5.87	*2.66*	2.66	11.1	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	2.35	*2.04*	2.04	5.77	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	2.19	*1.70*	1.70	6.45	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	281	*0.553*	0.553	1900	*3.75*	3.75	03/29/24	KCA	15	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	207	*0.555*	0.555	1110	*2.98*	2.98	03/29/24	KCA	15	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	103	*%*	%	103	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	91	*%*	%	91	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	94	*%*	%	94	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	90	*%*	%	90	*%*	%	03/29/24	KCA	5	
% Bromofluorobenzene (15x)	101	*%*	%	101	*%*	%	03/29/24	KCA	15	
% IS-1,4-Difluorobenzene (15x)	96	*%*	%	96	*%*	%	03/29/24	KCA	15	

Ver 2

Project ID: 100 S 4TH ST
Client ID: SV-1B

Phoenix I.D.: CQ38534

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
% IS-Bromochloromethane (15x)	97	%	%	97	%	%	03/29/24	KCA	15
% IS-Chlorobenzene-d5 (15x)	94	%	%	94	%	%	03/29/24	KCA	15

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:30
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	0207				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38535

Project ID: 100 S 4TH ST
Client ID: SV-2A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	3.74	*2.11*	2.11	8.88	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-2A

Phoenix I.D.: CQ38535

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	10.6	*2.66*	2.66	20.0	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	ND	*2.04*	2.04	ND	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	3.76	*1.70*	1.70	11.1	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	0.400	*0.184*	0.184	2.71	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	1.05	*0.185*	0.185	5.64	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	108	*%*	%	108	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	88	*%*	%	88	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	91	*%*	%	91	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	89	*%*	%	89	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-2A

Phoenix I.D.: CQ38535

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:20
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	471				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38536

Project ID: 100 S 4TH ST
Client ID: SV-3A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	3.79	*2.11*	2.11	9.00	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-3A

Phoenix I.D.: CQ38536

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	4.99	*1.02*	1.02	24.3	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	4.24	*2.66*	2.66	7.98	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	ND	*2.04*	2.04	ND	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	4.79	*1.70*	1.70	14.1	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	1.13	*0.184*	0.184	7.66	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	1.73	*0.185*	0.185	9.29	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	101	*%*	%	101	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	87	*%*	%	87	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	92	*%*	%	92	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	91	*%*	%	91	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-3A

Phoenix I.D.: CQ38536

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	15:30
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	13638				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38537

Project ID: 100 S 4TH ST
Client ID: SV-5A

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	1.60	*1.22*	1.22	6.55	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	7.75	*2.11*	2.11	18.4	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-5A

Phoenix I.D.: CQ38537

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	2.08	*1.02*	1.02	10.1	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	9.91	*2.66*	2.66	18.7	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	ND	*2.04*	2.04	ND	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	2.19	*1.15*	1.15	9.5	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	5.50	*1.70*	1.70	16.2	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	ND	*0.184*	0.184	ND	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	ND	*0.185*	0.185	ND	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	96	*%*	%	96	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	87	*%*	%	87	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	90	*%*	%	90	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	98	*%*	%	98	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-5A

Phoenix I.D.: CQ38537

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	16:00
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	49244				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38538

Project ID: 100 S 4TH ST
Client ID: SV-5B

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	5.15	*2.11*	2.11	12.2	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-5B

Phoenix I.D.: CQ38538

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	10.5	*2.66*	2.66	19.8	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	ND	*2.04*	2.04	ND	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	1.27	*1.15*	1.15	5.51	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	6.90	*1.70*	1.70	20.3	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	ND	*0.184*	0.184	ND	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	ND	*0.185*	0.185	ND	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	106	*%*	%	106	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	94	*%*	%	94	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	97	*%*	%	97	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	97	*%*	%	97	*%*	%	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-5B

Phoenix I.D.: CQ38538

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

April 08, 2024

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	CJC	03/27/24	
Location Code:	IMPACT-ICL	Received by:	CP	03/28/24	17:30
Rush Request:	72 Std	Analyzed by:	see "By" below		
P.O.#:	13817				
Canister Id:	19426				

Laboratory Data

SDG ID: GCQ38533
Phoenix ID: CQ38539

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	1
1,1,1-Trichloroethane	1.22	*0.917*	0.917	6.65	*5.00*	5.00	03/29/24	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	0.729	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	0.917	ND	*5.00*	5.00	03/29/24	KCA	5	
1,1-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	03/29/24	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	0.674	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	0.651	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,2-Dichloroethane	ND	*1.24*	1.24	ND	*5.02*	5.02	03/29/24	KCA	5	
1,2-dichloropropane	ND	*1.08*	1.08	ND	*4.99*	4.99	03/29/24	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	0.716	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
1,3-Butadiene	ND	*2.26*	2.26	ND	*5.00*	5.00	03/29/24	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	0.832	ND	*5.00*	5.00	03/29/24	KCA	5	
1,4-Dioxane	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	1
4-Ethyltoluene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	1.22	ND	*4.99*	4.99	03/29/24	KCA	5	
Acetone	5.88	*2.11*	2.11	14.0	*5.01*	5.01	03/29/24	KCA	5	
Acrylonitrile	ND	*2.31*	2.31	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzene	ND	*1.57*	1.57	ND	*5.01*	5.01	03/29/24	KCA	5	
Benzyl chloride	ND	*0.966*	0.966	ND	*5.00*	5.00	03/29/24	KCA	5	

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Phoenix I.D.: CQ38539

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	0.747	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromoform	ND	*0.484*	0.484	ND	*5.00*	5.00	03/29/24	KCA	5	
Bromomethane	ND	*1.29*	1.29	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Disulfide	ND	*1.61*	1.61	ND	*5.01*	5.01	03/29/24	KCA	5	
Carbon Tetrachloride	ND	*0.159*	0.159	ND	*1.00*	1.00	03/29/24	KCA	5	
Chlorobenzene	ND	*1.09*	1.09	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroethane	ND	*1.90*	1.90	ND	*5.01*	5.01	03/29/24	KCA	5	
Chloroform	ND	*1.02*	1.02	ND	*4.98*	4.98	03/29/24	KCA	5	
Chloromethane	ND	*2.42*	2.42	ND	*4.99*	4.99	03/29/24	KCA	5	
Cis-1,2-Dichloroethene	0.295	*0.252*	0.252	1.17	*1.00*	1.00	03/29/24	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Cyclohexane	ND	*1.45*	1.45	ND	*4.99*	4.99	03/29/24	KCA	5	
Dibromochloromethane	ND	*0.587*	0.587	ND	*5.00*	5.00	03/29/24	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	1.01	ND	*4.99*	4.99	03/29/24	KCA	5	
Ethanol	107	*2.66*	2.66	201	*5.01*	5.01	03/29/24	KCA	5	1
Ethyl acetate	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	1
Ethylbenzene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Heptane	ND	*1.22*	1.22	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexachlorobutadiene	ND	*0.469*	0.469	ND	*5.00*	5.00	03/29/24	KCA	5	
Hexane	ND	*1.42*	1.42	ND	*5.00*	5.00	03/29/24	KCA	5	
Isooctane	ND	*1.07*	1.07	ND	*4.99*	4.99	03/29/24	KCA	5	
Isopropylalcohol	18.2	*2.04*	2.04	44.7	*5.01*	5.01	03/29/24	KCA	5	
Isopropylbenzene	ND	*1.02*	1.02	ND	*5.01*	5.01	03/29/24	KCA	5	
m,p-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Methyl Ethyl Ketone	2.78	*1.70*	1.70	8.19	*5.01*	5.01	03/29/24	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	1.39	ND	*5.01*	5.01	03/29/24	KCA	5	
Methylene Chloride	ND	*4.32*	4.32	ND	*15.0*	15.0	03/29/24	KCA	5	
Naphthalene	ND	*1.00*	1.00	ND	*5.23*	5.23	03/29/24	KCA	5	
n-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
o-Xylene	ND	*1.15*	1.15	ND	*4.99*	4.99	03/29/24	KCA	5	
Propylene	ND	*2.91*	2.91	ND	*5.01*	5.01	03/29/24	KCA	5	1
sec-Butylbenzene	ND	*0.911*	0.911	ND	*5.00*	5.00	03/29/24	KCA	5	1
Styrene	ND	*1.17*	1.17	ND	*4.98*	4.98	03/29/24	KCA	5	
Tetrachloroethene	4.44	*0.184*	0.184	30.1	*1.25*	1.25	03/29/24	KCA	5	
Tetrahydrofuran	ND	*1.70*	1.70	ND	*5.01*	5.01	03/29/24	KCA	5	1
Toluene	ND	*1.33*	1.33	ND	*5.01*	5.01	03/29/24	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	1.26	ND	*4.99*	4.99	03/29/24	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	1.10	ND	*4.99*	4.99	03/29/24	KCA	5	
Trichloroethene	7.98	*0.185*	0.185	42.9	*0.99*	0.99	03/29/24	KCA	5	
Trichlorofluoromethane	ND	*0.891*	0.891	ND	*5.00*	5.00	03/29/24	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	0.653	ND	*5.00*	5.00	03/29/24	KCA	5	
Vinyl Chloride	ND	*0.390*	0.390	ND	*1.00*	1.00	03/29/24	KCA	5	
QA/QC Surrogates/Internals										
% Bromofluorobenzene (5x)	103	*%*	%	103	*%*	%	03/29/24	KCA	5	
% IS-1,4-Difluorobenzene (5x)	93	*%*	%	93	*%*	%	03/29/24	KCA	5	
% IS-Bromochloromethane (5x)	96	*%*	%	96	*%*	%	03/29/24	KCA	5	
% IS-Chlorobenzene-d5 (5x)	97	*%*	%	97	*%*	%	03/29/24	KCA	5	

Ver 2

Project ID: 100 S 4TH ST
Client ID: SV-DUP

Phoenix I.D.: CQ38539

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Elevated reporting limits have been reported due to the presence of reported target and/or non-target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 08, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Canister Sampling Information

April 08, 2024

FOR: Attn: Chris Connolly
Impact Closures
170 Keyland Court
Bohemia NY 11716

Location Code: IMPACT-ICL

Project ID: 100 S 4TH ST

SDG I.D.: GCQ38533

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SV-1A	CQ38533	28586	6.0L	5383	03/22/24	-30	-17	10.9	11	0.9	-30	-18	03/27/24 08:45	03/27/24 16:10
SV-1B	CQ38534	28599	6.0L	4976	03/22/24	-30	-1	23.3	24.8	6.2	-30	-1	03/27/24 08:40	03/27/24 15:00
SV-2A	CQ38535	0207	6.0L	5388	03/22/24	-30	-9	11.3	11.5	1.8	-29	-7	03/27/24 08:50	03/27/24 15:30
SV-3A	CQ38536	471	6.0L	5352	03/22/24	-30	-11	10.6	10.8	1.9	-30	-10	03/27/24 09:00	03/27/24 15:20
SV-5A	CQ38537	13638	6.0L	10593	03/22/24	-30	-11				-30	-10	03/27/24 09:15	03/27/24 15:30
SV-5B	CQ38538	49244	6.0L	6988	03/22/24	-30	-12	10.7	10.9	1.9	-29	-10	03/27/24 09:20	03/27/24 16:00
SV-DUP	CQ38539	19426	6.0L		03/22/24	-30		11.3	11.4	0.9	-30		03/27/24 00:00	03/27/24 00:00

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 08, 2024

QA/QC Data

SDG I.D.: GCQ38533

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 724507 (ppbv), QC Sample No: CQ38152 (CQ38534 (5X, 15X) , CQ38535 (5X) , CQ38538 (5X) , CQ38539 (5X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	100	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	101	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	98	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	123	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	115	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	107	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	100	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	107	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	111	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	104	0.99	1.01	0.212	0.217	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	109	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	113	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	103	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	98	36.1	36.3	15.2	15.3	0.7	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	105	2.79	2.79	0.875	0.873	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	114	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	102	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	102	0.49	0.48	0.078	0.077	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	100	2.71	2.77	0.556	0.568	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	105	ND	1.04	ND	0.505	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	105	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	105	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	106	1.87	2.04	0.379	0.412	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ38533

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethanol	ND	0.530	ND	1.00	77	49.7	51.2	26.4	27.2	3.0	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	102	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	122	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	108	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	85	2.04	2.05	0.831	0.834	NC	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	114	1.58	1.58	0.363	0.364	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	100	ND	ND	ND	ND	NC	70 - 130	25
Naphthalene	ND	0.200	ND	1.05	128	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	110	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	101	0.39	0.39	0.058	0.057	NC	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.270	ND	1.02	107	3.99	4.07	1.06	1.08	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	103	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	105	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	103	1.11	1.12	0.198	0.200	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	100	%	100	%	102	105	105	105	105	NC	70 - 130	25
% IS-1,4-Difluorobenzene	101	%	101	%	99	95	91	95	91	NC	60 - 140	25
% IS-Bromochloromethane	100	%	100	%	94	94	92	94	92	NC	60 - 140	25
% IS-Chlorobenzene-d5	103	%	103	%	104	96	93	96	93	NC	60 - 140	25
QA/QC Batch 724520 (ppbv), QC Sample No: CQ38155 (CQ38533 (5X) , CQ38536 (5X) , CQ38537 (5X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	98	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	104	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	124	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	120	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	106	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	98	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	106	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	112	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	95	ND	ND	ND	ND	NC	70 - 130	25
2,2,4-Trimethylpentane	ND	0.210	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCQ38533

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
2-Hexanone(MBK)	ND	0.240	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	111	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	90	3.47	3.70	1.46	1.56	NC	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	116	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	104	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	104	0.47	0.51	0.075	0.081	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	104	1.22	1.28	0.591	0.621	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	106	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	102	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	108	2.40	2.74	0.485	0.554	NC	70 - 130	25
Ethanol	ND	0.530	ND	1.00	63	3.56	3.88	1.89	2.06	NC	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	108	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	112	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	117	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	86	ND	ND	ND	ND	NC	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	103	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	104	ND	1.03	ND	0.349	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	114	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	99	ND	ND	ND	ND	NC	70 - 130	25
Naphthalene	ND	0.200	ND	1.05	126	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	110	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	121	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	102	ND	ND	ND	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.270	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	106	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	102	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	103	1.30	1.40	0.232	0.250	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	104	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	98	%	98	%	98	103	110	103	110	NC	70 - 130	25
% IS-1,4-Difluorobenzene	91	%	91	%	100	82	67	82	67	NC	60 - 140	25
% IS-Bromochloromethane	91	%	91	%	93	85	77	85	77	NC	60 - 140	25
% IS-Chlorobenzene-d5	91	%	91	%	106	84	74	84	74	NC	60 - 140	25

QA/QC Data

SDG I.D.: GCQ38533

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 08, 2024

Monday, April 08, 2024

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCQ38533 - IMPACT-ICL

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

8hr Sub-Slab

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
860-645-1102
email: greg@phoenixlabs.com

P.O. # 13817 Page of

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to: Chris Connolly	**Project Name:** 100 S 4th St.	**Data Format:** (Circle) Equis Excel Other:
Customer: Impact Env.	**Invoice to:** Impact.	**Requested Deliverable:** RCP ASP CAT B
Address: 170 Keyland Ct.		MCP NJ Deliverables
Bohemia, NY 11716	**Sampled by:** CJC.	**Quote Number:**

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH	
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
38533	SV-1a	28586	6L	-30	-17	5383	23.3	8:45	4:10	3/27	-30	-18.		✓		✓		
38534	SV-1b	28599	6L	-30	-1	4976	10.9	8:40	3:00	3/27	-30	-1		✓		✓		
38535	SV-2a	0207	6L	-30	-9	5388	11.3	8:50	3:30	3/27	-29	-7		✓		✓		
38536	SV-3a	471	6L	-30	-11	5352	10.6	9:00	3:20	3/27	-30	-10		✓		✓		
38537	SV-5a	13638	6L	-30	-11	0593	11.3	9:15	3:30	3/27	-30	-10		✓		✓		
38538	SV-5b	49244	6L	-30	-12	6988	10.7	9:20	4:00	3/27	-29	-10		✓		✓		
38539	SV-DUP	19426	6L	-30	-17									✓		✓		

Relinquished by: 3/28/24 **Accepted by:** **Date:** 3/28/24 **Time:** 1340

3/28/24 17:30

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: _____ **Date:** _____

State Where Samples Collected: _____

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Turnaround Time:
- 1 Day* ☐
- 2 Day* ☐
- 3 Day* ☐
- 4 Day* ☐
- 5 Day* ☐
- Standard ☐

*SURCHARGES MAY APPLY

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial **Sub-slab** Residential Industrial

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact
170 Keyland Court
Bohemia, NY 11716
Attn: Mr. Christopher Connolly
CConnolly@impactenvironmental.com

May 14, 2024

SUBJECT: 100 S 4th Street, Brooklyn, NY - Data Validation

Dear Mr. Connolly,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on April 18, 2024. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #58903:

SDG #	**Fraction**
GCQ38524, GCQ38533, GCQ38540, GCQ39445, GCQ39449, GCQ39454	VOC

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Analysis of Volatile Organic Compounds in Air Contained Canisters, SOP HW-31, Revision 6 (September 2016)
- USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005 (November 2020)

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
pgeng@lab-data.com
Project Manager/Senior Chemist

174 pages-ADV

Attachment 1

Category B EDD DUSR **LDC# 58903 (Impact Enviromental, Bohemia, NY / 100 S 4th Street, Brooklyn, NY)**

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (TO-15)																															
Matrix:	Air/Water/Soil			A	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	GCQ38524	04/18/24	05/09/24	9	0																														
B	GCQ38533	04/18/24	05/09/24	7	0																														
C	GCQ38540	04/18/24	05/09/24	2	0																														
D	GCQ39445	04/18/24	05/09/24	5	0																														
E	GCQ39449	04/18/24	05/09/24	4	0																														
F	GCQ39454	04/18/24	05/09/24	1	0																														
Total	TR/PG			28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28

Shaded cells indicate Category B review (all other cells are Category A review).

V:\LOGIN\Impact Environmental\100 S 4th Street\58903ST.wpd

Site: 100 South 4th Street, Brooklyn, NY
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.: GCQ38524
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date: May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
IA-4A	CQ38524	VOC
IA-4B	CQ38525	VOC
IA-4C	CQ38526	VOC
IA-4D	CQ38527	VOC
IA-4E	CQ38528	VOC
IA-4F	CQ38529	VOC
IA-4G	CQ38530	VOC
IA-4I	CQ38531	VOC
IA-DUP	CQ38532	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: IA-4C and IA-DUP

The above-listed air samples were collected on March 26, 2024 and were analyzed for volatile organic compounds (VOCs) by methods TO-15 and TO-15 in selected ion monitoring (SIM) mode. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/22/24	ICV-SIM Chem39	1,4-Dioxane	40.68	IA-4A	SS	UJ nondetects
		sec-Butylbenzene	43.25	IA-4B	SS	UJ nondetects
				IA-4C		
				IA-4D		
				IA-4E		
				IA-4F		
				IA-4G		
				IA-4I		
				IA-DUP		

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,4-dioxane and sec-butylbenzene results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS percent recoveries (%R) outside of control limits in the VOC analyses and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
724520-LCS	Ethanol	63 (70-130)	IA-4A IA-4B IA-4C IA-4D IA-4E IA-4F IA-4G IA-4I IA-DUP	J detects

The ethanol result may be biased low due to low LCS percent recovery. The result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples IA-4C and IA-DUP were submitted as the field duplicate pairs with this sample group. The following table summarizes the concentrations and validation actions taken.

Compound	Concentration (ug/m^3)		RPD
	IA-4C	IA-DUP	
1,2,4-Trimethylbenzene	2.12	1.89	11
4-Ethyltoluene	2.05	1.88	9
Acetone	39.2	39.4	1
Carbon tetrachloride	0.52	0.49	6
Chloromethane	1.85	1.76	5
Dichlorodifluoromethane	2.44	2.50	2
Ethanol	186	188	1
Ethyl acetate	5.15	5.55	7
Ethylbenzene	1.68	1.60	5
Heptane	2.24	2.28	2
Isopropyl alcohol	82.3	85.0	3
m,p-Xylenes	7.68	7.51	2
Methyl ethyl ketone	4.13	4.10	1
o-Xylene	2.33	2.25	3
Styrene	1.26	1.02	21
Tetrachloroethene	0.35	0.33	6
Tetrahydrofuran	2.27	2.32	2
Toluene	5.69	5.65	1
Trichlorofluoromethane	1.38	1.27	8

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analyses.

Dilutions were not required for VOC analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Validation Action
IA-4A IA-4B IA-4C IA-4F IA-4G IA-DUP	Ethanol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J detects
IA-4D IA-4I	Ethanol Isopropyl alcohol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J detects J detects

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903A48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/8/24
SDG #: GCQ38524 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15/ TO-15 SIM

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A SW	%D RSD / ICV ≤ 30
IV.	Continuing calibration	A	CCV ≤ 30
V.	Laboratory Blanks canister check per batch	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	SW	LCS
X.	Field duplicates	SW	D = 3, 9
XI.	Internal standards	A	
XII.	Target analyte quantitation	SW	
XIII.	Target analyte identification	A	No Result < RL > MDL
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	IA-4A	CQ38524	Air	03/26/24
2	IA-4B	CQ38525	Air	03/26/24
3	IA-4C D	CQ38526	Air	03/26/24
4	IA-4D	CQ38527	Air	03/26/24
5	IA-4E	CQ38528	Air	03/26/24
6	IA-4F	CQ38529	Air	03/26/24
7	IA-4G	CQ38530	Air	03/26/24
8	IA-4I	CQ38531	Air	03/26/24
9	IA-DUP D	CQ38532	Air	03/26/24
10				

Notes:

	72452V (CQ38155 BLANK)						

LDC #: 58903 A48a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓	✓		
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?			✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	-		✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET ANALYTE LIST

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. n-Octane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2. n-Propyl alcohol
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2. n-Pentane
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2. n-Decane
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2. Chlorodifluoromethane
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2. cis-Decahydronaphthalene
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2. trans-Decahydronaphthalene
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2. n-Nonane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2. n-Undecane
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2. Chloroprene
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2. n-Butanol
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2. n-Butyl acetate
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2. Nitrobenzene
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2.
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2.
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2.
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane	R2.
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2.
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2.
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2.
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

LDC #: 58903A48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/22/24	ICV-SIM	HHHH	40.6	All	J/UJ/P all ND
	1153	Chem 39	EEE	43.2	↓	↓

LDC #: 58903 A48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	724520-LCS	WWW	63 (70-130)	( )	( )	All	J/UJ/P all Dil
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC#:__58903A48a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page:_1__of_1__
Reviewer:__FT____

METHOD: GCMS VOA (EPA Method TO15)

Compound	Concentration (ug/m3)		
	3	9	
DDD	2.12	1.89	11
VVV	2.05	1.88	9
F	39.2	39.4	1
O	0.52	0.49	6
A	1.85	1.76	5
JJ	2.44	2.50	2
WWW	186	188	1
RRRR	5.15	5.55	7
EE	1.68	1.60	5
C1	2.24	2.28	2
DDDD	82.3	85.0	3
RRR	7.68	7.51	2
Methyl Ethyl Ketone	4.13	4.10	1
SSS	2.33	2.25	3
FF	1.26	1.02	21
AA	0.35	0.33	6
PPPP	2.27	2.32	2
CC	5.69	5.65	1
KK	1.38	1.27	8

LDC #: 58903A48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation

Reviewer: FT

METHOD: __ GC __ HPLC GCMS VOA 7015

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Associated Samples	Compound Name	Findings	Qualifications
	1-3, 6, 7,	WWW	x'd cal Range	Jdw lp
	~~8~~ 9			
	4, 5	WWW, DDDD	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: _58903A48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/20~~23~~ 24	B	1.172	1.172	1.244	1.244	9.36	9.36
	Chem 39		HHHH	0.153	0.153	0.151	0.151	19.11	19.11
	SIM		RRR	1.765	1.765	1.949	1.949	12.42	12.42

LDC #: _58903A48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/20~~23~~ 24	A	1.700	1.700	1.789	1.789	6.58	6.58
	Chem 39		CC	1.076	1.076	1.071	1.071	8.22	8.22
			BB	1.789	1.789	1.764	1.764	8.84	8.84

LDC #: 58903A48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	3/28/24 1416	Δ	1.789	1.829	1.829	2.2	2.2
			cc	1.071	0.966	0.966	9.8	9.8
			BB	1.764	1.767	1.767	0.2	0.2
2	ccv	↓	B	1.244	1.176	1.176	5.5	5.5
			HHH	0.151	0.155	0.155	2.6	2.6
			RRR	1.949	1.892	1.892	2.9	2.9
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903A48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Surrogate Results Verification Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Toluene-d8~~					
Bromofluorobenzene	10	10.187	102	102	0
~~1,2-Dichloroethane-d4~~					
~~Octafluorotoluene~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903 A48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 724520 - LCS

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
UU	10	NA	9.822	NA	98	98				
N	↓	↓	10.42	↓	104	104				
BB			10.39		104	104				
U			9.909		99	99				
I			10.27		103	103				
H			10.45		104	104				
KKK	↓	↓	12.37	↓	124	124				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903A48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Sample Calculation Verification Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

MW = 90.49

Example:

Sample I.D. #1, A:

Conc. = $\frac{24620 \quad (10)}{198925 \quad (1.789)}$ =

0.692 ppbv

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#1	A	0.692 ppbv	0.692	
			1.43 ng/m³	1.429	
		$\frac{(0.692)(50.49)}{24.45}$ =		1.429	

Site: 100 South 4th Street, Brooklyn, NY
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.: GCQ38533
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date: May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SV-1A	CQ38533	VOC
SV-1B	CQ38534	VOC
SV-2A	CQ38535	VOC
SV-3A	CQ38536	VOC
SV-5A	CQ38537	VOC
SV-5B	CQ38538	VOC
SV-DUP	CQ38539	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: SV-1A and SV-DUP

The above-listed air samples were collected on March 27, 2024 and were analyzed for volatile organic compounds (VOCs) by methods TO-15 and TO-15 in selected ion monitoring (SIM) mode. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/22/24	ICV-SIM Chem39	1,4-Dioxane	40.68	SV-1B	SS	UJ nondetects
		sec-Butylbenzene	43.25	SV-2A	SS	UJ nondetects
				SV-5B		
				SV-DUP		
03/24/24	ICV-SIM Chem20	Benzyl chloride	30.79	SV-1A	SS	UJ nondetects
				SV-3A		
				SV-5A		

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,4-dioxane, sec-butylbenzene, and benzyl chloride results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Standard ID	Compound	CC %D	Associated Samples		Validation Action
03/28/24	CCV-Chem20	Naphthalene	35.6	SV-1A SV-3A SV-5A	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The naphthalene result was estimated due to continuing calibration exceedance. The bias cannot be determined. The result can be used for project objectives as nondetect with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS percent recoveries (%R) outside of control limits in the VOC analyses and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
724520-LCS	Ethanol	63 (70-130)	SV-1A SV-3A SV-5A	J detects

The ethanol result may be biased low due to low LCS percent recovery. The result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples SV-1A and SV-DUP were submitted as the field duplicate pairs with this sample group. The following table summarizes the concentrations and validation actions taken.

Compound	Concentration (ug/m^3)		RPD
	SV-1A	SV-DUP	
1,1,1-Trichloroethane	7.25	6.65	9
Acetone	16.3	14.0	15
cis-1,2-Dichloroethene	1.72	1.17	38
Ethanol	237	201	16
Isopropyl alcohol	57.2	44.7	25
Methyl ethyl ketone	9.31	8.19	13
Tetrachloroethene	31.5	30.1	5
Trichloroethene	44.3	42.9	3

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analyses.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SV-1A SV-2A SV-3A SV-5A SV-5B SV-DUP	5-fold dilution due to nature of sample matrix
SV-1B	5-fold dilution due to nature of sample matrix 15-fold dilution due to high target compound level for tetrachloroethene and trichloroethene

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Validation Action
SV-1A SV-DUP	Acetone	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J detects
SV-1B	Ethanol Acetone Isopropyl alcohol	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J detects J detects J detects
SV-2A SV-3A SV-5A SV-5B	Ethanol Acetone	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J detects J detects

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903B48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/8/24
SDG #: GCQ38533 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: AF
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA Method TO-15) TO-15 SIM

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / SW	%RSD ≤ 30, r² ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 30
V.	Laboratory Blanks 1 canister per batch	A / A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	SW	LCS
X.	Field duplicates	SW	D = 1, 7
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	
XIII.	Target analyte identification	SW	No Result < RL > MDL
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1 2	SV-1A D	5X	CQ38533	Air	03/27/24
2 1	SV-1B	5X 15X for AA + S	CQ38534	Air	03/27/24
3 1	SV-2A	5X	CQ38535	Air	03/27/24
4 2	SV-3A	5X	CQ38536	Air	03/27/24
5 2	SV-5A	5X	CQ38537	Air	03/27/24
6 1	SV-5B	5X	CQ38538	Air	03/27/24
7 1	SV-DUP D	5X	CQ38539	Air	03/27/24
8					
9					

Notes:

1	724507 MB1	39					
2	724520 MB2	20					

LDC #: 58903B48a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?		.	✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?			✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET ANALYTE LIST

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. n-Octane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2. n-Propyl alcohol
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2. n-Pentane
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2. n-Decane
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2. Chlorodifluoromethane
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2. cis-Decahydronaphthalene
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2. trans-Decahydronaphthalene
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2. n-Nonane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2. n-Undecane
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2. Chloroprene
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2. n-Butanol
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2. n-Butyl acetate
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2. Nitrobenzene
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2.
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2.
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2.
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane	R2.
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2.
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2.
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2.
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

LDC #: 58903B48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/22/24	ICV- SIM	HHHH	40.68	2, 3, 6, 7, MB2	J/UJ/P MD
	1153	Chem 39	EEE	43.25	↓	↓ ↓
	3/24/24	ICV - SIM	MMMM	30.79	1, 4, 5, MB1	J/UJ/P MD
	0501	Chem 20				

LDC #: 58903B48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/28/24	CCV-Chem20	MMM	35.6	1,4,5, MB2	J/UJ/P ND
	0209		~~KKK~~	~~37.9~~	↓	↓
			note: KKK - was reported from SIM analysis. CCV passed			

LDC #: 58903B48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	724520-LCS	WWW	63 (70-130)	( )	( )	1,4,5, MBZ	J/UJ/P all Det
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 58903B4a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/m3)		RPD	Qualification
	1	7		
N	7.25	6.65	9	
F	16.3	14.0	15	
QQQ	1.72	1.17	38	
WWW	237	201	16	
DDDD	57.2	44.7	25	

Compound	Concentration (ug/m3)		RPD	Qualification
	1	7		
Methyl Ethyl KeTone	9.31	8.19	13	
AA	31.5	30.1	5	
S	44.3	42.9	3	

Compound	Concentration ( )		RPD	Qualification

LDC #: 58903B48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Compound	Findings	Qualifications
		1,7	F	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J dw lp
		2	WWW, F, DDDD	↓	J dw lp
		3,4,5,6	WWW, F	↓	J dw lp

Comments: See sample calculation verification worksheet for recalculations

Results above are <5x RL

LDC #: _58903B48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	B	0.852	0.852	0.934	0.934	9.73	9.73
	Chem 20		HHHH	see curve					
	SIM		RRR	1.820	1.820	1.828	1.828	14.86	14.86

LDC #: _58903B48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	A	1.216	1.216	1.189	1.189	8.56	8.56
	Chem 20		CC	1.118	1.118	1.072	1.072	10.83	10.83
			BB	1.721	1.721	1.642	1.642	10.11	10.11

LDC #: ___ 58903B48a

Validation Findings Worksheet
Initial Calibration Calculation Verification

Reviewer: EJ

Method: Method _____

Calibration Date	Instrument/Column	Compound	Standard	(Y) Response	(X) Conc.	(X^2) Conc.
3/24/2024	Chem20	HHHH	1	0.0004	0.01	0.0001
			2	0.0063	0.02	0.0004
			3	0.0202	0.05	0.0025
			4	0.1184	0.10	0.0100
			5	0.6358	0.25	0.0625
			6	2.4815	0.50	0.2500

Regression Output	**Calculated**		***Reported***	
Constant	*c*	*-0.0028*	*c*	*NR*
Std Err of Y Est				
R Squared		*0.9999638*		*0.9900000*
Degrees of Freedom				
	a	*b*	*a*	*b*
X Coefficient(s)	*1.62439E-01*	*9.6107E+00*	*NR*	*NR*
Std Err of Coef.				
Correlation Coefficient		*0.999982*		
Coefficient of Determination (r^2)		*0.999964*		

LDC #: _58903B48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/2023 24	B	1.172	1.172	1.244	1.244	9.36	9.36
	Chem 39		HHHH	0.153	0.153	0.151	0.151	19.11	19.11
	SIM		RRR	1.765	1.765	1.949	1.949	12.42	12.42

LDC #: _58903B48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/2023 24	A	1.700	1.700	1.789	1.789	6.58	6.58
	Chem 39		CC	1.076	1.076	1.071	1.071	8.22	8.22
			BB	1.789	1.789	1.764	1.764	8.84	8.84

LDC #: 58903B48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv chem20	3/28/24	A	1.189	1.231	1.231	3.5	3.5
		1409	CC	1.072	1.032	1.032	3.7	3.7
			BB	1.642	1.717	1.717	4.6	4.6
2	ccv chem20	↓	B	0.934	0.909	0.909	2.7	2.7
	SIM		HHH	1.00	1.11	1.11	11.0	11.0
			RRR	1.828	2.024	2.024	10.7	10.7
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903B48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method ~~8260~~ TO15

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where:
ave. RRF = initial calibration average RRF
A_x = Area of target analyte
C_x = Concentration of target analyte
RRF = continuing calibration RRF
A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv chem39	3/28/24 1416	Δ	1.789	1.829	1.829	2.2	2.2
			cc	1.071	0.966	0.966	9.8	9.8
			BB	1.764	1.767	1.767	0.2	0.2
2	ccv chem39 SIM	3/22/24 1416	B	1.244	1.176	1.176	5.5	5.5
			HHHH	0.151	0.155	0.155	2.6	2.6
			RRR	1.949	1.892	1.892	2.9	2.9
3								
4								

LDC #: 58903 B48a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10	9.642	96	96	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903 B48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 7240507-LCS
CQ38152

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
UU	10	NA	9.67	NA	97	97				
N			9.97		100	100				
BB			10.2		101	102				
U			10.4		104	104				
I			9.75		98	98				
H			10.2		102	102				
KKK			12.3		123	123	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903B48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Sample Calculation Verification Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only. MW = 96.94

Example:

Sample I.D. #2, QQQ

Conc. = $\frac{(101476)(10.0)(5)}{(191359)(1.704)}$

=

15.56 ppbV

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#2	QQQ	15.6 ppbV	15.56	
			61.8 ug/m3	61.7	
		$\frac{(15.56)(96.94)}{24.45}$ =	61.7 ug/m3		

Site:	100 South 4th Street, Brooklyn, NY
Laboratory:	Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.:	GCQ38540
Reviewer:	Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date:	May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SV-4	CQ38540	VOC
SV-DUP	CQ38541	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: SV-4 and SV-DUP

The above-listed air samples were collected on March 26, 2024 and were analyzed for volatile organic compounds (VOCs) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/24/24	ICV-SIM Chem20	Benzyl chloride	30.79	SV-4	SS	UJ nondetects
03/25/24	ICV-Chem24	Naphthalene	38	SV-DUP	SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzyl chloride and naphthalene results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Standard ID	Compound	CC %D	Associated Samples		Validation Action
03/28/24	CCV-Chem20	Naphthalene	35.6	SV-4	XX	UJ nondetects
03/28/24	CCV-SIM Chem24	1,2,4-Trichlorobenzene	34.0	SV-DUP	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The naphthalene and 1,2,4-trichlorobenzene results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

The following table lists the LCS percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
724512-LCS	Naphthalene	64 (70-130)	SV-DUP	UJ nondetects

The naphthalene result may be biased low due to low LCS percent recovery. The result can be used for project objectives as nondetect with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples SV-4 and SV-DUP were submitted as the field duplicate pairs with this sample group. The following table summarizes the concentrations and validation actions taken.

Compound	Concentration (ug/m^3)		RPD
	SV-4	SV-DUP	
Acetone	54.1	60.8	12
Ethanol	237	281	17
Ethylbenzene	15.3	17.1	11
Isopropyl alcohol	98.3	116	17
m,p-Xylene	63.4	67.7	7
o-Xylene	16.7	18.3	9

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SV-4 SV-DUP	5-fold dilution due to nature of sample matrix

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903C48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/8/24
SDG #: GCQ38540 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15)

\he samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/Δ	
II.	GC/MS Instrument performance check	Δ	
III.	Initial calibration/ICV	A/SW	%RSD ≤30, 12 ICV ≤30
IV.	Continuing calibration	SW	CCV ≤30
V.	Laboratory Blanks	Δ	
VI.	Field blanks	N	
VII.	Surrogate spikes	Δ	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	SW	LCS
X.	Field duplicates	SW	D = 1,2
XI.	Internal standards	Δ	
XII.	Target analyte quantitation	Δ	
XIII.	Target analyte identification	Δ	NO Result <RL >MDL
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	Δ	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID			Lab ID	Matrix	Date
1 2	SV-4	D	5X	CQ38540	Air	03/26/24
2 1	SV-DUP	D	5X	CQ38541	Air	03/26/24
3						
4						
5						
6						
7						
8						
9						

Notes:

1	724512	24					
2	724507	20					

LDC #: 58903C48a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?			✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

LDC #: 58903C48a **VALIDATION FINDINGS CHECKLIST** Page: 2 of 2
Reviewer: FT

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	✓		✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 58903c48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/24/24	ICV-SIM	MMMM	30.79	1, MB 2	J/UJ/P ND
	0501	chem 20				
	3/25/24	ICV-chem24	MMM	38	2, MB 1	J/UJ/P ND
	0934					

LDC #: 58903 C4Sa

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/28/24 0209	CCV - chem 20	~~KKK~~	~~32.9~~ F7	1, MB2	J/UJ/P ND
			MMM	35.6	↓	↓
	3/28/24 1416	CCV - chem 24 SIM	KKK	34.0	2, MB1	J/UJ/P ND
			Note:	For #1	KKK was reported	
				from	SIM analysis. CCV passed	

LDC #: 58903c48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	724512-LCS	MMM	64 (70-130)	( )	( )	2	J|UJ|P NP
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 58903c48a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/m3)		RPD	Qualification
	1	2		
F	54.1	60.8	12	
WWW	237	281	17	
EE	15.3	17.1	11	
DDDD	98.3	116	17	
RRR	63.4	67.7	7	

Compound	Concentration (ug/m3)		RPD	Qualification
	1	2		
SSS	16.7	18.3	9	

Compound	Concentration ( )		RPD	Qualification

LDC #: _58903C48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	B	0.852	0.852	0.934	0.934	9.73	9.73
	Chem 20		HHHH	see curve					
	SIM		RRR	1.820	1.820	1.828	1.828	14.86	14.86

LDC #: _58903C48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	A	1.216	1.216	1.189	1.189	8.56	8.56
	Chem 20		CC	1.118	1.118	1.072	1.072	10.83	10.83
			BB	1.721	1.721	1.642	1.642	10.11	10.11

LDC #: ___ 58903C48a

Validation Findings Worksheet
Initial Calibration Calculation Verification

Reviewer: JB

Method: Method TO15

Calibration Date	Instrument/Column	Compound	Standard	(Y) Response	(X) Conc.	(X^2) Conc.
3/24/2024	Chem20	HHHH	1	0.0004	0.01	0.0001
			2	0.0063	0.02	0.0004
			3	0.0202	0.05	0.0025
			4	0.1184	0.10	0.0100
			5	0.6358	0.25	0.0625
			6	2.4815	0.50	0.2500

Regression Output	**Calculated**		***Reported***	
Constant	*c*	*-0.0028*	*c*	*NR*
Std Err of Y Est				
R Squared		*0.9999638*		*0.9900000*
Degrees of Freedom				
	a	*b*	*a*	*b*
X Coefficient(s)	*1.62439E-01*	*9.6107E+00*	*NR*	*NR*
Std Err of Coef.				
Correlation Coefficient		*0.999982*		
Coefficient of Determination (r^2)		*0.999964*		

LDC #: _58903C48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/25/2024	A	1.461	1.461	1.514	1.514	5.82	5.82
	Chem24		CC	1.145	1.145	1.154	1.154	2.42	2.42
			EE	2.912	2.912	2.874	2.874	12.44	12.44

LDC #: _58903C48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	B	1.267	1.267	1.165	1.165	8.01	8.01
	Chem 24		HHHH	0.199	0.199	0.205	0.205	12.71	12.71
	SIM		RRR	2.364	2.364	2.518	2.518	11.95	11.95

LDC #: 58903 c48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method ~~8260~~ TO15

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where:
ave. RRF = initial calibration average RRF
A_x = Area of target analyte
C_x = Concentration of target analyte
RRF = continuing calibration RRF
A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv chem24	3/28/24 1416	Δ	1.514	1.504	1.504	0.7	0.7
			CC	1.154	1.176	1.176	1.9	1.9
			EE	2.874	2.982	2.982	3.8	3.8
2	cch chem24 SIM	↓	B	1.165	1.086	1.086	6.8	6.8
			HHHH	0.205	0.192	0.192	6.3	6.3
			RRR	2.518	2.319	2.319	7.9	7.9
3								
4								

LDC #: 58903C48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCN	3/28/24	A	1.189	1.231	1.231	3.5	3.5
	Chem 20	1409	CC	1.072	1.032	1.032	3.7	3.7
			BB	1.642	1.717	1.717	4.6	4.6
2	CCN	↓	B	0.934	0.909	0.909	2.7	2.7
	Chem 20		HHH	1.0	1.11	1.11	11.0	11.0
	SIM		RRR	1.828	2.024	2.024	10.7	10.7
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903c48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Surrogate Results Verification Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10.0	10.420	104	104	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903 C48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 724512 LCS (CQ37765)

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
HH	10	NA	9.17	NA	92	92				
N	↓	↓	9.71	↓	97	97				
BB			9.48		95	95				
U			9.17		91	97				
I			9.72		97	97				
H			9.88		99	99				
KKK	↓	↓	7.27	↓	73	73	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903c48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Sample Calculation Verification Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, EE:

Conc. = $\frac{(69258)(10)(5)}{(3772152)(2.485)}$

= = 3.5282 ppbV

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#1	EE	3.53 ppbV		
			15.32 ug/m3		
		(3.53)(106.167) / 24.45	= 15.32 ug/m3		

Site: 100 South 4th Street, Brooklyn, NY
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.: GCQ39445
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date: May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SSDS STACK #1	CQ39445	VOC
SSDS STACK #2	CQ39446	VOC
SSDS STACK #3	CQ39447	VOC
SSDS STACK #4	CQ39448	VOC
SSDS STACK #1DUP	CQ39445DUP	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed air samples were collected on March 26, 2024 and were analyzed for volatile organic compounds (VOCs) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/22/24	ICV-SIM Chem39	1,4-Dioxane	40.68	SSDS STACK #1	SS	UJ nondetects
		sec-Butylbenzene	43.25	SSDS STACK #2	SS	UJ nondetects
				SSDS STACK #3		
				SSDS STACK #4		

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,4-dioxane and sec-butylbenzene results were estimated due to second source verification exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Standard ID	Compound	CC %D	Associated Samples		Validation Action
03/30/24	CCV-Chem39	Naphthalene	32.4	SSDS STACK #1 SSDS STACK #2 SSDS STACK #3 SSDS STACK #4	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The naphthalene result was estimated due to continuing calibration exceedance. The bias cannot be determined. The result can be used for project objectives as nondetect with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were performed on sample SSDS STACK #1 for VOC analysis. All criteria were met.

LCS Results

The following table lists the LCS percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
724711-LCS	1,4-Dioxane	63 (70-130)	SSDS STACK #1	J detects/UJ nondetects
	Ethanol	45 (70-130)	SSDS STACK #2	J detects/UJ nondetects
	1,2,4-Trimethylbenzene	66 (70-130)	SSDS STACK #3	J detects/UJ nondetects
			SSDS STACK #4	

The 1,4-dioxane, ethanol, and 1,2,4-trimethylbenzene results may be biased low due to low LCS percent recoveries. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SSDS STACK #1	5-fold dilution due to high target compound level for tetrachloroethene and trichloroethene

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Validation Action
SSDS STACK #1	Ethanol Acetone Isopropyl alcohol	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J detects J detects J detects

Sample	Compound	Finding	Criteria	Validation Action
SSDS STACK #4	Ethanol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J detects

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903D48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/24
SDG #: GCQ39445 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: AF
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA Method TO-15)

\he samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/Δ	
II.	GC/MS Instrument performance check	Δ	
III.	Initial calibration/ICV	Δ/SW	%D RSD ≤ 30 ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 30
V.	Laboratory Blanks | canister per batch	A/Δ	
VI.	Field blanks	N	
VII.	Surrogate spikes	Δ	
VIII.	Duplicate sample analysis	Δ	
IX.	Laboratory control samples	SW	LCS
X.	Field duplicates	N	
XI.	Internal standards	Δ	
XII.	Target analyte quantitation	SW	
XIII.	Target analyte identification	Δ	No Results < RL > MDL
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	Δ	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
SW = See worksheet FB = Field blank EB = Equipment blank

	Client ID		Lab ID	Matrix	Date
1	SSDS STACK #1	SX=AA, S	CQ39445	Air	03/26/24
2	SSDS STACK #2		CQ39446	Air	03/26/24
3	SSDS STACK #3		CQ39447	Air	03/26/24
4	SSDS STACK #4		CQ39448	Air	03/26/24
5	SSDS STACK #1DUP	FD	CQ39445DUP	Air	03/26/24
6					
7					
8					
9					

Notes:

1	724683 (CQ 39460)						
2	724711 (CQ 39445)						

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✗	✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	•	✓		
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?			✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	✓			
Were the relative percent differences (RPD) within the QC limits?	✓			

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?			✓	
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?			✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 58903D48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/22/24	ICV- SIM	HHHH	40.68	All	J/UJ/P ND
	1153	chem 39	EEE	43.25	↓	↓

LDC #: 58903D48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/30/24 1217	CCV - Chem 39	M M M	32.4	All	J/UJ/P ND

LDC #: 58903D48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?
Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	724711-LCS	HHHH	63 (70-130)	( )	( )	All	J/UJ/P NP+Pe
		WWW	45 ( )	( )	( )	↓	↓
		PPP	66 ( )	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 58903D48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Compound	Findings	Qualifications
		1	WWW, F, DDD	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	Jdw/p
		4	WWW	x'd cal Range	Jdw/p

Comments: See sample calculation verification worksheet for recalculations

LDC #: _58903D48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/2024	A	1.700	1.700	1.789	1.789	6.58	6.58
	Chem 39		CC	1.076	1.076	1.071	1.071	8.22	8.22
			BB	1.789	1.789	1.764	1.764	8.84	8.84

LDC #: _58903D48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/22/2024	B	1.172	1.172	1.244	1.244	9.36	9.36
	Chem 39		HHHH	0.153	0.153	0.151	0.151	19.11	19.11
	SIM		RRR	1.765	1.765	1.949	1.949	12.42	12.42

LDC #: 58903P48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/29/24						
	For SX	1445	S	0.424	0.408	0.408	3.8	3.8
2	CCV	3/30/24	Δ	1.789	1.823	1.823	1.9	1.9
		1217	CC	1.071	0.936	0.936	12.6	12.6
			BB	1.764	1.819	1.819		
3	CCV-SIM	↓	B	1.244	1.151	1.151	7.5	7.5
			HHH	0.151	0.140	0.140	7.3	7.3
			RRR	1.949	1.893	1.893	2.9	2.9

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903D4 8a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10	9.777	98	98	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903D48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 72411 LCS

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
UU	10	NA	9.7	NA	97	97				
N	↓	↓	10.36	↓	104	104				
BB			10.25		102	102				
U			10.08		101	101				
I			10.12		105	105				
H			10.50		108	108				
KKK			11.82		118	118				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903048a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Sample Calculation Verification Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #2 , S :

Conc. = $\frac{137756\ (10)}{638641\ (0.424)}$ =

5.087 ppbv

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#2	S	27.3 ug/m3	27.34 ug/m3	
			5.09 ppbv	5.087 ppbv	
			131.4		
		$\frac{(5.087)\ (64.93)}{24.45}$ =		27.34	

Site: 100 South 4th Street, Brooklyn, NY
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.: GCQ39449
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date: May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
IA-2	CQ39450	VOC
IA-3	CQ39451	VOC
IA-5	CQ39452	VOC
IA-DUP	CQ39453	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed air samples were collected on March 27, 2024 and were analyzed for volatile organic compounds (VOCs) by methods TO-15 and TO-15 in selected ion monitoring (SIM) mode. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/24/24	ICV-SIM Chem20	Benzyl chloride	30.79	IA-2 IA-3 IA-5 IA-DUP	SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzyl chloride result was estimated due to second source verification exceedance. The bias cannot be determined. The result can be used for project objectives as nondetect with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analyses.

Dilutions were not required for VOC analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Validation Action
IA-2 IA-3 IA-5	Ethanol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J detects
IA-DUP	Ethanol Isopropyl alcohol	Sample result exceeded calibration range.	Reported result should be within calibration range.	J detects J detects

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903E48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/24
SDG #: GCQ39449 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15) / TO-15 SIM

\he samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / SW	0/0 RSD ≤30, r² ICV ≤30
IV.	Continuing calibration	A	CCV ≤30
V.	Laboratory Blanks / canister check per batch	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	SW	
XIII.	Target analyte identification	A	No Result < RL > MDL
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	IA-2	CQ39450	Air	03/27/24
2	IA-3	CQ39451	Air	03/27/24
3	IA-5	CQ39452	Air	03/27/24
4	IA-DUP D	CQ39453	Air	03/27/24
5				
6				
7				
8				
9				

Notes:

	724676						

Note IA-1 - not analyzed, no sample was collected. ICV in 58903B

LDC #: 58903E48a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?			✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?			✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 58963E48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/24/24	ICV-SIM	MMMM	30.79	All	J/UJ/P ND
	0501	Chem20				

LDC #: 58903E48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation

Reviewer: FT

METHOD: ___ GC ___ HPLC GCMS VOA TO15

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Associated Samples	Compound Name	Findings	Qualifications
	1, 2, 3	WWW	x'd cal Range	J dw lp
	4	WWW, DDDD	↓	J dw lp

Comments: See sample calculation verification worksheet for recalculations

LDC #: _58903E48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	A	1.216	1.216	1.189	1.189	8.56	8.56
	Chem 20		CC	1.118	1.118	1.072	1.072	10.83	10.83
			BB	1.721	1.721	1.642	1.642	10.11	10.11

LDC #: _58903E48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	B	0.852	0.852	0.934	0.934	9.73	9.73
	Chem 20		HHHH	see curve	see curve				
	SIM		RRR	1.820	1.820	1.828	1.828	14.86	14.86

LDC #: ___ 58903E48a

Validation Findings Worksheet
Initial Calibration Calculation Verification

Page:____ of ____
Reviewer:_____

Method: Method TO 15

Calibration Date	Instrument/Column	Compound	Standard	(Y) Response	(X) Conc.	(X^2) Conc.
3/24/2024	Chem20	HHHH	1	0.0004	0.01	0.0001
			2	0.0063	0.02	0.0004
			3	0.0202	0.05	0.0025
			4	0.1184	0.10	0.0100
			5	0.6358	0.25	0.0625
			6	2.4815	0.50	0.2500

Regression Output	**Calculated**		***Reported***	
Constant	*c*	*-0.0028*	*c*	*NR*
Std Err of Y Est				
R Squared		*0.9999638*		*0.9900000*
Degrees of Freedom				
	a	*b*	*a*	*b*
X Coefficient(s)	*1.62439E-01*	*9.6107E+00*	*NR*	*NR*
Std Err of Coef.				
Correlation Coefficient		*0.999982*		
Coefficient of Determination (r^2)		*0.999964*		

LDC #: 58903E48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/29/24 1441	Δ	1.189	1.206	1.206	1.4	1.4
			CC	1.072	1.033	1.033	3.6	3.6
			BD	1.642	1.829	1.829	11.4	11.4
2	CCV	↓	B	0.934	0.903	0.903	3.3	3.3
	SIM		HHHH	1.0	1.07	1.07	7.0	7.0
			RRR	1.828	2.069	2.069	13.2	13.2
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903 E48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Surrogate Results Verification Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10.0	10.642	106	106	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903E48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 724676 LCS

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
UU	10	NA	9.84	NA	98	98				
N			9.99		100	100				
BB			10.1		101	101				
U			10.1		101	101				
I			9.85		99	99				
H			10.2		102	102				
KKK	↓	↓	12.5	↓	125	125				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903E48a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/HPLC/GCMS

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 3 , CC

Conc. = $\frac{(74994)(10)}{(724901)(1.072)}$

=

0.965 ppbv

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#3	CC	0.965 ppbv	0.965 ppbv	
			3.63 ug/m3	3.6366	
		$\frac{(0.965)(92.14)}{24.45}$ = 3.6366			

Site:	100 South 4th Street, Brooklyn, NY
Laboratory:	Phoenix Environmental Laboratories, Inc., Manchester, CT
Report No.:	GCQ39454
Reviewer:	Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental, Bohemia, NY
Date:	May 13, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
OA-1	CQ39454	VOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed air sample was collected on March 26, 2024 and was analyzed for volatile organic compounds (VOCs) by method TO-15. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review,* EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	IC %D	Associated Samples		Validation Action
03/24/24	ICV-SIM Chem20	Benzyl chloride	30.79	OA-1	SS	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 30; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzyl chloride result was estimated due to second source verification exceedance. The bias cannot be determined. The result can be used for project objectives as nondetect with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Dilutions were not required for VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Validation Action
OA-1	Isopropyl alcohol	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	J detects

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 58903F48a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/24
SDG #: GCQ39454 Category B Page: 1 of 1
Laboratory: Phoenix Environmental Laboratories, Inc., Manchester, CT Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA Method TO-15)

\he samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A SW	%RSD ≤ 30, r² ICV ≤ 30
IV.	Continuing calibration	A	CCV ≤ 30
V.	Laboratory Blanks / canister check per Batch	A /A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Duplicate sample analysis	N	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	SW	ND Results < RL > MDL
XIII.	Target analyte identification	A	
XIV.	Leak Check Compounds	N	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	OA-1	CQ39454	Air	03/26/24
2				
3				
4				
5				
6				
7				
8				
9				

Notes:

	724676						

LDC #: 98903F48a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was canister pressure criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 24 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 30%?	✓			
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
Was a canister blank analyzed for every canister?	✓			
Was there contamination in the canister blanks?		✓		
VI. Field Blanks				
Were field blanks identified in this SDG?			✓	
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?			✓	
Were the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within ± 40% from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	✓		✓	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.			✓	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 58963F48a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?
Y (N) N/A Were all percent differences (%D) ≤ 30%?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤30.0%)	Associated Samples	Qualifications
	3/24/24	ICV-SIM	MMMM	30.79	all	J/UJ/P ND
	0501	chem 20				

LDC #: 58903F48a

VALIDATION FINDINGS WORKSHEET
Target Analyte Quantitation

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Compound	Findings	Qualifications
		1	DDOD	Analyte flagged "S". The analyte is a solvent that is used in the laboratory. Laboratory contamination is suspected if the analyte concentration is less than five times the reporting level.	Jdu jf

Comments: See sample calculation verification worksheet for recalculations

LDC #: _58903F48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF0.2ppbv std)	Recalculated (RRF0.2ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	B	0.852	0.852	0.934	0.934	9.73	9.73
	Chem 20		HHHH	see curve	see curve				
	SIM		RRR	1.820	1.820	1.828	1.828	14.86	14.86

LDC #: _58903F48a_

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS TO-15

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF5ppbv std)	Recalculated (RRF5ppbv std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	3/24/2024	A	1.216	1.216	1.189	1.189	8.56	8.56
	Chem 20		CC	1.118	1.118	1.072	1.072	10.83	10.83
			BB	1.721	1.721	1.642	1.642	10.11	10.11

LDC #: ___ 58903F48a

Validation Findings Worksheet
Initial Calibration Calculation Verification

Page:____ of ____
Reviewer:_____

Method: Method _____

Calibration Date	Instrument/Column	Compound	Standard	(Y) Response	(X) Conc.	(X^2) Conc.
3/24/2024	Chem20	HHHH	1	0.0004	0.01	0.0001
			2	0.0063	0.02	0.0004
			3	0.0202	0.05	0.0025
			4	0.1184	0.10	0.0100
			5	0.6358	0.25	0.0625
			6	2.4815	0.50	0.2500

Regression Output	**Calculated**		***Reported***	
Constant	*c*	*-0.0028*	*c*	*NR*
Std Err of Y Est				
R Squared		*0.9999638*		*0.9900000*
Degrees of Freedom				
	a	*b*	*a*	*b*
X Coefficient(s)	*1.62439E-01*	*9.6107E+00*	*NR*	*NR*
Std Err of Coef.				
Correlation Coefficient		*0.999982*		
Coefficient of Determination (r^2)		*0.999964*		

LDC #: 58903F48a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/29/24 1441	A	1.189	1.206	1.206	1.4	1.4
			CC	1.072	1.033	1.033	3.6	3.6
			BB	1.642	1.829	1.829	11.4	11.4
2	CCV	↓	B	0.934	0.903	0.903	3.3	3.3
	SIM		HHHH	1.0	1.07	1.07	7.0	7.0
			RRR	1.828	2.069	2.069	13.2	13.2
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903F48a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100 Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene	10	10.471	105	105	0
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

LDC #: 58903F48a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 724676 LCS

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
UU	10	NA	9.84	NA	98	98				
N			9.99		100	100				
BB			10.1		101	101				
U			10.1		101	101				
I			9.85		99	99				
H			10.2		102	102				
KKK	↓	↓	12.5	↓	125	125				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 58903 F48a **VALIDATION FINDINGS WORKSHEET** Page: 1 of 1
Sample Calculation Verification Reviewer: FT

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, CC

Conc. = $\frac{30443 \quad (10)}{729209 \quad (1.072)}$

= 0.389 ppbV

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
	#1	CC	0.390 ppbV	0.389 ppbV	
			1.47 ug/m3	1.4676 ug/m3	
		$\frac{(0.389)(92.14}{(24.45)}$	= 1.467		

IRM CCR

Appendix G

Key Personnel Resumes

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

KEVIN KLEAKA, P.G.

Executive Vice President/Senior Environmental Scientist

EDUCATION

State University of New York at Plattsburg,
Bachelor of Science in Environmental Science, 1995 Applied Environmental Science Program

EXPERIENCE

IMPACT ENVIRONMENTAL CLOSURES Inc., 1997-Present),
Executive Vice President, Senior Environmental Scientist

- Principally responsible for managing environmental assessment, investigation, construction and remediation projects in commercial and industrial markets for lenders, real estate investment/development firms, construction firms and government agencies.
- Manage Phase I and II Environmental Site Assessments, State Spill Investigation and Remediation, County and Federal Underground Injection Control Programs, State & City Voluntary/Brownfield Cleanup Programs, State & Federal Superfund Sites, Brownfield Environmental Restoration Programs, Federal RCRA Closure, City E-Designation Projects.
- Responsible for environmental compliance of construction projects for waste management.
- Quality control of work products and deliverables.
- Supervise staff of geologists, hydrogeologists, engineers, environmental scientists, and environmental technicians to develop and implement sampling and analysis plans, quality assurance programs, remedial action plans.
- Provide expert witness testimony/fact statements and support in litigation cases involving soil, air and/or groundwater pollution.

WYETH AYERST LABORATORIES, (1995-1997), Chemist worked in chromatographic separations division performing quality assurance analysis.

- Performed laboratory procedures and analyses in accordance with USFDA analytical test methods by liquid, gas, and thin layer chromatography.

KEY PROJECTS

- East Side Access MTA LIRR
- Melody Cleaners
- ExxonMobil Spill- Valley Stream, NY
- Spartan Petroleum
- JFK 1020, Runway 13R-31L
- Rheingold Brewery Redevelopment Project
- WTC Greenwich Street Corridor Reconstruction
- Yankee Stadium Macomb's Park

ORGANIZATIONS

- New York City Brownfield Partnership
- New Partners for Community Revitalization
- ASTM Committee
- National Groundwater Association
- Environmental Bankers Association
- Vapor Intrusion Network
- Long Island Geologist Association
- Environmental Consulting Professionals
- Environmental Insurance Professionals

CERTIFICATIONS/ ACHIEVEMENTS

- Licensed Profession Geologist (NYS# 000735)
- Gold Certified Brownfield Professional 2012
- Advanced Tools for In-Situ Remediation Workshop
- ASTM Technical & Professional Training for Assessment of Vapor Intrusion into Structures of Property & New York State Department of Health, Vapor Intrusion Training
- New York Precision Equipment Global Survey Positioning Training
- MTBE & TBA Comprehensive Site Assessment and Successful Groundwater Remediation
- Environmental Data Resources, Due Diligence Workshop
- Advanced Technologies for Accelerated Natural Attenuation
- Eophysical Survey Systems, Theory and Practice of Applying Subsurface Interface Radar in Engineering and Geophysical Investigation.
- 40-Hour Occupational Safety & Health Administration

CHRISTOPHER CONNOLLY

PROJECT MANAGER

EDUCATION

Bachelor of Science, Music Technology and Studio Systems Design - University of Derby, England (2008)

EXPERIENCE

IMPACT ENVIRONMENTAL-Project Manager, 2015-Present

- Conducts visual inspections and produces Phase I Environmental Site Assessments.
- Arranges, organizes, and oversees Phase II Environmental Site Assessments and Limited Subsurface Investigations.
- Arranges and oversees small, moderate and large-scale remediation projects, including communication with disposal facilities, subcontractors, Clients and regulatory agencies, as applicable.
- Produces Work Plans, Final Engineering Reports and other associated regulatory reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.

LAUREL ENVIRONMENTAL ASSOCIATES - Environmental Scientist, 2010-2015

- Conducts visual inspections of Phase I & II Environmental Site Assessments.
- Writes Transaction screen and Phase I, II, and III Environmental Site Assessments, Remedial Action Work Plans (RIWP), Environmental Assessment Statements (EAS) and Supplemental Studies reports, as well as New York City Office of Environmental Remediation Voluntary Cleanup Program Reports.
- Assists in Phase II site operations.
- Organizes, arranges logistics, and oversees small to large scale remediation projects, with accurate communication with disposal facility, trucking, developer and regulatory agency required. Conducts associated CAMP monitoring and writes Daily Reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.
- Experience operating and assisting with truck-mounted,track-mounted and portable Geoprobe® machines and tooling.
- Conducts ground penetrating radar, magnetic and utility surveys.
- Completed OSHA 24-Hour HAZWOPER Training program.
- Conducts Nuisance Noise and Excessive Vibration monitoring assessments.
- Project manages numerous NYC OER Voluntary Cleanup Projects, dealing with the remediation and continuing use of Brownfields sites.

KEY PROJECTS

- KENSINGTON ROAD, Bronxville, NY.
  1.63-acre New York State Department of Environmental Conservation Brownfields Cleanup Program (BCP) Remediation: Oversight, Reporting, Agency, client and developer coordination.
- RCRA Closure projects, activities and reports.
- CEQR EAS Reports, OER Work Plans, OER Final Engineering Reports.
- Gasoline Station Portfolio Phase I and II ESAs

CERTIFICATIONS/ ACHIEVEMENTS

- OSHA 40-hour HAZWOPER Training
- OSHA 8-hour Refresher (2007-to-present)
- OSHA 10-hour Construction Training (2016)

Alex Keenan

Project Geologist I

6 years EXPERIENCE

EDUCATION

Bachelor of Science, Geology, Virginia Polytechnic and State University (2014)

EXPERIENCE

IMPACT ENVIRONMENTAL, 2019-Present, ***Project Geologist***

- Prepare Phase I & II Environmental Assessments (ESAs) in general conformation with ASTM Practice E-1527-05 and USEPA ALL Appropriate Inquiries (AAI).
- Perform various aspects of Phase II scopes of work for commercial properties.
- Prepare RIR/RAR reports for various NYSDEC OER projects.

PREFERRED ENVIRONMENTAL SERVICES, 2017-2019, *Geologist II*

- Prepared Cause & Origin Investigation reports for insurance claim determinations.
- Performed various aspects of Phase II scopes of work for residential and commercial properties.
- Oversight of residential spill remediations with NYSDEC oversight.

ADVANCED CLEANUP TECHNOLOGIES, 2016-2017, *Env. Scientist*

- Prepared Phase I & II Environmental Assessments (ESAs) in general conformation with ASTM Practice E-1527-05 and USEPA ALL Appropriate Inquiries (AAI).
- Prepared RIR reports for various NYSDEC OER projects.
- Performed various aspects of Phase II scopes of work for commercial properties.

SUNBURST CONSULTING, 2014-2015, *Wellsite Geologist and Geosteering Consultant*

- ND/MT based wellsite geologist responsible for geosteering Middle Bakken and Three Forks (1st and 2nd Bench) wells using TerraVu and excel programs.
- Gas Chromatography

KEY PROJECTS

- LIRR/MTA 3rd Rail Project
- MTA Bus Depot Sludge Sampling – 5 boroughs

CERTIFICATIONS/ ACHIEVEMENTS

- OSHA 40-hour HAZWOPER Training
- OSHA 8-hour Refresher (2016-to-present)
- OSHA 30-hour Construction Training (2019)
- Staten Island & LIRR Roadway Safety Training (2019)

DANIEL FRUHAUF

Project Manager

8 years EXPERIENCE

EDUCATION

Bachelor of Arts, Ecosystems & Human Impact. SUNY at Stony Brook (2012)

EXPERIENCE

2014-Present **IMPACT ENVIRONMENTAL** *Associate Project Manager*

- Responsible for management and logistical coordination of investigative and remedial tasks, schedule and implementation quality on very large to small clean-up projects within NYC, Long Island, NY and East Chicago, Indiana
- Developed and prepared various environmental planning documents approved by regulators including, Remedial Action Work Plans, Corrective Measures Implementation Work Plan, Health and Safety Plans, Waste Characterization Work Plans, Community Air Monitoring Plans, Phase II ESA Work Plans, Underground Storage Tank Removal Work Plan, etc.
- Responsible for developing complex methods of tracking and incorporating innovative technology to measure remedial completion for adequate reporting purposes
- Assembled proposals, work orders, change orders and general contracts for multiple clients
- Performed complex Phase II Assessments and other Subsurface Investigations to detect and target specific contaminants for delineation purposes.
- Designed and constructed various remedial systems including sub-slab depressurization systems, soil vapor extraction systems.
- Conducted, presented and attended multiple regulator meetings with USEPA, NYSDEC, NYC OER.
- Provided a professional attitude of always learning, exploring new methods and teaching along the way

2013-2014 **SOVEREIGN CONSULTING Inc.** *Environmental Scientist*

- Collected field data, soil, groundwater samples from various NYSDEC regulated Spill Sites and other hazardous waste sites
- Assisted in construction and design of SVE, SSDS and product skim systems at multiple tri-state clean-up projects
- Prepared various reporting components specific to NYSDEC Quarterly Monitoring Reports, Phase I ESA, Phase II ESA and owner liability risk assessments
- Provided contractor oversight and split sampling with multiple environmental contractors on various clean-up and development projects
- Engaged in various meetings with regulators as to develop clean-up strategies for complex projects

KEY PROJECTS

- Former Du Pont East Chicago Facility – RCRA CA Clean-up Project, East Chicago, IN
- Independent Metal Strapping – NYSDEC/RCRA Closure, Roslyn, NY
- Multiple MTA/ LIRR Development Projects – NYC, LI NY
- Saint Barnabas Hospital Development Project – Bronx NY
- Multiple NYC OER regulated Commercial Development Projects - NYC

CERTIFICATIONS/ ACHIEVEMENTS

- HAZWOPER 40hr + 8hr Refreshers
- OSHA 10hr Construction Safety
- OSHA 30hr Construction Safety
- Transportation Worker Identification Card (TWIC)
- NYC Office of Environmental Remediation (OER) Trained
- MTA/Amtrak Track Safety
- MTA/NYC Transit Track Safety
- LIRR Safety Blue Card
- NYSDEC SWPPP Certified Inspector
- Certified NYSDOL Asbestos Inspector

JULIANA DE LA FUENTE, P.G.

SENIOR PROJECT MANAGER

EDUCATION

Bachelor of Science, Environmental Science- Geology Concentration Long Island University, Southampton College (1985)

EXPERIENCE

IMPACT ENVIRONMENTAL, 2013-Present, *Senior Project Manager*

- Manage a portfolio of remediation projects in the metropolitan New York City and Long Island regions.
- Responsible for managing Phase I and II Environmental Site Assessments, Site characterization and remedial investigations, soil vapor investigation, construction and remediation projects in commercial and industrial markets for financial intuitions, retail gasoline property owners, attorneys, real estate investment and development firms, and construction firms.
- Also, manage underground storage tanks removals, State Spill Investigation and Remediation Sites, County and Federal Underground Injection Control Program Sites, New York City Voluntary/Brownfield Cleanup Program Sites, NYSDEC Brownfield Environmental Restoration Program Sites, NYSDEC RCRA Closure Sites, New York City E-Designation Projects.
- Supervise staff of geologists, hydrogeologists, engineers, environmental scientists, and environmental technicians to develop and implement sampling and analysis plans, quality assurance programs, remedial action plans.

Kleinfelder East, Inc., 2006-2013, *Project Manager*

- Effectively execute environmental investigation and remediation work in support of a multi-million-dollar national contract with focus on risk management for activities such as drilling, construction associated with remediation system installation, demolition, trenching and excavation, underground storage tank removal, sheeting/shoring installation, dewatering systems, mobile crane work activities and waste management.
- Policy and procedure implementation in accordance with client's operation integrity management system and Loss Prevention System (LPS) requirements.
- Established strong and sustainable relationships with regulatory agency representatives and reached milestones negotiated on behalf of the client with the regulator that have resulted in no further action and site closures.
- Team leader with direct reports responsible for the implementation of health and safety/LPS and technical training, mentorship, goal setting and performance evaluations, and team building.

1991-2006 **Experience as a Project Manager within the South and Eastern US.**

KEY PROJECTS

- Bill Wolf Petroleum
- Spartan Petroleum
- Atlantis Management Group
- Gateway Development Group
- Extell Development Company
- Xenolith Partners
- Lab Corp
- AutoZone

ORGANIZATIONS

- National Groundwater Association
- Long Island Geologist Association

CERTIFICATIONS/ ACHIEVEMENTS

- New York City Office of Environmental Remediation – Certified Brownfield Professional (Gold Certification)
- ISO 14001:2004 8 Hour Training Certification
- Loss Prevention System™ Training
- 40-Hour Hazardous Waste Site Worker Course/Refresher
- CPR and First Aid certification
- RCRA and DOT Training
- The Ninth Annual Indoor Air Pollution Conference Seminars
- U.S. EPA and ASHRAE Orientation to Indoor Air Quality
- Licensed Profession Geologist (NYS# 000790)

XIN YUAN, P.E.

Quality Control Manager

11 years EXPERIENCE

EDUCATION

Masters of Science, Civil Engineering, UMass Amherst (2010)
Bachelor of Science, Environmental Engineering. Tsinghua University, Beijing, China (2008)

EXPERIENCE

2010-Present **IMPACT ENVIRONMENTAL Engineering and Geology PLLC**
Quality Control Manager (2015-present)
Environmental Analyst (2010-2015)

- Quality control of all waste management/brownfield redevelopment projects;
- Management of site remediation/waste management projects;
- Environmental compliance & permitting of waste management facilities
- Achieve and maintain appropriate and consistent application of environmental compliance for waste disposal/beneficial use facilities
- Achieve and maintain appropriate and consistent application of environmental compliance at the regional Levels for waste management projects
- Review & evaluate site investigation/waste characterization results for waste management projects and provide technical recommendations to project manager
- Authored a multitude of BUD petitions for various other solid waste related projects in NY,NJ &PA, including projects such as The East Side Access, The Air Rail Project and JFK International Jet Blue Terminal 5
- Design and perform waste characterization investigations for waste management projects

KEY PROJECTS

- Columbia University Manhattanville Development Project
- LIRR 3rd Track Expansion Project
- Atlas Quarry Reclamation Project
- Former New Jersey Zinc Company-West Plant Remediation Project
- Morris Blanchard Redevelopment Project
- Brooklyn Bridge Park Pier 1 Redevelopment Project
- Southwest Brooklyn Marine Transfer Station Redevelopment Project
- Doremus Avenue Redevelopment Project

CERTIFICATIONS/ ACHIEVEMENTS

- Long Island Association of Professional Geologists
- American Chinese Real Estate Society

CERTIFICATIONS/ ACHIEVEMENTS

- US EPA 40hr Hazardous Materials Response for First Responders Training
- Professional Engineer in MA, PA, ID, NJ & NY

IRM CCR

Appendix H

SSDS Component Specifications

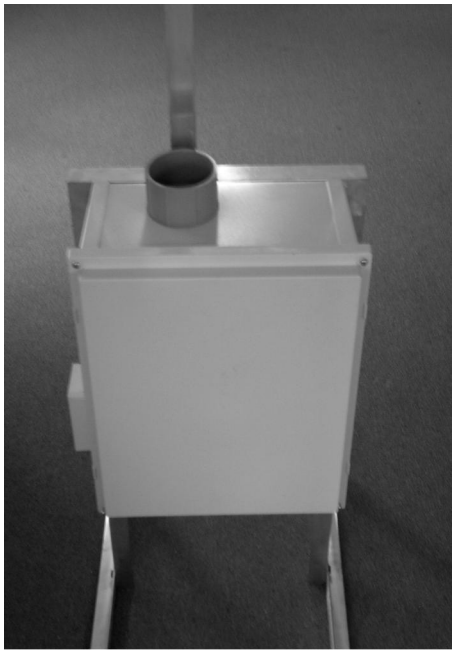
98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

THE OBAR GBR89
COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR89 WITH ROOF MOUNT

PERFORMANCE

- GBR89 HA 14" WC at 100CFM max flow 500 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 18"x 16"x 10" weighing only 18 lbs.
- 4" schedule 40 inlet and 6" schedule 40 exhaust.

1. COST	GBR89 HA
COMPLETE UNIT	**$1,789.00**
3 YEAR WARRANTY	**$650.00**

Enclosure Specifications
Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

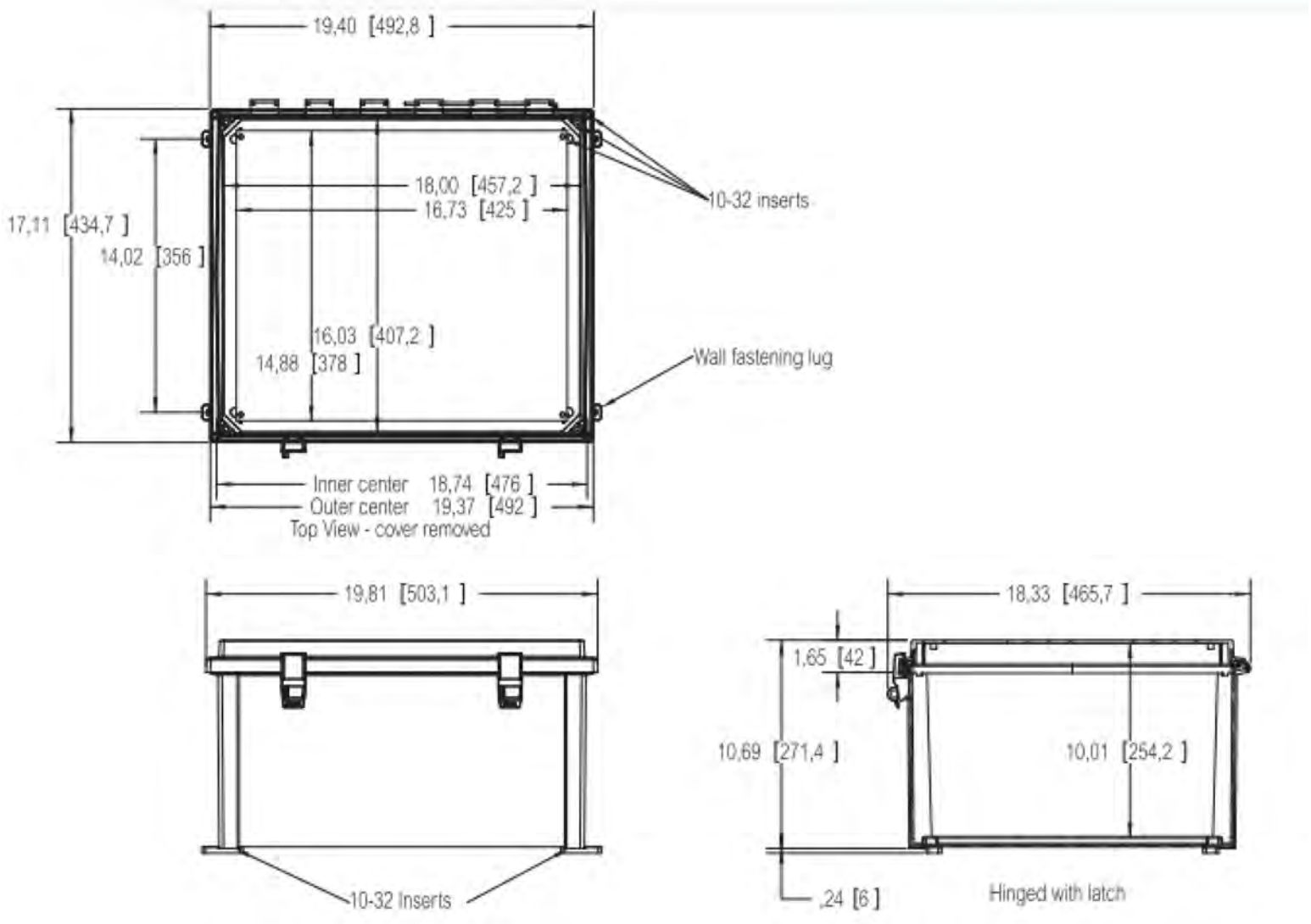
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

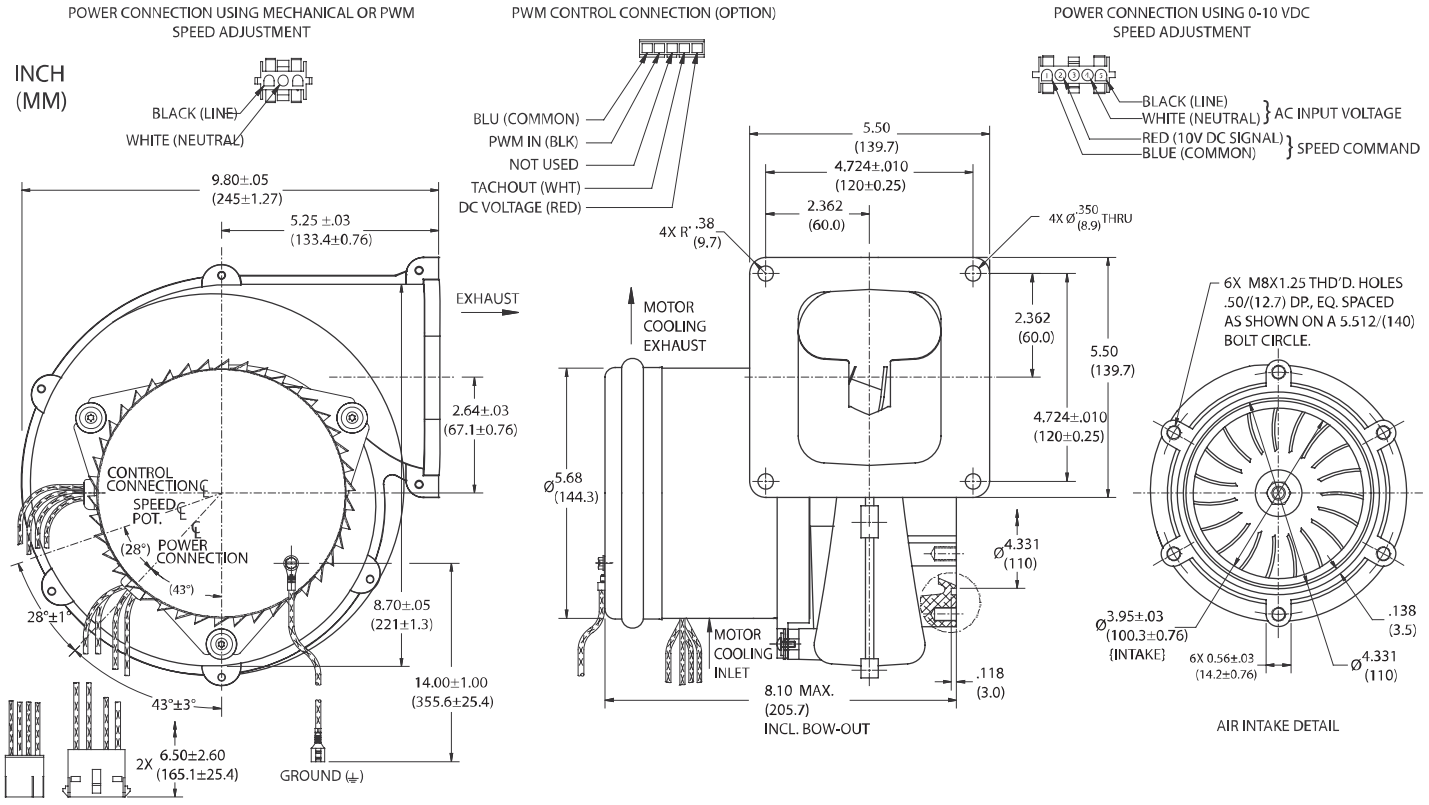
Certificates: Underwriters Laboratories



High Voltage Brushless DC Blowers

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output



		Part/ Model Number		
Specification	Units	150240	150241	150242
Speed Control	-	Mechanical	0-10 VDC	PWM

Notes:

- **Input Voltage Range:** 216 - 264 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 10 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation). Speed control input signal of 15 - 45 VDC @ 500 Hz - 10 kHz, and tachometer output (2 Pulses / Revolution). Optional tachometer output (3 Pulses / Revolution).
  0 to 10 VDC with a speed control input current of 5 mA to 20 mA at 10 VDC Input with multi-turn potentiometer set to minimum resistance (fully clockwise).
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
  4-20mA speed control available.
- **Approximate Weight:** 9.3 Lbs. / 4.2 Kg.
- **Option Card available for Customization**
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and CSA C22.2#133 under File LR43448
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION (3 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 1-480701-0.
  POWER CONNECTION (5 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 350810-1.
  SPEED CONNECTION (5 CAVITY): Blower connector, Molex Mini-Fit Jr., part no. 39-01-4057.
  Mating harnesses available upon request.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

AMETEK TECHNICAL & INDUSTRIAL PRODUCTS
627 Lake Street, Kent OH 44240
USA: +1 215-256-6601 - Europe: +44 (0) 845 366 9664 - Asia: +86 21 5763 1258
www.ametektip.com

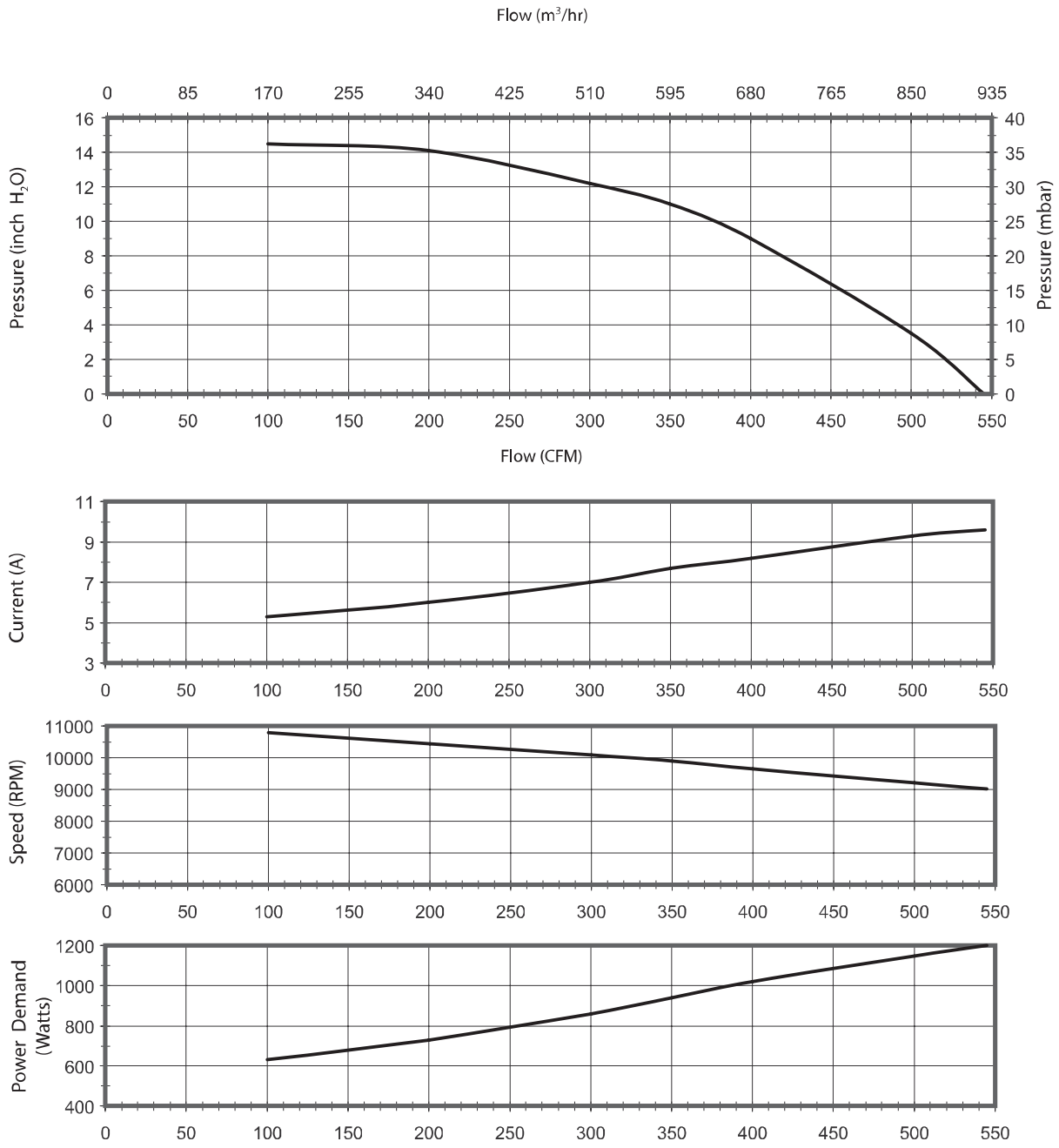
AMETEK
PRECISION MOTION CONTROL

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output

Nautilair

Typical Performance



Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft^3 (29.92" Hg, Sea Level, 68° F)
Vacuum performance available upon request.

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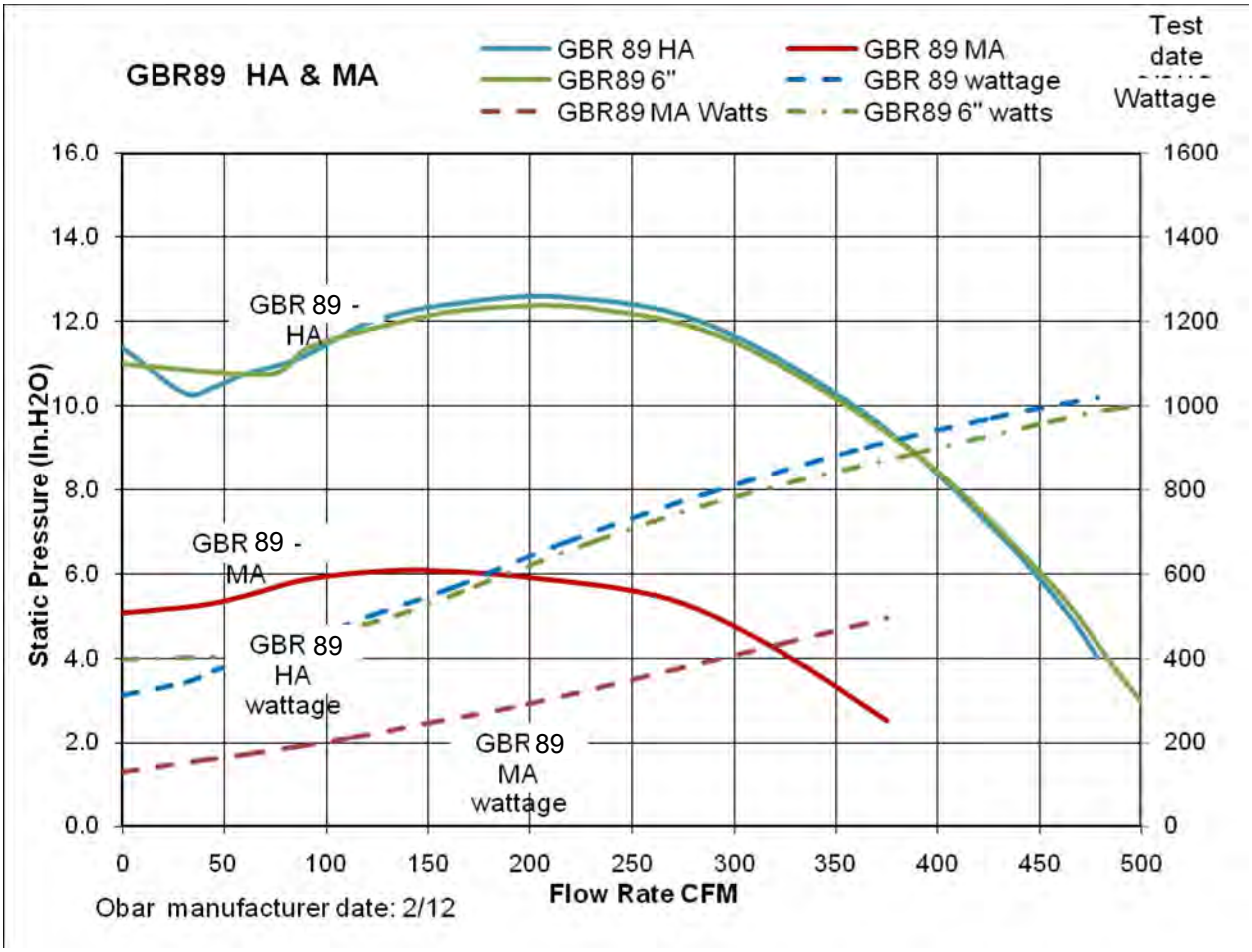
www.ametektip.com

AMETEK
PRECISION MOTION CONTROL

GBR89 HA tested at full voltage with 8 feet of 4" inlet (Blue Lines) and 6" Inlet (Green lines)

Maximum airflow with no exhaust piping and 8' of 6" piping is 529 CFM

GBR89 MA tested with speed control set to half the wattage consumption (Red Line)



IRM CCR

Appendix I

Import of Material Information

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

Christopher Connolly

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Monday, September 12, 2022 2:49 PM
To: Christopher Connolly
Cc: Kevin Kleaka, PG; Hal Benjamin; Maycock, Cris-Sandra (DEC); O'Connell, Jane H (DEC)
Subject: Re: 100 South 4th (C224260) - Import of Material

Chris,
The Department has reviewed the request dated August 30, 2022 to import approximately 50 cubic yards of virgin sand from US Silica P.O. Box 254 (Permit ID No. 01-2018) located at Mauricetown in New Jersey. The material will be used for the SSDS backfill. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be used above or below the demarcation layer.

Testing in accordance with DER-10, the Interim Remedial Measures Work Plan and approval by the Department is required for any additional material imported from this source. Should you have any questions please contact me.

Thank you,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Monday, September 12, 2022 12:46 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Yes, it is my understanding that the material is only sourced from the Maurice River Township facility. For which we have the permit #.

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Monday, September 12, 2022 12:44 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Subject: Re: 100 South 4th (C224260) - Import of Material

Hi Chris,
To confirm, processing facility moved the material to Maurice River Township facility and the material is only being imported from Maurice River Township facility?

Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Monday, September 12, 2022 11:59 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Hi Wendi,
Just following up to see if the permit # for the Maurice River Township facility is sufficient.

Best,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Friday, September 9, 2022 3:03 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Wendi,
According to my contact at US Silica, the Commercial Township facility is just a processing facility. The Maurice River Township (Port Elizabeth) facility is where the material comes from.
Does this help?

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Friday, September 9, 2022 12:56 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
Is there a permit ID number for the Commercial Township permit? Please present a document that shows a permit ID number for this facility. The permit for Maurice River is acceptable as there is a permit ID number.

Thanks,

Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Friday, September 09, 2022 10:26 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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See attached the Mining Permits, and associated Resolutions.
Best,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Thursday, September 8, 2022 11:00 AM
To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
These are stormwater discharge permits. Please submit mine registration certificates.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Thursday, September 08, 2022 10:38 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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Hi Wendi, will the attached permits suffice?

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Thursday, September 8, 2022 7:42 AM

To: Christopher Connolly <cconnolly@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Thanks Chris. Could US Silica provide a permit that shows their permit # NJG0161012 and expiration date?

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Wednesday, September 07, 2022 2:59 PM
To: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

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I got this response from my contact at US Silica:
Hi Chris,

I was informed by the Plant Manager that on the permit it states "resource extraction" which means all of our material is from virgin ground. We do not recycle the sand.

Hope this helps.

Wendy Windhurst
Customer Service Support, U.S. Silica Company
ISP Customer Support: 844.GOT.SAND opt. 2
(844.468.7263 opt. 2)

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Wednesday, September 7, 2022 11:25 AM
To: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

NJG0161012	46641	US SILICA PORT ELIZABETH	ESTELLE MANOR RD Maurice River Twp, NJ 08329	Maurice River Twp	Cumberland	363230.09	180566.43	Southern	Dav

See above, take from the NJDEP Active Permit list from 2020. I have contacted the facility directly, and am waiting for the relevant information to be sent over.

Chris

CHRISTOPHER CONNOLLY | Project Manager 1
O: 631-269-8800 x152 C: 631-664-4425

From: O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>
Sent: Wednesday, September 7, 2022 10:57 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>; Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

If the source cannot provide documentation that it is a permitted virgin source, the material would have to be tested to demonstrate meeting the applicable SCOs for import.

Jane H. O'Connell, P.G.
Regional Remediation Engineer, Division of Environmental Remediation

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4599 | F: (718) 482-6358 | M: (917) 817-1845 | jane.oconnell@dec.ny.gov
www.dec.ny.gov |

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Wednesday, September 7, 2022 9:34 AM
To: cconnolly@impactenvironmental.com
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Is there a license number registered with NJ? US Silica has one for their other blocks and lots. See attachment you provided on 9/6.

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Wednesday, September 07, 2022 9:29 AM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Having spoken to a representative from US Silica, they cannot find a mining permit with an ID #. They told me they have not had to provide this information before, and sent me all they have on file.

I apologize. Is there a chance we can move forwards with using the material with what was provided? It is my understanding that Filpro material is used commonly in DEC jobs due to its inert qualities.

Thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1

O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Wednesday, September 7, 2022 7:48 AM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,
For the Township of Commercial Permit for US Silica Company at 905 Noble Street in NJ, is there a permit that shows an ID number?

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Tuesday, September 06, 2022 3:04 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good afternoon,
Please find attached the facility permits. Please let us know when you can approve the material.

Regards,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1

O: 631-269-8800 x152 C: 631-664-4425

From: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Sent: Tuesday, August 30, 2022 3:06 PM
To: Christopher Connolly <cconnolly@impactenvironmental.com>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: RE: 100 South 4th (C224260) - Import of Material

Hi Chris,

Please submit the permit for the facility the stone is coming from.

Thanks,
Wendi

From: Christopher Connolly <cconnolly@impactenvironmental.com>
Sent: Tuesday, August 30, 2022 12:46 PM
To: Zheng, Wendi Y (DEC) <Wendi.Zheng@dec.ny.gov>
Cc: Kevin Kleaka, PG <kkleaka@impactenvironmental.com>; Hal Benjamin <hbenjamin@impactenvironmental.com>
Subject: 100 South 4th (C224260) - Import of Material

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good afternoon Wendi,
Please see attached the requested import form.
We would like to begin using this material today to fill the suction points. Can you provide approval?

Many thanks,
Chris

CHRISTOPHER CONNOLLY | Project Manager 1

O: 631-269-8800 x152 C: 631-664-4425
170 Keyland Court, Bohemia, NY 11716

Our email policies

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code - 401-02B
Division of Water Quality
Bureau of Nonpoint Pollution Control
P.O. Box 420 – 401 E. State St.
Trenton, NJ 08625-0420
Tel: (609) 633-7021 / Fax: (609) 777-0432
http://www.state.nj.us/dep/dwq/bnpc_home.htm

BOB MARTIN
Commissioner

RECEIVED
OCT - 7 2014

September 30, 2014

MICHAEL L WINKLER
US SILICA PORT ELIZABETH
PO BOX 254 - 9035 NOBLE ST
MAURICETOWN, NJ 08329

Re: RSG -Sand & Gravel Stormwater (GP)
NJPDES Authorization Number: **NJG0161012** PI ID #: **46641**
US SILICA PORT ELIZABETH
Maurice River Township, Cumberland County

Dear Michael L Winkler:

Enclosed is a NJPDES Authorization to Discharge No. **NJG0161012** issued under the **NJPDES Sand and Gravel (No. NJ0201189, permit code "RSG") Stormwater General Permit**. This authorization requires you to do the following:

- Maintain all discharges on-site;
- Develop, implement, update and maintain a Stormwater Pollution Prevention Plan (SPPP) which includes a Drainage Control Plan;
- Conduct Annual Inspections ensuring that the facility is in compliance with the SPPP;
- Prepare an Annual Report summarizing the Annual Inspection. For facilities already authorized under the Mining and Quarrying Stormwater General Permit (R13), the schedule for preparing the Annual Report will remain the same as it was under their previous authorization. For facilities **not previously** authorized under the Mining and Quarrying Stormwater General Permit, the Annual Report must be completed within 18 months of Effective Date Of Permit Authorization (EDPA); and
- Complete and submit the Department's Certification Form (attached) annually. For facilities that were previously authorized under the Mining and Quarrying Stormwater General Permit, the schedule for submission will remain the same as it was under their previous authorization. For facilities **not previously** authorized under the Mining and Quarrying Stormwater General Permit,

submission of the initial Certification Form will be due within 6 months of EDPA. This initial Certification Form must be signed and submitted to the Department certifying that your facility has prepared and implemented a SPPP. Within 6 to 18 months of EDPA, the Certification Form must be submitted to the Department certifying that the Annual Inspection was conducted and that your facility is in compliance with its SPPP. Thereafter the Certification Form must be submitted on an annual basis.

- **Below is a Summary of SPPP Preparation, Implementation, Annual Inspection, Annual Reports and Certification Submittals for the RSG**

Requirement	**Previously Authorized Under R13**	**Not Previously Authorized Under R13**
Prepare and Implement a SPPP	Update SPPP (If Necessary)	Within Six (6) Months EDPA
Submit Initial Certification Form	N/A (SPPP Preparation and Implementation Required Under R13)	Within Six (6) Months EDPA
Annual Inspection & Annual Report	On Previous Schedule Under R13 Authorization	Within Six (6) to Eighteen (18) Months of EDPA and Annually Thereafter
Submit Certification	On Previous Schedule Under R13 Authorization	Within Six (6) to Eighteen (18) Months of EDPA and Annually Thereafter

The enclosed Authorization to discharge under the RSG Master General Permit shall expire on May 31, 2019. Authorization under this permit will be automatically renewed when this general permit is reissued, so long as your facility remains eligible. If there are changes to your facility at any time during the permit term (e.g. changes in activity or ownership), please notify the Department as stipulated in Part II B.6.c. of the permit.

Facilities that engage in the business of mining and quarrying with a surface water discharge, and/or store materials not authorized under the RSG permit, are **not** eligible under this permit and will be considered for authorization under the Department's Mining and Quarrying Stormwater General Permit (R13).

The Department appreciates your efforts toward accomplishing the goal of providing cleaner water for our State and looks forward to working together with you in the future. If you have any questions, please contact Vicki Margulies of the Bureau of Nonpoint Pollution Control at 609-633-7021 or via e-mail at vicki.margulies@dep.nj.gov.

Sincerely,

James J. Murphy, Chief
Bureau of Nonpoint Pollution Control

Enclosures:
Authorization to Discharge
Generic Certification Form

New Jersey Department of Environmental Protection
Mail Code - 401-02B
Bureau of Nonpoint Pollution Control
Water Pollution Management Element
PO Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 633-7021
Fax: (609) 777-0432

AUTHORIZATION TO DISCHARGE
RSG -Sand & Gravel Stormwater (GP)

Facility Name:
US SILICA PORT ELIZABETH

PI ID #: 46641

Facility Address:
ESTELLE MANOR RD
MAURICE RIVER TWP, NJ 08329

NJPDES #: NJG0161012

Type of Activity: Stormwater Discharge General Permit Authorization Renewal

Owner:
US SILICA PORT ELIZABETH
PO BOX 254 - 9035 NOBLE ST
MAURICETOWN, NJ 08329

Operating Entity:
US SILICA PORT ELIZABETH
PO BOX 254 - 9035 NOBLE ST
MAURICETOWN, NJ 08329

Issuance Date:	Effective Date of Authorization:	Expiration Date:
09/22/2014	10/01/2014	05/31/2019

Your Request for Authorization under NJPDES General Permit No. NJ0201189 has been approved by the New Jersey Department of Environmental Protection.

Date: September 22, 2014

James J. Murphy, Chief
Bureau of Nonpoint Pollution Control
Division of Water Quality
New Jersey Department of Environmental Protection

Table of Contents

This Permit Package Contains the Items Listed Below

1. Cover Letter
2. Table of Contents
3. NJPDES Permit Authorization Page
4. Part I GENERAL CONDITIONS FOR ALL NJPDES PERMITS
5. Part II: GENERAL REQUIREMENTS: DISCHARGE CATEGORIES
6. Part III LIMITS AND MONITORING REQUIREMENTS
7. Part IV SPECIFIC REQUIREMENTS: NARRATIVE
8. ATTACHMENT A
9. ATTACHMENT B
10. Certification Form

PART I
GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.

b. General Conditions

Penalties for Violations	N.J.A.C. 7:14-8.1 et seq.
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1
Treatment Works Approval	N.J.A.C. 7:14A-22 & 23

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) &(f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.

i. Surface Water Quality Standards N.J.A.C. 7:9B-1

2. Stormwater/Ground Water Discharge Requirements

a. In addition to the conditions in Part 1 of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations, which are in effect as the Effective Date of Permit (EDP) of this final permit.

b. Conditions for General Permits at N.J.A.C. 7:14A-6.13.i

c. Procedures and conditions applicable to Ground Water at N.J.A.C. 7:14A-7

d. Pinelands rules at N.J.A.C. 7:50 et seq. (Where applicable)

B. General Conditions

1. Scope

a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.

b. Submit a complete permit renewal application: 180 days before the.

3. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.

b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Operator Certification

a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.

i. Notifcations shall be submitted to:
NJDEP
Examination and Licensing Unit
P.O. Box 417
Trenton, New Jersey 08625
(609)777-1012

b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condtion for water or waste, except as specifically authorized by a valid NJPDES permit.

8. Residuals Management

a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:

i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;

ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;

iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;

iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;

v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and

vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.

vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)

b. If any applicable standard for residual use or disposal is promulgated under section 405(d)of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.

c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.

d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.

e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C 7:14A-20.7(j).

f. The preparer who provides biosolids to another person who further prepares the biosolids for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.

g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to provide written notice to the Department and to the permitting authority for the State in which the bulk residual is proposed to be applied.

9. Permit Area

a. This permit applies to:

i. Existing facilities-Statewide; and

ii. New facilities-except as prohibited below

10. Scope

a. The issuance of this permit shall not be considered as a waiver of any applicable federal, State and local rules, regulations and ordinances.

b. Permit conditions remain in effect and enforceable until the permit is modified, renewed or revoked by the Department

11. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C 7:14A-6.10 by contacting the DEP Hotline at 1-877-WARN-DEP

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five (5) days.

12. Eligibility

a. Facilities eligible for this Sand and Gravel Permit are those facilities which conduct excavation of materials using a dredge, excavator or similar machinery as a whole or part of their industrial activity, and include the following SIC (and NAICS) codes: Construction Sand and Gravel 1442 (NAICS 212321); Industrial Sand (NAICS 212322); and parts of 1499 (NAICS 212399)-facilities that excavate soil and/or fill dirt.

b. Facilities that may not have the above references SIC or NAICS codes but conduct operations out of a borrow pit for the purposes of removing sand and/or soil.

c. The following facilities and activities are not eligible for this permit:

i. New Facilities (established after January 1, 2013) that discharge to ground water in areas classified under N.J.A.C. 7:9C as Class 1-A and Class 1-PL, or which discharge to ground water that contributes to surface waters classified as C1 or FW1;

ii. New facilities (established after January 1, 2013) that submit a request for authorization application that fail to demonstrate a facility design capable of full compliance with this permit;

iii. Other activities not associated with the facility's industrial activities (see sections A & B above). Activities such as composting, recycling activities and/or storage of materials not associated with the facility's on-site industrial activity are not authorized by their permit;

iv. Process wastewater discharges containing surfactants, flocculants, detergents and/or other chemicals used in the process of their industrial activity; and

v. Facilities that discharge to the surface waters of the State.

13. Authorization

a. In order to obtain authorization under this permit (except for automatic renewal authorization under B.6. below), a complete Request for Authorization (RFA) shall be submitted in accordance with the application request posted at htttp://www.state.nj.us/dep/dwq/pdf/njdes1f.pdf

b. Upon review of the RFA, the Department may, in accordance with N.J.A.C. 7:14A-6.13, either:

i. Issue notification of authorization under this permit, in which case, authorization is deemed effective;

ii. Deny authorization under this permit and require submittal of an application for an individual permit; or

iii. Deny authorization under this permit and require submittal of an RFA for another general permit.

14. Automatic Renewal of Authorization

a. Authorization under this permit will be automatically renewed when this general permit is reissued, as provided by N.J.A.C. 7:14A-6.13(d)9 and N.J.A.C. 7:14A-25.4(a), as long as the discharge remains eligible.

b. The Department shall issue a notice of renewed authorization to the permittee.

c. If the permittee is aware of any information in the most recently submitted RFA that is no longer true, accurate, and/or complete, the permittee shall provide the correct information to the Department.

d. A permittee whose authorization was renewed as provided above may request to be excluded from the reissued general permit in accordance with N.J.A.C. 7:14A-6.13(g).

15. Contents of the Request for Authorization (RFA)

a. A completed RFA shall include all of the following information and shall be supplied on the Department's NJPDES_1 form which can be found at http://www.state.nj.us/dep/dwq/pdf/njpdes1f.pdf:

i. The name, mailing address and location of the facility;

ii. The four (4) digit Standard Industrial Classification (SIC) Code or North American Industry Classification System (NAICS) Code and Short Title;

iii. For new facilities or existing facilities currently issued an individual permit; a completed RFA, a completed RSG Supplemental form, a valid Mining Certificate issued by the Office of Public Safety Compliance under the new Jersey Department of Labor, and a verification of an approved Soil Erosion and Sediment Control Plan (251 Plan);

iv. For existing facilities currently authorized under the R13, Mining and Quarrying Stormwater General permit, a completed RSG Supplemental form and the appropriately completed Certification form; and

v. Other information may be requested if the Department deems it reasonably necessary for the purposes of rendering a decision for authorization under this permit.

b. A completed and signed RFA shall be submitted to the Department at the address specified on the Department's NJPDES_1 form.

16. Requiring an Individual NJPDES Permit or Another General Permit

a. Pursuant to N.J.A.C 7:14A-6.13(e) the Department may require any facility authorized under this permit to apply for and obtain an individual permit, or seek authorization under another general permit.

b. If a facility is required by the Department to obtain another NJPDES permit that would also cover the authorized stormwater and/or ground water discharge. authorization under this permit remains in effect only until the date the other permit becomes effective.

17. Specific Discharges and/or Industrial Activities Not Authorized by This Permit

a. The following discharges are not authorized by this permit:

i. Rinsing of mobile fueling tankers, tankers, industrial equipment, piping, hoses, dump trucks, dumpsters, roll-off containers, other containers, totes, etc.;

ii. Rinsing of engines, radiators and other internal areas of the vehicles;

iii. Rinsing of vehicles used in handling and/or transporting of hazardous waste and/or hazardous materials;

iv. Rinsing/washing of vehicles/equipment using detergents;

v. Mine dewatering;

vi. Composting, recycling and/or storage of materials not listed in Part IV.C.1. of this permit; and

vii. Process water discharges that contain surfactants, flocculants, detergents and/or other chemicals used in the process of their industrial activities.

18. Other Permits or Regulatory Requirements

a. Compliance with the conditions of this permit does not exempt the permittee from any other applicable permit or other regulatory requirements including, but not limited to, all Federal, State and Local rules and regulations.

19. Other Laws

a. In accordance with N.J.A.C. 7:14A-6.2(a)7, this permit does not authorize any infringement of State or local laws or regulations, including, but not limited to the Pinelands rules (N.J.A.C. 7:50), N.J.A.C. 7:1E (Department rules entitled "Discharges of Petroleum and other Hazardous Substances"), and all other Department rules. No discharge of hazardous substances (as defined in N.J.A.C. 7:1E-1.6) resulting from an on-site spill shall be deemed to be "pursuant to and in compliance with [this] permit" within the meaning of the Spill Compensation and Control Act at N.J.S.A. 58:10-23.11c.

20. Notification of Changes

a. Prior to any physical or operational alterations or additions to the permitted facility the permittee shall give written notification to the Department within 90 days of any planned alteration or addition is expected to result in any change in the permittee's discharge and/or residuals use or disposal practices, including the cessation of discharge in accordance with N.J.A.C.7:14A-6.7.

b. Prior to any change of ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to notification of change of ownership.

C. Closing a Facility

1. Requirements for Closing a Facility

a. The permittee shall remove all operating equipment including but not limited to trucks, earth moving equipment, pumps and miscellaneous parts.

b. The permittee shall empty the contents of all tanks and clean the tanks of all residues. The contents of the tanks shall be disposed of in accordance with applicable rules and regulations.

c. The permittee shall remove all remaining aggregate piles or the permittee shall permanently stabilize the aggregate piles in accordance with the technical standards listed in the Standards for Soil Erosion and Sediment Control in New Jersey.

d. The permittee shall restore and/or stabilize all disturbed areas of the site in accordance with the technical standards listed in the Standards for Soil Erosion and Sediment Control in New Jersey.

e. The permittee shall submit a Permit Revocation Request Form which can be found at http://www.state.nj.us/dep/dwq/pdf/storm_revoke.pdf.

f. The permittee shall continue to comply with the terms and conditions of the permit until notification of termination of the permit has been issued.

g. At closure of a quarry, due dilgence must include consideration of technically enhanced naturally occuring radioactive materials (TENORM). At the time of closure, contact the Bureau of Environmental Radiation (BER) at (609) 984-5400 for a determination on whether a gamma scan is required. BER, in consultation with Division or Water Supply and Geoscience, will make a determination based on the geologic region of the State.

PART III
LIMITS AND MONITORING REQUIREMENTS

There are no monitoring requirements for the RSG permit.

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. Stormwater Definitions

a. Unless otherwise stated in this permit, the definitions set forth at N.J.A.C. 7:14A-1.2 and Discharge Monitoring (DMR) Report Instruction Manual are incorporated into this permit.

b. Other terms used in this permit are defined as follows:

i. "Best Management Practice (BMP)" means methods that have been determined to be most effective, practical means of preventing or reducing pollution form non-point sources.

ii. "Borrow pits" means any excavation pit that may or may not intercept the ground water table. The common feature of these basins is that they are topographic depressions that are used to extract materials for the facility's operations and are not designed to hold, retain, or treat and/or transmit stormwater and/or pollutants

iii. "Category One waters" means those waters designated in the tables in N.J.A.C. 7:9B-1.15(c) through (h) for purposes of implementing the anti-degradation policies set forth at N.J.A.C. 7:9B-1.5(d), et seq.

iv. "EDP" means Effective Date of the Permit.

v. "EDPA" means Effective Date of Permit Authorization.

vi. "Mine Dewatering" means any water that is impounded or that collects in a mine and is pumped, drained or otherwise removed from the mine through the efforts of the mine operator and is discharged to surface waters.

vii. "MQGP" means the Mining and Quarrying General Stormwater Permit (R13).

viii. "Non-Process" means any water including stormwater runoff which is not used in manufacturing or processing.

ix. "Pineland waters" means all waters within the boundaries of the Pinelands area, except those waters designated FW1 in N.J.A.C. 7:9B-1.15(h) Table 6, as established in the Pineland Protection Act (N.J.S.A. 13:18A-1 et seq.) and shown on Plate 1 of the "Comprehensive Management Plan" adopted by the New Jersey Pinelands Commission in November 1980.

x. "PL" means the general surface water classification applied to Pineland waters.

xi. "Process wastewater" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater includes, but is not limited to, leachate and cooling water other than non-contact cooling water. This definition includes the terms commercial wastewater and industrial wastewater as used in 40 CFR Part 503.

xii. "Source materials" means any materials, located at the facility and directly or indirectly related to process or other industrial activities, which could be a source of pollutants in a stormwater discharge that is subject to N.J.A.C.7:14A-24.2. Source materials include, but are not limited to: raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels; and lubricants, solvents, and detergents that are related to process or other industrial activities.

xiii. "Stormwater" means water resulting from precipitation (including rain or snow) that runs off the land's surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewerage or drainage facilities.

xiv. "Vehicles and Equipment" means any of the following, but is not limited to: pickup trucks, cars, SUVs, forklifts, front-end loaders, backhoes, road sweepers, other mobile earth-moving equipment and man lifts used on-site in the facility's operations.

B. Definitions

B. Stormwater Acronyms

1. Stormwater Acronyms Used in this Permit

a. BMPs-Best Management Practices

b. DCP-Drainage Control Plan

c. DGW-Discharge to Ground Water

d. DSW-Discharge to Surface Water

e. EDP-Effective Date of Permit

f. EDPA-Effective Date of Permit Authorization

g. MQGP-Mining and Quarrying Stormwater General Permit

h. NAICS-North American Industry Classification System

i. N.J.A.C.-New Jersey Administrative Code

j. NJPDES-New Jersey Pollutant Discharge Elimination System

k. N.J.S.A.-New Jersey Statutes Annotated

l. SIC-Standard Industrial Code

m. SPPP-Stormwater Pollution Prevention Plan

Sand & Gravel Stormwater (GP)

A. Permit Overview

1. Summary of Stormwater Permit Requirements

a. The permittee shall develop, implement, update and maintain a Stormwater Pollution Prevention Plan (SPPP), which includes a Drainage Control Plan (DCP). (See Part IV.B.1. & Part IV.B.2.)

b. The permittee shall develop, implement, update, and maintain site specific Best Management Practices (BMPs) to achieve the design criteria as specified in the permit. (See Part IV.C.1-4.)

c. The permittee shall be responsible for supervising and managing the operation and maintenance of this facility, which includes routine inspections of the facility. (See Part IV.F.1.)

d. The permittee shall summarize facility inspections in written reports and submit reports and certifications to ensure compliance with this permit. (See Part IV.H.)

e. The permittee shall retain copies of all maintenance records, and copies of all reports (including the SPPP, and soil erosion and sediment control plans) required by this permit. (See Part IV.I.)

B. Requirements for All Facilities

1. The Stormwater Pollution Prevention Plan (SPPP)

a. The SPPP shall include a written narrative and a Drainage Control Plan (see Part IV. B.2. below). The SPPP shall include all areas and activities that may impact stormwater quality, and include all items in Attachment A (required practices for fueling operations, vehicle maintenance and good housekeeping practices);

b. The SPPP shall address all stormwater and ground water discharges associated with industrial activities, including source materials, at the facility;

c. The SPPP shall identify the BMPs that are in practice to eliminate, reduce, or minimize exposure of all industrial activity and source material to stormwater or ground water;

d. The SPPP shall demonstrate that upon implementation, the stormwater and ground water discharges associated with industrial activity shall meet the conditions of this permit;

e. The SPPP shall identify BMPs to stabilize surface soils and reduce sediment transport, using BMPs outlined in the Standards for Soil Erosion and Sediment Control in New Jersey where appropriate, in accordance with the Soil Erosion and Sediment Control Act N.J.S.A. 4:24-39 et seq.;

f. The SPPP shall identify production and non-production areas that have a high potential for soil erosion or a known soil erosion control problem. Appropriate vegetative, structural, or stabilization measures shall be selected to limit erosion and sediment transport in these areas:

g. The SPPP shall be prepared, implemented and maintained in accordance with good engineering practices and shall include, at a minimum, all of the items and information in Attachment B: Contents of the Stormwater Pollution Prevention Plan;

h. The SPPP must include (or cite the location of) the following (if applicable):

i. Any spill reports prepared under section 313 in Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, 42 U.S.C. 9601 et seq.;

ii. Any Spill Prevention Control and Countermeasures Plan (SPCC Plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C. 1321; any Discharge Prevention, Containment and Countermeasure Plan (DPCC Plan); and Discharge Cleanup and Removal (DCR Plan) prepared under N.J.A.C. 7:1E.

2. Drainage Control Plan (DCP)

a. A drainage Control Plan is a series of controls that a facility establishes that ensures that all stormwater remains onsite. The DCP contains both a written narrative and a Drainage Control Map.

b. Drainage Control shall be established at a minimum within 6 months of EDPA for all areas.

c. The Drainage Control Plan shall have been incorporated into the facility's SPPP.

d. DCP shall be revised and updated whenever necessary to reflect the current conditions of the facility.

e. The contents of the Drainage Control Map (unless otherwise specified by the Department) shall be legible and clearly depict the following:

i. The Drainage Control Map shall be a 1" = 400' ;

ii. Site boundary of the facility;

iii. A title block containing tax block and lot number;

iv. North directional arrow;

v. Final grading of drainage area, including flow arrows showing drainage;

vi. Location of flow diversion structures;

vii. Areas of industrial activity (e.g. maintenance, fueling, equipment storage);

viii. Access roads;

ix. Existing Buildings and other structures;

x. Employee parking; and

xi. Certification of the DCP shall be from a Responsible Corporate Officer or Duly Authorized Representative as defined by N.J.A.C. 7:14A-4.9, or by a Professional Engineer's certification. This certification shall include the date prepared and date of subsequent revisions.

f. Drainage Control Plan (DCP)

i. The DCP shall be prepared and implemented within six (6) months of EDPA.

ii. The DCP shall be kept onsite and be available for review by the Department.

C. Specific Best Management Practices

1. BMPs-Management of Other Materials

a. Wood chips, tree stumps and other debris shall only be stored in a manner such that runoff from the storage area shall infiltrate into the ground. Runoff form the storage areas shall not flow into the borrow pits that intersect the ground water table.

b. Runoff from the storage of wood chips cannot discharge to surface water bodies. Tree trunks, brush piles, tree limbs, etc. can be stored in any manner as long as they are not stored in wetlands, transition zones or any manner with a direct connection to a surface water body.

c. Salt shall only be stored on-site in a manner consistent with the Department's policy on salt storage or the National Salt Institutes guidance on salt storage; both of which can be found in Attachment B of the permit.

2. BMPs-Facility Entrance

a. All stormwater at the facility entrance shall be retained on-site.

b. The permittee shall establish and implement BMPs to prevent or minimize transport of sediment and dust off-site, which may include the use of sweepers to remove material.

3. BMPs-Dust Control

a. Spraying, with non-process water is permitted under this for use on unpaved access roads, to maximize dust control and minimize off-site tracking of sand, soil, sediment or similar materials. However at no time can this discharge from this activity cause a discharge to surface water or be permitted to run off-site

4. BMPs-Other

a. All facilities shall establish and implement BMPs to prevent the discharge of oil, grease thinners, degreasers, lubricants, and contact cooling water to the ground or surface waters of the State during maintenance of stationary equipment.

D. Specific Requirements

1. Laboratory wastes must be managed in accordance with all applicable State laws and regulations.

2. Maintenance, Fueling and Good Housekeeping Practices

a. The facility must implement BMPs for good housekeeping practices, fueling and maintenance yard operations listed in Attachment A of this permit (when applicable).

E. Non-Stormwater Discharges allowed by this Permit

1. After the Effective Date of Permit Authorization(EDPA) the permit allows for the rinsing of vehicles and equipment under the following conditions:

a. Rinsing of vehicles/equipment shall be restricted to using water only, with no detergents;

b. Vehicle rinsing shall be of the external parts and undercarriage of the vehicles and limited to the removal of grit, grime, dust, dirt and incidental road salt;

c. Equipment and vehicles used in the application/handling of salt and de-icing materials shall be rinsed only with water only, immediately following salt and de-icing material applications. Prior to rinsing with water, all residual salt and de-icing materials shall be removed from equipment and vehicles to the maximum extent practicable using dry cleaning methods only (e.g. shoveling and sweeping). Recovered materials are to be returned to storage for reuse or properly discarded;

d. Truck beds and earth moving bucket/clamshells may be rinsed provided the following conditions are met:

   i. The equipment was used to move and/or excavate de-icing salt and/or non-hazardous, non-contaminated soil;

   ii. The bulk of the soil and/or salt has been physically removed by shoveling, raking, sweeping or other means.

e. Rinse water from activities listed E.1. a.-d. above shall not be diverted to any borrow pit that has intercepted the ground water table or cause a discharge to surface water. All discharge from the above mentioned activities shall be diverted to infiltrate into the ground.

f. Allowable discharges to the borrow pits that have intersected the ground water:

   i. Return water from the process area;

   ii. Overland flow of incidental stormwater from around the borrow pit.

F. Operations and Maintenance

1. Operations and Maintenance Requirements

a. The permittee shall be responsible for supervising and managing the operation and maintenance of this facility, and any BMPs which are implemented by the permittee to achieve compliance with the conditions of this permit, in accordance with the requirements identified in the SPPP. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with conditions of the permit.

G. Annual Inspections, Annual Reports and Certifications

1. Annual Inspections and Annual Certification

a. Beginning the first year of the authorization, and each year thereafter the permittee shall conduct an annual inspection in accordance with N.J.A.C. 7:14A-24.9(a).2.i, to assess all areas contributing to stormwater to ground water discharges, and evaluate the effectiveness of the implemented BMPs, in order to determine whether the SPPP is being implemented in accordance with the permit conditions. The permittee shall determine whether additional measures are needed to meet the permit conditions as required under Attachment B.

b. The permittee shall submit a complete Certification form, in accordance with H. below. The Annual Certification shall be submitted to the Department in accordance with the requirements contained in Part IV, Section H. Submittals of this permit.

2. Annual Report

a. Beginning the first year of authorization, and each year thereafter the permittee shall prepare an annual report summarizing the annual inspection in accordance with N.J.A.C. 7:14A-24.9(a).2.ii. The annual report is not submitted to the Department but shall be made part of the facility's SPPP and made available for inspection. The annual report shall include:

i. The date of inspection;

ii. Name(s) and title(s) of the inspectors; and

iii. A summary of the findings of the annual inspection, including any incidents of noncompliance. All incidences of noncompliance shall be identified in the annual certification in accordance with N.J.A.C 7:4A-24.9(a).2.ii

H. Permit Submittals and Deadlines

1. Submittal requirements

a. Each facility previously authorized under the Mining and Quarrying Stormwater General Permit (R13) shall submit the Department's Certification form annually, certifying that they have:

i. Updated their SPPP: and

ii. Conducted an annual inspection and are in compliance with their SPPP and permit conditions.

b. Each facility that was not previously authorized under the Mining and Quarrying Stormwater General Permit (R13), shall submit the Department's Certification form within the time frame specified in G.2. above

c. The Department's Certification form is available on the Department's website at www.state.nj.nj.us/dep/dwq/forms_storm.htm or by calling the Bureau of Nonpoint Pollution Control at (609) 633-7021.

2. Submittal Deadlines for Facilities Not Previously Authorized under the MQGP (R13)

a. SPPP preparation and implementation certification submittal requirements for facilities that were not previously authorized under the MQGP. NOTE: Facilities previously authorized under the Mining and Quarrying Stormwater General Permit that have previously submitted their SPPP preparation and implementation certification(s) are not required to resubmit these certifications.

i. Submit the Certification form certifying that the SPPP was prepared and implemented: within six (6) months from the Effective date of Permit Authorization (EDPA).

b. Annual Certification submittal requirements for facilities that were not previously authorized under the Mining and Quarrying Stormwater General Permit:

i. Submit the Certification form, certifying that the annual inspection was conducted: annually, beginning six (6) months form EDPA.

3. Submittal Deadlines for Facilities Previously Authorized under the MQGP (R13)

a. SPPP update certification submittal requirements for facilities previously authorized under the MQGP:

i. Submit the Certification form, certifying that the SPPP was updated, with the Annual certification.

b. Annual Certification submittal requirements for facilities that were previously authorized under the MQGP

i. Submit the Certification Form certifying that the annual inspection was conducted: annually from the effective date of permit authorization (EDPA).

4. Where to Send All Permit Submittals

a. All permit Certification submittals shall be sent to the following address:

i. New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Bureau of Nonpoint Pollution Control
P.O. Box 420
401 East State Street, 3rd Floor
Trenton, NJ 08625-0420

I. Record Keeping

1. Agency review

a. All SPPP's prepared under this permit shall be available to the public for inspection and duplication upon request, pursuant to N.J.A.C. 7:14A-18.1 The SPPP shall be signed by the permittee and the original shall be retained at the facility for use and NJDEP inspection. Upon request, a copy of the SPPP shall be delivered to the Department within five (5) business days of the date of the request. The permittee may claim any portion of the SPPPP confidential in accordance with N.J.A.C. 7:14A-18.3. The Department's decision regarding such claims shall be made in accordance with N.J.A.C. 7:14A-18.5

b. The permittee shall keep a copy of the updated SPPP on-site and have it available for inspection at all times.

Attachment A
BEST MANAGEMENT PRACTICES

The following BMPs shall be implemented for maintenance and fueling areas including ancillary operations (for example: mobile fueling), vehicle maintenance, good housekeeping practices (including on-site laboratories) and secondary containment (where applicable):

A. Maintenance areas

An inventory of all materials and machinery located within the maintenance areas which could be a source of pollutants in a stormwater discharge, shall be included in your facility's SPPP. The materials in question include, but are not limited to: raw materials; intermediate products; final products; waste materials; by-products; machinery and fuels; and lubricants, solvents, and detergents that are related to the maintenance areas or ancillary operations.

B. Fueling (including ancillary operations)

1. No topping off vehicles, mobile fuel tanks, and storage tanks. Drip pans must be used under all hose and pipe connections and other leak-prone areas during bulk transfer of fuels.
2. During bulk fuel transfer, either block storm sewer inlets, or contain tanks within temporary berms or temporary absorbent booms. If temporary berm containment of tanks is used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel should be within the temporary berms during the loading/unloading of bulk fuels. A trained employee should always be present to supervise during bulk fuel transfer.
3. Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response.
4. Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must immediately be repaired or replaced or taken out of service until repair or replacement is possible.

C. Vehicle Maintenance

1. Perform all vehicle and equipment maintenance at an indoor location with a paved floor whenever possible. For projects that must be performed outdoors that last more than one day, portable tents or covers must be placed over the equipment being serviced when not being worked on, and drip pans must be used.

2. For vehicles too large that it would be impractical to have maintenance conducted indoors or under portable tents, outdoor maintenance must be conducted on an impervious surface with no discharge to surface or ground waters of the State. All wastewater generated by this maintenance activity shall be collected and appropriately managed and disposed.__

D. General Good Housekeeping practices (including on-site laboratories)

1. Properly mark or label all containers. Labels must be kept clean and visible. All containers must be kept in good condition and tightly closed when not in use. When practical, containers must be stored indoors. If indoor storage is not practical, containers may be stored outside as long as they are covered and placed on spill platforms. An area that is graded and/or bermed that prevents run-through of stormwater may be used in place of spill platforms. Outdoor storage locations must be regularly maintained.
2. Conduct cleanups of any spills of liquids or dry materials immediately after discovery. Clean-up materials, spill kits and drip pans must be kept near any liquid transfer areas, protected from rainfall. Clean all maintenance areas with either:
    a. Dry cleaning methods using a dry, absorbent material (i.e., kitty litter, sawdust, etc.) and the rest of the area is to be swept. Collected waste is to be disposed of properly; or
    b. Wet cleaning methods shall be conducted only on imperious surfaces and all waste water generated by such activity shall be collected, appropriately managed and disposed of properly.

E. Good Housekeeping Practices for salt and other de-icing material handling (if applicable)

1. Practices to minimize the spillage of salt and de-icing materials during loading and unloading activities.
2. At the completion of loading and unloading activities, spilled salt and de-icing materials shall be removed using dry cleaning methods and either reused or properly discarded.
3. Sweeping by hand or mechanical means of storage and loading/unloading areas shall be done on a regular basis. More frequent sweeping is required following loading/unloading activities. Sweeping shall also be conducted immediately following, as practicable, loading/unloading activities.
4. Tracking of materials from storage and loading/unloading areas shall be minimized.
5. Minimize the distance salt and de-icing materials are transported during loading/unloading activities.

F. Inspections:

Inspections of the maintenance and fueling areas shall be conducted as part of your facility's regular inspections.

G. Discharge of Stormwater from Secondary Containment

The discharge pipe/outfall from a secondary containment area must have a valve and the valve must remain closed at all times except as described below. The facility may discharge stormwater that accumulated in the secondary containment area if a visual inspection is performed to ensure that the contents of the above ground storage tank have not come in contact with the stormwater to be discharged. Visual inspections are only effective when dealing with materials that can be observed, like petroleum. If the contents of the tank are not visible in stormwater, your facility must rely on previous tank inspections to determine

with some degree of certainty that the tank has not leaked. If your facility cannot make a determination with reasonable certainty that the stormwater in the secondary containment area is uncontaminated by the contents of the tank, then the stormwater should be hauled for proper disposal. For facilities subject to the Spill Prevention, Control and Countermeasures (SPCC) and/or Discharge Prevention Control and Countermeasures (DPCC) regulations, refer to www.epa.gov/oem/content/spcc/index.htm and www.nj.gov/dep/rpp/brp/dp/index.htm for specific requirements relative to discharges from secondary containment.

Resolution No. 2017-06

RESOLUTION OF FINDINGS, CONCLUSIONS AND DECISION

OF

THE DOWNE TOWNSHIP COMBINED PLANNING BOARD

WHEREAS, application having been made to the Combined Planning Board of the Township of Downe by U.S. Silica Company, a Corporation authorized to do business in New Jersey, with offices located at 9035 Noble Street, Mauricetown, New Jersey 08362 ("Applicant") for renewal of a Conditional Use Permit and Preliminary and Final Site Plan Approval, as more specifically described below, respecting Applicant's resource extraction facilities (Dragston Area) located northeast of James Moore Road (County Route #614) and along Tom's Bridge Road in the Township of Downe, County of Cumberland and State of New Jersey, being designated as Lot 4 of Block 33, Lots 2, 3, 4 and 5 of Block 35 on the Tax Map of Downe Township ("the property"); and

WHEREAS, a public hearing was held on Tuesday, September 12, 2017 at which time members of the general public had an opportunity to come forward and be heard with respect to the within application; and

WHEREAS, the Combined Planning Board of Downe Township, after carefully considering in detail the application submitted herein, the testimony of Applicant and all of the facts and circumstances herein, has made the following factual findings:

1. The property is owned by Applicant.

2. The property is located within an M-1 (Mining) Zone as shown on the Zoning Map of the Township of Downe wherein sand mining is a conditional use. Applicant has requested a renewal of the permits for Phase I and Phase II. The site is bounded on the west by Dragston and Toms Bridge Road, with James Moore Road (aka Little Italy Road) Bisecting Phase I and II. Phase I Mining is complete and contains Block 33 Lot 4; Phase II is the south of James Moore Road and contains Block 35 Lots 2-5. The total permit area is for 208.37 acres and exceeds the minimum 50 acre tract requirement for the mining. The mining is Phase I is complete, and Phase II consists of an additional 24.94 acres;

3. Applicant is seeking a renewal of its resource extraction activities for The Dragston area, Phase I and II with a total permit area of 208.37 acres in conformity with the pertinent requirements of *Ordinance 90-7* of the Township of Downe, as amended and supplemented thereto, as more specifically set forth on the plans prepared by prepared by Mark V. Shourds Consulting PC (Mark V. Shourds. N.J.P.E., N.J.P.P.), dated April, 2017 and submitted on behalf of Applicant as part of its application;

4. Applicant has submitted the requisite permits/approvals set forth set forth in Comment #4(a) of the report of the Township Engineer dated September 7, 2011, specifically, the NJDES/DSW Permit; (b) NJDEP Stream Encroachment Permit, (c) CAFRA permit, (d) NJDEP Wetlands Permit, and (e) Cumberland County Soil and Erosion Permit (pending); and (f) Cumberland County Planning Board Approval;

5. In deeming the application complete, the Board granted waivers relating to (a) Aerial photographs being at a scale of 1" = 400 in lieu of a scale of 1" = 200' (b) Existing Conditions Plan, Operational Plan, Reclamation Plan and Future Land Use at a scale of 1" = 300' such that the

entire tract may be shown on a single sheet in lieu of a scale of 1" = 200'. Other than the foregoing; Applicant does not seek any design waivers of or new variances from the pertinent requirements of *Ordinance 90-7* of the Township of Downe, as amended and supplemented thereto;

6. Applicant has received and reviewed the report of the Township Engineer dated August 31, 2017 **6.** Applicant has received and reviewed the report of the Township Engineer dated June 28, 2017 setting forth specific comments and recommendations/conditions to be considered in approving the subject application and has agreed to submit a perfected Plan addressing the following comments/actions to be taken to the satisfaction of the Township Engineer:

(a) Comment #5 (Confirm from the local fire district that keys have been provided for an existing locked metal gate for access to Phase I east of Toms Bridge Road and revise the site plan to show a proposed metal gate for Phase II along James Moore Road and confirm from the local fire district that keys have been provided for same);

(b) Comment #6 (The applicant shall notify Downe Township Officials and Emergency services prior to construction of the road opening for a proposed pipe crossing consisting two 14" slurry pipes and a single 24" metal pipe for maintaining water balance beneath James Moore Road and provide a note to this effect on the site plan;

(c) Comment #7 (Applicant shall replant an area on New Italy/James Moore Road that appear to have previously used access point with appropriate species, to provide an adequate buffer, providing a more substantial closure of the access lanes to the public and provide a note to this effect on the site plan;

(d) Comment #9 (Provide an additional note on Sheet 5 that all reclamation plans shall adhere to the Downe Township Mining Ordinance 90-7 Section 908B.C.);

(e) Comment #11 (Applicant shall conform to all requirements under 908C Performance Bond for the reclamation plan as submitted;

7. Applicant has complied with all applicable procedural requirements of the land use/development ordinance(s) of the Township of Downe, as amended and supplemented thereto, with respect to this application;

NOW, THEREFORE, BE IT RESOLVED BY THE COMBINED PLANNING BOARD OF DOWNE TOWNSHIP AS FOLLOWS:

8. The application for renewal of a Conditional Use Permit and Preliminary and Final Site Plan Approval of U.S. Silica Company pursuant to *Ordinance 90-7* of the Township of Downe, as amended and supplemented thereto, as same has been more specifically delineated above, be, and the same is, hereby GRANTED;

9. The foregoing approval is granted subject, however, to the following conditions:

(a) Submission of a perfected plan by Applicant setting forth those conditions/plat details set forth in the Engineer's Review Memorandum dated August 31, 2017 as delineated in Paragraph (6) (a) through (e), above;

(b) Compliance by Applicant with applicable provisions of *Ordinance 90-7* and other land use/development ordinance(s) of the Township of Downe, as amended and supplemented thereto, relating to resource extraction activities conducted on the property;

(c) Compliance by Applicant with *Section 908(G), Items (A) through (D)* of *Ordinance 90-7* of the Township of Downe;

(d) Maintaining those performance sureties in their current amounts based upon previous estimates of site improvements/restoration costs as submitted by Applicant;

(e) Payment of any outstanding real estate taxes due with respect to the property;

(f) Payment of any outstanding escrow fees for review of this project;

(g) Approval, if applicable, of the Cumberland County Soil Conservation District and other reviewing agencies or departments having jurisdiction herein.

ROLL CALL

THOSE		THOSE	
IN FAVOR	**OPPOSED**	**ABSTAINED**	**ABSENT**
Mike Rothman			Mayor Robert Campbell
Doug Cook			
Brent Daly			
Harry Levenknight			
Nancy Hartem			
John Gilligan			
Jeff Sanza			

The undersigned, Secretary of the Combined Planning Board of the Township of Downe, hereby certifies that the foregoing is a true copy of a Resolution adopted by the Combined Planning Board of the Township of Downe on November 14, 2017 memorializing action taken by the aforesaid Board at its regularly scheduled meeting on September 12, 2017.

Dated: November 14, 2017

Nicole Marlette
Combined Planning Board of the Township of Downe

OCT 1 5 2019

State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code - 401-02B
Water Pollution Management Element
Bureau of Nonpoint Pollution Control
P.O. Box 420 – 401 E. State St.
Trenton, NJ 08625-0420
Tel: (609) 633-7021 / Fax: (609) 777-0432
http://www.state.nj.us/dep/dwq/bnpc_home.htm

CATHERINE R. McCABE
Commissioner

October 7, 2019

C. Scott Eves
US SILICA CO
PO BOX 254
Mauricetown, NJ 08329

Re: R13 -Mining and Quarrying Activity Stormwater General Permit NJ0141950
NJPDES: NJG0161110 PI ID #: 49413
US SILICA MAURICETOWN
Commercial Twp, Cumberland

Dear C. Scott Eves:

Please find enclosed your Authorization to Discharge Stormwater under NJPDES: R13 -Mining and Quarrying Activity Stormwater General Permit (MQGP) NJ0141950 and a copy of that permit. A copy of this Authorization should be kept at the regulated mine/quarry site at all times and be available for inspection by any authorized representative of the New Jersey Department of Environmental Protection. If you have designated an agent, it is your responsibility to notify your agent about this General Permit Authorization and its requirements.

On October 22, 2015, the U.S. Environmental Protection Agency (EPA) promulgated the final National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule (see Federal Register 80:204 p. 64064). Among other obligations, this rule requires entities regulated under the Clean Water Act NPDES program to report certain information electronically instead of filing paper reports. Consistent with this rule, please be advised that the existing reporting requirements contained within your permit have been moved and/or modified. Please refer to Parts II and IV of your permit for further details regarding the new reporting requirements. To view the final rule, please visit https://www.gpo.gov/fdsys/pkg/FR-2015-10-22/pdf/2015-24954.pdf.

The Department appreciates your efforts toward accomplishing the goal of providing cleaner water for our State and looks forward to working together with you in the future. If you have any questions, please contact Gwen Socoloski at (609) 633-7021 or at Gwen.Socoloski@dep.nj.gov.

Sincerely,

Eleanor Krukowski, Supervisor
Bureau of Nonpoint Pollution Control

Enclosures:
Authorization to Discharge (ATD)
NJPDES General Permit No. **NJ0141950**

New Jersey Department of Environmental Protection
Mail Code - 401-02B
Bureau of Nonpoint Pollution Control
Water Pollution Management Element
PO Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 633-7021
Fax: (609) 777-0432

AUTHORIZATION TO DISCHARGE
R13 -Mining and Quarrying Activity Stormwater General Permit

Facility Name:
US SILICA MAURICETOWN

PI ID #: 49413

Facility Address:
9035 NOBLE ST
COMMERCIAL TWP, NJ 08329

NJPDES #: NJG0161110

Type of Activity: Stormwater Discharge General Permit Authorization Renewal

Owner:
US SILICA CO
9035 NOBLE ST
MAURICETOWN, NJ 08329

Operating Entity:
US SILICA CO
PO BOX 254
MAURICETOWN, NJ 08329

Issuance Date:	Effective Date of Authorization:	Expiration Date:
10/07/2019	11/01/2019	08/31/2022

Your Request for Authorization under NJPDES General Permit No. NJ0141950 has been approved by the New Jersey Department of Environmental Protection.

Eleanor Krukowski

Date: 10/07/2019

Eleanor Krukowski, Supervisor
Bureau of Nonpoint Pollution Control
Division of Water Quality
New Jersey Department of Environmental Protection

PART I
GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.

b. General Conditions

Penalties for Violations	N.J.A.C. 7:14-8.1 et seq.
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1
Treatment Works Approval	N.J.A.C. 7:14A-22 & 23

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) &(f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Stormwater/Ground Water Discharge Requirements

a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations, which are in effect as of the effective date of the final permit.

i. Conditions for General Permits N.J.A.C. 7:14A-6.13.

ii. Procedures and conditions applicable to certain stormwater discharges at N.J.A.C. 7:14A-24 et seq.

iii. Pineland rules N.J.A.C. 7:50 et seq.

iv. Recycling rules N.J.A.C. 7:26A et seq.

v. Procedures and conditions applicable to ground water N.J.A.C. 7:14A-7.

B. General Conditions

1. Permit Area

a. This permit applies to:

i. Existing Facilities - Statewide; and

ii. New Facilities - except as prohibited in Part II.B.4 below.

2. Scope

a. The issuance of this permit shall not be considered a waiver of any applicable federal, state, and local rules, regulations and ordinances.

b. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.

c. Regulated activities covered under this general permit are specifically exempt from the stormwater runoff quality standards at N.J.A.C. 7:8-5.5.

3. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP Hotline at 1-877-WARN-DEP.

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five (5) days.

4. Eligibility

a. The permit authorizes only those stormwater discharges to surface and ground water, and mine dewatering discharges to surface water, as specified in Part III Tables and activities outlined in Part IV of this permit from facilities engaged in mining and quarrying operations. The Department may authorize, under this general permit, other facilities that it deems are performing similar operations.

b. The following SIC (and NAICS) codes may be authorized to discharge under the conditions of this permit: SIC 1411 (212311)-Mining and Quarrying of Dimension Stone; 1422 (212312), 1423 (212313), 1429 (212319)-Crushed and Broken Stone; 1442 (212321), 1446 (212322)-Sand & Gravel; 1455 (212324), 1459 (212325)-Clay, Ceramic, and Refractory Stone. Facilities that have a significant portion of their business derived from activities under this permit but do not operate under the designated SIC (or NAICS) codes, may be authorized to discharge under the conditions of the permit. Those eligible for the Mining and Quarrying Stormwater General Permit will be facilities that have mining and quarrying as whole or part of their industrial activity. These facilities may or may not have on-site hot mix asphalt plants and/or concrete products manufacturing plants that share common drainage area(s) and outfall(s) with the mining and quarrying operations.

c. This permit does not authorize the following discharges or industrial activities:

i. Stormwater discharges authorized under another individual NJPDES Discharge to Surface Water (DSW) or NJPDES Discharge to Ground Water (DGW) permit (including an expired permit). The permittee may request authorization under this general permit if eligible;

ii. Stormwater discharges from facilities with "sanitary landfills", as defined in N.J.A.C. 7:26-1.4, or hazardous waste facilities that have significant materials exposed, as defined in 40 CFR 122.26(b)(12);

iii. Other discharges, even if such discharges are combined with stormwater discharges that are authorized by this permit;

iv. New or expanded operations with discharges to surface water classified under Category One (C1), Pineland Waters (PL) or Fresh Water One (FW1) designated in the tables in N.J.A.C. 7:9B-1.15; or Trout Maintenance or Trout Production streams;

v. New or expanded operations with discharges to ground water in areas classified under N.J.A.C. 7:9C as Class I-A and I-PL, or which discharge to ground water that contributes to surface waters classified as C1 or FW1;

vi. Discharges to FW1 waters;

vii. New or existing facilities operating under SIC 1459 (NAICS 212325) and mining bentonite and/or magnesite;

viii. New or existing facilities which propose to mine silicated marble or serpentine rock types, which have been determined to contain asbestos;

ix. Other activities not associated with the facility's industrial activities that could result in a discharge of a contaminant to ground water/surface water. These activities could include composting, and/or storage of materials not associated with the facility's industrial activity, on-site;

x. Process wastewater discharges containing surfactants, detergents, and/or other chemicals not specifically authorized under this permit; and

xi. Hot Mix Asphalt and/or Concrete operations with existing NJPDES permits that have not established drainage control.

d. Mining and quarrying facilities which have expanded beyond the areas defined by municipal boundaries may be directed to apply for an individual permit.

5. Initial Authorization

a. To obtain authorization under this permit (except for automatic renewal authorization under Part II.B.7 below), a complete Request for Authorization (RFA) shall be submitted in accordance with the requirements of this permit. Upon review of the RFA, the Department may, in accordance with N.J.A.C. 7:14A-6.13, either:

i. Issue notification of authorization under this permit, in which case, authorization is deemed effective as of the first day of the following month;

ii. Deny authorization under this permit and require submittal of an application for an individual permit; or

iii. Deny authorization under this permit and require submittal of an RFA for another general permit.

6. Notification of Authorization

a. Facilities that discharge industrial stormwater through a municipal separate storm sewer system (MS4) shall notify the owner and operator of that system of permit authorization.

7. Automatic Renewal of Authorization

a. Authorization under this permit will be automatically renewed when this general permit is reissued as provided by N.J.A.C. 7:14A-6.13(d)9 as long as the discharge authorized under this permit continues to be eligible. However, the Department reserves the right to require the permittee to submit, prior to authorization, an MQGP Supplemental Form to update any information that is no longer true, accurate and/or complete.

b. The Department shall issue notice of renewed authorization to the permittee.

c. When the permittee is aware of any information in the most recently submitted RFA and/or MQGP Supplemental Form that is no longer true, accurate, and/or complete, the permittee shall provide the correct information to the Department within 90 days of the effective date of renewal authorization notice.

d. A permittee whose authorization was renewed as provided above may request to be excluded from the reissued general permit in accordance with N.J.A.C. 7:14A-6.13(g), and may also request a stay of the application to that permittee of any new/additional conditions of the reissued permit in accordance with N.J.A.C. 7:14A-17.6.

8. Contents of the Request for Authorization (RFA)

a. An RFA shall include the following information:

i. A completed NJPDES_1 form (see http://www.nj.gov/dep/dwq/r13.htm);

ii. A completed MQGP Supplemental Form (see http://www.nj.gov/dep/dwq/r13.htm);

iii. A valid Mining Certificate issued by the Office of Public Safety Compliance under the New Jersey Department of Labor;

iv. A verification of an approved Soil Erosion and Sediment Control Plan (251 Plan); and

v. For new facilities, an SPPP Preparation, Implementation and Annual Certification Form certifying that, for the purposes of this RFA, the requirements of Part IV.B.1.a.i and Part IV.B.4.a have been met.

vi. Other information may be requested if the Department deems it reasonably necessary for the purposes of rendering a decision for authorization under this permit.

b. The completed and signed RFA, along with any additional required forms (see 8.a. above), shall be submitted to the Department at the address specified on the Department's NJPDES_1 form.

9. Requiring an Individual Permit or another General Permit

a. Pursuant to N.J.A.C. 7:14A-6.13(e), the Department may require the facility to apply for and obtain an individual permit, or seek and obtain authorization under another general permit.

b. If a facility is required by the Department to obtain another NJPDES permit that would cover the authorized stormwater and/or ground water discharge, authorization under this permit remains in effect only until the date the other permit becomes effective.

10. Other Discharges

a. If, at any time, it is discovered that the facility generates and discharges to surface or ground waters any wastewater (such as boiler or air compressor blowdown, steam or air compressor condensate, etc.) other than those discharges specifically authorized by this permit, the permittee shall discontinue such discharge and apply for the appropriate NJPDES DSW or DGW permit in accordance with N.J.A.C. 7:14A.

b. The discharge of any non-sanitary waste (including laboratory wastes) to a septic system designed and constructed under N.J.A.C. 7:9A is prohibited and shall cease immediately, and be directed to a holding tank, constructed and operated in accordance with N.J.A.C. 7:14A.

c. Specific discharges not authorized by this permit:

i. Rinsing of mobile fueling tankers, tankers, industrial equipment, piping, hoses, dump trucks, dumpsters, roll-off containers, other containers, totes, etc;

ii. Rinsing of engines, radiators and other internal areas of the vehicles; and

iii. Rinsing of vehicles used in handling and/or transporting of hazardous waste and/or hazardous materials.

11. Standard Reporting Requirements - Monitoring Report Forms (MRFs)

a. All required monitoring results reported on Monitoring Report Forms (MRFs) shall be electronically submitted to the Department via NJDEP's Electronic Monitoring Report Form (MRF) Submission Service.

b. Any electronic MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.

c. MRFs shall be submitted at the frequencies identified in Part III of this permit.

d. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.

e. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).

f. Monitoring results shall be submitted in accordance with the current NJPDES Monitoring Report Form Reference Manual and any updates thereof.

g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.

h. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the monitoring report submittal form.

12. Standard Reporting Requirements - Electronic Submission of NJPDES Information

a. Effective December 21, 2020, the below identified documents and reports, if required to be submitted by this permit, shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service.

i. General permit authorization requests (i.e. RFAs).

ii. General permit termination/revocation requests.

13. Other Permits or Regulatory Requirements

a. Compliance with the conditions of this permit does not exempt the permittee from other applicable permits or other regulatory requirements including, but not limited to, all Federal, State and local rules and regulations.

14. Other Laws

a. In accordance with N.J.A.C. 7:14A-6.2(a)7, this permit does not authorize any infringement of State or local laws or regulations, including, but not limited to the Pinelands rules (N.J.A.C. 7:50), N.J.A.C. 7:1E (Department rules entitled "Discharges of Petroleum and other Hazardous Substances"), and all other Department rules. No discharge of hazardous substances (as defined in N.J.A.C. 7:1E-1.6) resulting from an on-site spill shall be deemed to be "pursuant to and in compliance with [this] permit" within the meaning of the Spill Compensation and Control Act at N.J.S.A. 58:10-23.11c.

15. Notification of Changes

a. Prior to any physical or operational alterations or additions to the permitted facility the permittee shall give written notification to the Department within 90 days of any planned alteration or addition that is expected to result in any change in the permittee's discharge and/or residuals use or disposal practices, including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7; and

b. Prior to any change of ownership the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to notification of change of ownership.

C. Operation and Maintenance

1. Operation of Facility

a. The permittee shall be responsible for the operation and maintenance of this facility and any BMPs which are installed or used by the permittee to achieve compliance with the conditions of the permit and the requirements identified in the SPPP. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with conditions of this permit.

2. Licensed Operator Requirement for Stormwater Only

a. The operation of treatment systems (i.e. treatment works as defined by 7:14A-1.2) for stormwater only discharges, authorized under this general permit, do not require a licensed operator pursuant to N.J.A.C. 7:10A-1.1 et seq. These treatment systems include, but are not limited to, retention or detention basins, infiltration/percolation lagoons, pumping, power equipment and their appurtenances.

3. Residual Management

a. Beneficial use of residuals

i. Use of residuals on-site, where the material was excavated, generally does not require site-specific approval from the Department provided the residuals contain contaminants at levels below the most stringent soil clean-up levels established by the Department, except in the Pineland Area, where the Pinelands Commission's requirements shall also be met. All materials for on-site beneficial reuse within the State of New Jersey must be sampled and analyzed in accordance with the standard Department quality assurance standards and practices at a minimum as specified at N.J.A.C. 7:26E to fully characterize the contaminants in the latest Soil Remediation Standards (SRS) http://www.nj.gov/dep/srp/guidance/scc/ or other contaminants as specified on a case-by-case basis. The residuals must also qualify for placement on the land in view of the most recent Impact to Groundwater guidance available at http://www.state.nj.us/dep/srp/guidance/rs/, which will require additional analysis for leachate contamination.

ii. Use of residuals off-site will generally require issuance of a Certificate of Authority to Operate (CAO) for a beneficial use project determination (BUD), pursuant to N.J.A.C. 7:26-1.7(g) from the Solid and Hazardous Waste Management Program, Bureau of Landfill and Hazardous Waste Permitting. An electronic copy of the Application Form and Instructions for Completing the Certificate of Authority to Operate (CAO) a beneficial use project can be found at http://www.state.nj.us/dep/dshw/rrtp/benuseap.htm.

b. Except as otherwise provided for under Part II.C.3.a above, the permittee shall comply with land-based sludge management criteria and shall conform with the requirement for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:

i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;

ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;

iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;

iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;

v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and

vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.

c. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.

d. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtime at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual shall remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.

e. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.

f. Any person who prepares bulk residual in New Jersey that is applied to land in a state other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to submit to the Department written proof of compliance with or satisfaction of all applicable statutes, regulations, and guidelines of the State in which land application will occur.

4. Operation of a Waste Treatment Facility

a. The operation of a waste treatment or disposal facility shall at no time create:

i. A discharge, except as authorized by the Department in the manner and at the location(s) specified in this permit; and

ii. Any discharge to the waters of the State or any standing or ponded water or waste, except as specifically authorized by a valid NJPDES permit.

D. Closing a Facility

1. Requirements for Closing a Facility

a. The permittee shall remove all operating equipment including but not limited to trucks, earth moving equipment and pumps and miscellaneous parts.

b. The permittee shall empty the contents of all tanks and clean the tanks of all residues. The contents of the tanks shall be disposed of in accordance with applicable rules and regulations.

c. The permittee shall remove all remaining aggregate piles or the permittee shall permanently stabilize the aggregate piles in accordance with the technical standards listed in the Standards for Soil Erosion and Sediment Control in New Jersey.

d. The permittee shall restore and/or stabilize all disturbed areas of the site in accordance with the technical standards listed in the Standards for Soil Erosion and Sediment Control in New Jersey.

e. The permittee shall submit a Permit Revocation Request Form which can be found at http://www.state.nj.us/dep/dwq/pdf/storm_revoke.pdf.

f. The permittee shall continue to comply with the terms and conditions of the permit until notification of termination of the permit has been issued.

g. At closure of a quarry, due diligence must include consideration of technically enhanced naturally occurring radioactive materials (TENORM). At the time of closure, contact the Bureau of Environmental Radiation (BER) at (609) 984-5400 for a determination on whether a gamma scan is required. BER, in consultation with the Division of Water Supply and Geoscience, will make a determination based on the geologic region of the State.

E. Custom Requirement

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION GROUP: Stormwater Outfall Group

Monitored Location Group Members

002A , 003A

Surface Water DMR Reporting Requirements:

Submit a Quarterly DMR: within thirty days after the end of each quarter.

Comments:

Stormwater Associated with Industrial Activity

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, Total	Effluent Gross Value	*****	REPORT Daily Maximum	MGD	*****	*****	*****	*****	1/Quarter	Estimated
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.5 Daily Minimum	*****	8.5 Daily Maximum	SU	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	*****	REPORT Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Turbidity	Effluent Gross Value	*****	*****	*****	*****	*****	REPORT Daily Maximum	NTU	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:
Submit a Quarterly DMR: within thirty days after the end of each quarter.

Comments:
Stormwater Associated with Industrial Activity

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Petroleum Hydrocarbons	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			

Surface Water WCR - Monthly Reporting Requirements:
Submit a Monthly WCR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:
Enter CODE = N for each parameter for months that monitoring samples are not taken.

Table III - A - 2: Surface Water WCR - Monthly Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Date of Storm Event	Precipitation	REPORT	YYYYMMDD	Calculated	January thru December
Time Storm Event Began	Precipitation	REPORT	HHMM	Calculated	January thru December
Storm Event Duration	Precipitation	REPORT	# HOURS	Estimated	January thru December
Hours Since Last Storm Event	Precipitation	REPORT	# HOURS	Estimated	January thru December

Surface Water WCR - Monthly Reporting Requirements:

Submit a Monthly WCR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Enter CODE = N for each parameter for months that monitoring samples are not taken.

Table III - A - 2: Surface Water WCR - Monthly Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Rainfall Amount at Time of Sampling	Precipitation	REPORT	# INCHES	Measured	January thru December
Time of Sample Collection	Precipitation	REPORT	HHMM	Calculated	January thru December

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
001A	Maurice River	FW2-NT/SE1(C1)	R13 - Mining and Quarrying Activity Stormwater General Permit

Location Description

Located in the west portion of the property. Sample is taken prior to discharge to surface water.

Contributing Waste Types

Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Mine Dewatering Discharge to SE waters

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, Total	Effluent Gross Value	*****	REPORT Daily Maximum	MGD	*****	*****	*****	*****	1/Month	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.5 Instant Minimum	*****	8.5 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	25 Monthly Average	45 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oF	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	85 Instant Maximum	DEG.F	Continuous	Continuous
June thru September	QL	***	***		***	***	***			
Turbidity	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	30 Daily Maximum	NTU	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:
Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:
Mine Dewatering Discharge to SE waters

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	REPORT Monthly Av Minimum	*****	*****	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Petroleum Hydrocarbons	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. Stormwater Notes

a. The following notes refer to the monitoring required by Part III of this permit:

i. For sample collection requirements and specific analytical methods refer to the most recent edition of the NJDEP Field Sampling Procedures Manual. To estimate flow during a monitoring event, follow the guidelines contained in the NJDEP Field Sampling Procedures Manual or equivalent engineering reference.

ii. Reporting of analytical results shall follow the procedures described in the NJDEP Discharge Monitoring Report Instruction Manual (latest revision).

iii. Parameters with a "Report" requirement have no standard established by this permit. The permittee shall still analyze the discharge for that parameter and report its value. Failure to sample and report is a permit violation.

iv. All samples shall be analyzed in accordance with approved EPA methods contained in 40 CFR Part 136, unless otherwise noted in the permit.

v. pH values that are measured below the lower pH limit are not in violation if they are not lower than the measured pH of the precipitation collected on site during the storm event. To qualify for this exception, pH of that precipitation shall be reported on the monitoring report form as "Rain" pH.

vi. For pH limits for mine dewatering to waters designated as PL or waters listed under N.J.A.C. 7:9B-1.14(d)5.ii, refer to Part IV.B.6.a.

vii. Grab samples shall be collected at the designated sampling points and shall be collected within the first 30 minutes of a discharge associated with a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be kept with the SPPP explaining why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

viii. SQAR DMR submittals shall be in accordance with the Sludge Quality Assurance Regulations (SQAR N.J.A.C. 7:14C), the frequency of monitoring is based upon the amount of sludge generated. Consequently, the frequency of monitoring may be reduced for individual authorizations. Also in accordance with the SQAR, the parameters to be monitored may change in individual authorizations.

ix. "Monitoring Report Forms" include, but are not limited to, the Discharge Monitoring Report (DMR), Waste Characterization Report (WCR) and Residual Transfer Report (RTR).

B. Definitions

1. Stormwater Definitions

a. Unless otherwise stated in this permit, the definitions set forth at N.J.A.C. 7:14A-1.2 and the NJDEP Discharge Monitoring Report Instruction Manual at http://www.nj.gov/dep/dwq/mrf.htm are incorporated into this permit.

b. Other terms included in this permit are defined as follows:

i. "10-year 24-hour storm event" means the maximum 24-hour period precipitation event with a probable reoccurrence interval of once every ten (10) years and is equivalent to six (6) inches within a 24-hour time period.

ii. "2-year 24-hour storm event" means the maximum 24-hour period precipitation event with a probable reoccurrence interval of once every two (2) years and is equivalent to two (2) inches within a 24-hour time period.

iii. "Benchmark" means a pollutant concentration, as determined by the EPA, where the pollutant concentration reaches the level of concern. The level of concern is the pollutant concentration above which a stormwater discharge could potentially impair, or contribute to impairing, water quality or affect human health from ingestion of water or fish.

iv. "Borrow Pit" means any excavation pit that may or may not intersect the ground water table. The common feature of these pits is that they are topographic depressions that are used to extract materials for the facility's operations and are not designed to hold, retain, or treat and/or transmit stormwater and/or wastewater.

v. "Category One Waters" or "C1" means those waters designated in the tables in N.J.A.C. 7:9B-1.15(c) through (i) for purposes of implementing the anti-degradation policies set forth in N.J.A.C. 7:9B-1.5(d) et seq.

vi. "Equipment" means any of the following, but is not limited to: pickup trucks, cars, SUVs, forklifts, front-end loaders, backhoes, road sweepers, other mobile earth-moving equipment and man lifts used on-site in the facility's operations.

vii. "Existing Permittee" means a facility that was authorized under the Mining and Quarrying Stormwater General Permit (NJ0141950) on April 30, 2010.

viii. "Freshwater One" or "FW1" means those fresh waters, as designated in N.J.A.C. 7:9B-1.15(j), that are to be maintained in their natural state of quality (set aside for posterity) and not subjected to any man-made wastewater discharges or increases in runoff from anthropogenic activities.

ix. "Grab sample" means an individual sample collected over a period not exceeding fifteen minutes.

x. "Hydraulic control" means the ability to contain hydraulically a 10-year 24-hour storm event (6" of rain) and have no discharges to surface water.

xi. "Marketable residual product" means any residual or material derived from a residual which has been prepared for land application of residual in accordance with a permit pursuant to N.J.A.C. 7:14A-20 and which at a minimum, meets the pollutant concentrations in 40 CFR 503.13(b)(1), the Class B pathogen requirements in 40 CFR 503.32 and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8).

xii. "Mine" means an area of land, surface or underground, actively mined for the purposes of production of sand, gravel, and hard rock from natural deposits.

xiii. "Mine dewatering" means any water that is impounded or that collects in the mine and is pumped, drained or otherwise removed from the mine through the effect of the mine operator and discharged to surface water.

xiv. "mg/L" means milligrams per liter.

xv. "New Operation" means a mine or quarry that has yet to commence the discharge of stormwater/ground water associated with the regulated industrial activity.

xvi. "New Permittee" means an existing mine or quarry with a stormwater/ground water discharge associated with the regulated industrial activity that has already commenced discharge and was not authorized under the Mining and Quarrying Stormwater General Permit (NJ0141950) on April 30, 2010.

xvii. "Outfall" means a point that a facility uses for drainage control purposes, within the facility at which stormwater associated with the facility's industrial activity enters a surface water body from a discernible, confined and discrete conveyance for transport as stormwater to an off-site surface water body. Note: A discernible, confined and discrete conveyance includes, but is not limited to, a pipe or channel. Examples of conveyances include storm sewer pipes, drainage ditches, spillways, gullies, curbs and streets.

xviii. "Pinelands waters" or "PL" means all waters within the boundaries of the Pinelands Area, except those waters designated as FW1 in N.J.A.C. 7:9B-1.15(j), as established in the Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.) and shown on Plate 1 of the "Comprehensive Management Plan" adopted by New Jersey Pineland Commission in November 1980.

xix. "Process wastewater" means water used during manufacturing or processing that comes in direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. This term does not include wastewater used in suction dredging of deposits in a body of water and returned directly to the body of water without being used for other purposes or combined with other wastewater. This definition includes the terms commercial wastewater and industrial wastewater as used in 40 CFR Part 503. For purposes of this permit, process wastewater does not include mine dewatering and/or stormwater which comes in contact with aggregate stockpiles.

xx. "Quarterly monitoring" means monitoring conducted at a minimum frequency of once every three calendar months. Quarters for the purposes of this permit align with the calendar quarters.

xxi. "Settling aids" means materials that include, but are not limited to, flocculants, polymers, coagulants, gel logs and other chemicals that are used to reduce the amount of settleable and/or dissolved solids discharged by a facility.

xxii. "Source material(s)" means any materials or machinery, located at the facility and directly or indirectly related to process or other industrial activities, which could be a source of pollutants in a stormwater discharge associated with industrial activity that is subject to N.J.A.C. 7:14A-24.2. Source materials include, but are not limited to: raw materials, intermediate products, final products, waste material and by-products; and industrial machinery, fuels, lubricants, solvents and detergents that are related to process or other industrial activities. Materials or machinery that are not exposed to stormwater are not "source materials".

xxiii. "Stormwater" means water resulting from precipitation (including rain or snow) that runs off the land's surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewerage or drainage facilities.

xxiv."Treated quarry dredge materials" means any material removed from a basin or impoundment where the influent water or water in the basin has been treated with any chemical solutions. This may or may not include flocculants.

xxv. "Untreated quarry dredge materials" means material from a basin or impoundment that contains only stormwater and/or ground water that has neither come in contact with process wastewater, nor with stormwater and/or process wastewater that has been treated with chemical solutions.

xxvi." ug/L" means micrograms per liter.

xxvii"Valid storm event" means any storm event greater than 1/10" that produces a stormwater discharge and is preceded by a seventy-two hour period of no discharge.

xxvii"Vehicles" see Equipment definition above.

2. Stormwater Acronyms

a. Stormwater acronyms included in this permit are as follows:

i. "BMP" – Best Management Practice

ii. "C1" – Category One Waters

iii. "CPM" – Concrete Products Manufacturing

iv. "CFR" – Code of Federal Regulations

v. "DCP" – Drainage Control Plan

vi. "DGW" – Discharge to Ground Water

vii. "DMR" – Discharge Monitoring Report

viii. "DPCC" – Discharge Prevention Containment and Countermeasure

ix. "DSN" – Discharge Serial Number

x. "DSW" – Discharge to Surface Water

xi. "EDI" – Electronic Discharge Interchange

xii. "EDP" – Effective Date of Permit

xiii. "EDPA" – Effective Date of Permit Authorization

xiv. "EPA" – Environmental Protection Agency

xv. "FW1" – Freshwater One

xvi. "FW2" - Freshwater Two

xvii. "HMAP" – Hot Mix Asphalt Producer

xviii "MBAS" – Methylene Blue Active Substances

xix. "MQGP" – Mining and Quarrying General Permit

xx. "MRF" – Monitoring Report Form

xxi. "NAICS – North American Industry Classification System

xxii. "N.J.A.C." – New Jersey Administrative Code

xxiii."NJPDES" – New Jersey Pollutant Discharge Elimination System

xxiv."N.J.S.A." – New Jersey Statutes Annotated

xxv. "PL" – Pinelands Waters

xxvi."RTR" – Residuals Transfer Report

xxvii"SC" - Saline Coastal Waters

xxvii"SE" - Saline Estuarine Waters

xxix."SIC" – Standard Industrial Code

xxx. "SPCC" – Spill Prevention Control and Countermeasure

xxxi."SPPP" – Stormwater Pollution Prevention Plan

xxxii"TM" – Trout Maintenance

xxxii"TP" – Trout Production

xxxi"WCR" – Wastewater Characterization Report

Mining and Quarrying Activity Stormwater General Permit

A. Permit Overview

1. Summary of Stormwater Permit Requirements

a. The permittee shall develop, implement, update, and maintain a Stormwater Pollution Prevention Plan, which includes a Drainage Control Plan (see Part IV.B.1 through 3).

b. The permittee shall develop, implement, update, and maintain site specific Best Management Practices (see Part IV.C, D and F).

c. The permittee shall be responsible for the operation and maintenance of the facility, which includes routine inspections of the facility (see Part IV.B.7.d, G and I.5).

d. The permittee shall summarize inspections in written reports and certifications to ensure compliance with this permit (see Part IV.B.1 through 3, H and I).

e. The permittee shall conduct stormwater monitoring in accordance with the permit after drainage control measures are established (see Part III; and Part IV.B.2 and 3, B.8, D and E).

f. The permittee shall retain records of all monitoring information, maintenance records, and copies of all reports (including the SPPP) required by this permit (see Part IV.B, F, C.5 and I).

B. Requirements for All Facilities

1. The Stormwater Pollution Prevention Plan (SPPP)

a. Preparation of the SPPP

i. For New Operations the SPPP shall be prepared prior to the submission of a Request for Authorization (RFA) and in accordance with Attachment B of this permit.

ii. For New Permittees the SPPP shall be prepared within six (6) months of EDPA and implemented within twelve (12) months of EDPA in accordance with Attachment B of this permit.

iii. For Existing Permittees currently authorized under the MQGP, the SPPP shall be updated as necessary to reflect the current conditions at the facility.

b. The SPPP shall include a Drainage Control Plan consisting of a written narrative and a Drainage Control Map (see Part IV.B.3 below). The SPPP shall include all areas and activities that may impact stormwater quality.

c. The SPPP shall address all stormwater and ground water discharges associated with industrial activities, including source materials (and other materials as described in Part IV.F.1), at the facility.

d. The SPPP shall identify the BMPs that are in practice to eliminate, reduce, or minimize exposure of all industrial activity and source materials (and other materials as described in Part IV.F.1) to stormwater, ground water or surface water.

e. The SPPP shall demonstrate that upon implementation, the mine dewatering discharges to surface water and stormwater associated with industrial activity that discharges to ground water and/or surface water shall meet the conditions of this permit.

Mining and Quarrying Activity Stormwater General Permit

f. The SPPP shall identify BMPs to stabilize surface soils and reduce sediment transport, using BMPs outlined in the Standards for Soil Erosion and Sediment Control in New Jersey where appropriate, in accordance with the Soil Erosion and Sediment Control Act N.J.S.A. 4:24-39 et seq.

g. The SPPP shall identify production and non-production areas that have a high potential for soil erosion or a known soil erosion control problem. Appropriate vegetative, structural, or stabilization measures shall be selected to limit erosion and sediment transport in these areas.

h. The SPPP shall be prepared, implemented, updated as necessary to reflect the current conditions of the facility, and maintained in accordance with good engineering practices; and shall include, at a minimum, all of the items and information in Attachment B: "Contents of the Stormwater Pollution Prevention Plan" and any other information specified in this permit.

i. The SPPP shall be reviewed at least annually and updated as often as necessary to reflect changes at the facility. Any amendments to the SPPP shall:
   i. Continue to meet the requirements of the permit;
   ii. Include implementation date, be signed and certified; and
   iii. Be retained for a period of least five (5) years from date of amendment.

j. The SPPP must include (or cite the location of) the following (if applicable):
   i. Any spill reports prepared under section 313 in Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, 42 U.S.C. 9601 et seq.; and
   ii. Any Spill Prevention Control and Countermeasures Plan (SPCC Plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C. 1321; any Discharge Prevention, Containment and Countermeasure Plan (DPCC Plan); and Discharge Cleanup and Removal Plan (DCR Plan) prepared under N.J.A.C. 7:1E.

2. Drainage Control

a. All facilities authorized under this industry specific permit shall:
   i. Establish drainage control of all stormwater from industrial portions of the facility and ensure that stormwater from these industrial areas is discharged through permitted discharge monitoring location(s) or diverted back to basins.
   ii. Separate and divert whenever possible non-industrial stormwater (e.g., rooftop runoff, employee parking) from industrial portions of the site. These non-industrial stormwater discharges may be discharged through non-regulated outfalls and/or to ground water.
   iii. Monitoring is not required for stormwater discharges to onsite basins, except for those directed to ground water infiltration basins as required under Part IV.C.1.d.

3. Drainage Control Plan (DCP)

a. A Drainage Control Plan is a series of controls that the facility establishes that ensures that all stormwater from the industrial areas of the facility is directed to a discharge monitoring location(s) or back to basins for reuse. The DCP contains both a written narrative and a Drainage Control Map.

b. The DCP shall be prepared for all New Permittees within six (6) months of EDPA and implemented within twelve (12) months of EDPA, and shall be maintained for all Existing Permittees.

c. The DCP shall be incorporated into the facility's SPPP.

d. DCP shall be revised and updated whenever necessary to reflect the current conditions at the facility.

e. The contents of the Drainage Control Map (unless otherwise specified by the Department) shall be on a 1" = 400' scale, be legible, and clearly depict the following where applicable:

   i. Site boundary of the facility;

   ii. A title block containing tax block and lot number;

   iii. Date prepared and subsequent revisions;

   iv. North directional arrow;

   v. Final grading of drainage area, including flow arrows showing drainage;

   vi. Location of flow diversion structures;

   vii. Location of ground water discharge structures;

   viii. Areas of industrial activity (e.g. maintenance, fueling, equipment storage);

   ix. Access roads;

   x. Existing buildings and other structures; and

   xi. Employee and customer parking.

f. Drainage control for HMAP and CPM operations shall be incorporated into the quarry's DCP.

g. Certification of the DCP shall be from a Responsible Corporate Officer or Duly Authorized Representative as defined in N.J.A.C. 7:14A-4.9, or by a Professional Engineer's certification.

4. Effluent Limitations and Benchmarks

a. For mine dewatering, the permittee shall implement and maintain BMPs designed to meet the numeric effluent limitations outlined in Part III of this permit.

b. For stormwater discharges to surface water, the permittee shall implement and maintain BMPs designed to meet the numeric effluent limitations in Part III of this permit and the following benchmarks: TSS - 100 mg/l, and Turbidity - 50 NTU.

c. For mine dewatering and stormwater discharges to surface waters designated as trout maintenance and trout production waters in the Surface Water Quality Standards (N.J.A.C. 7:9B), the permittee shall implement and maintain BMPs designed to meet the temperature effluent limitations in Part III of this permit effective immediately after EDPA.

d. Exceedance of a benchmark is not considered a violation of the permit, but an exceedance may indicate a need for repair and/or modification of existing BMPs, or a need for implementation of additional BMPs.

e. Failure to consistently meet benchmarks and/or failure to take additional corrective actions necessary to meet the benchmarks in this permit could result in loss of eligibility under this general permit.

5. Implementation of the Stormwater Pollution Prevention Plan

a. For New Operations the SPPP shall be implemented upon EDPA.

b. For New Permittees:

i. The SPPP shall be implemented within eighteen (18) months of EDPA.

ii. Specific BMPs that can be readily implemented shall be implemented within three (3) months of EDPA.

c. For Existing Permittees currently authorized under the MQGP, the SPPP shall continue to be implemented and updated as necessary to reflect current conditions at the facility.

6. Mine Dewatering

a. Mine dewatering, as defined in Stormwater Definitions above, is subject to effluent limitations outlined in Part III of this permit.

i. Mine dewatering to PL waters shall maintain a pH range between 3.5 and 5.5 except as provided in 6.a.ii below.

ii. In accordance with N.J.A.C. 7:9B-1.5(c)1, pH limits outside of the range noted in 6.a.i above may be established provided that the permittee completes and submits the necessary documentation as noted under N.J.A.C. 7:14A-2.12.

b. Water that is impounded or that collects in the mine, that is used for dust control or other reuse within the facility's operations that does not result in a discharge, is not subject to the effluent limitations outlined in Part III of the permit.

c. Pumping shall at no time create flooding, erosion, stream bank scouring and/or sedimentation within the surface water body.

7. Hydraulic Control

a. Facilities that do not have or maintain hydraulic control shall meet effluent limitations in the Part III Tables and benchmarks of this permit.

b. Discharges to surface water as a result of a storm event larger than a 10-year 24-hour storm event shall be considered an upset condition.

c. Design and construction of the hydraulic control system:

i. The system shall be designed and constructed to contain stormwater from a 10-year 24-hour storm including ground water, other process wastewater and sediment storage, with zero discharge to surface waters for the entire storm event.

ii. The system shall have adequate freeboard capacity for a 10-year 24-hour storm within 36 hours of the previous storm event. The freeboard shall be attained through infiltration, reuse, removal of excess sedimentation and/or evaporation or other methods that do not result in a discharge to surface waters.

iii. The system shall be designed with a spillway or other means to allow a gravity flow discharge during an upset condition. The spillway shall be constructed in accordance with the Technical Standards for Soil Erosion and Sediment Control in New Jersey and approved by the local Soil Conservation District, or exempt municipality, and include in a certified Soil Erosion and Sediment Control (251) plan.

iv. The system shall be reflected within the contents of the DCP, which shall be signed, dated and certified by a Professional Engineer.

d. Operation and maintenance:

i. The permittee shall maintain design capacity through routine removal and disposal or reuse of sediment.

ii. When water levels exceed the design capacity of the system, the facility operator shall take immediate action to restore capacity and maintain hydraulic control using methods described in 7.c.ii above.

iii. Elevation markers or other gauges shall be installed in the system to easily monitor water levels and ensure adequate freeboard is being maintained in the system.

iv. The permittee shall notify the Department in the event of an upset condition in accordance with N.J.A.C. 7:14A-6.10 by contacting DEP Hotline at 1-877-WARNDEP (1-877-927-6337).

v. Logs of upset conditions shall be kept with the SPPP and shall include the duration of the storm event and amount of rainfall for each upset condition.

vi. Facilities that can no longer maintain hydraulic control shall notify the Department within 30 days after the initial loss of hydraulic control.

vii. Facilities that can no longer maintain hydraulic control shall immediately begin monitoring the discharge in accordance with the terms and conditions of this permit.

8. Erosion Control

a. The permittee shall include all the requirements of this section as part of an approved Erosion and Sediment Control Plan.

b. All work shall be accomplished in accordance with applicable State, Federal, and local approvals.

c. The permittee shall design, implement and maintain BMPs to prevent downstream erosion and sedimentation caused by stormwater and mine dewatering runoff at the outfall(s).

d. At a minimum, the BMPs shall meet the most recent technical standards listed in Standards for Soil Erosion and Sediment Control in New Jersey, Engineering standards section titled Standards for Off-site Stability.

e. The permittee shall repair and maintain the erosion controls and shall restore all eroded areas to their previous condition.

f. The permittee shall include a narrative of stormwater/process water runoff controls and list of BMPs in the SPPP.

9. Site Stabilization

a. The facility shall identify and implement where appropriate, and include in their SPPP, BMPs to stabilize surface soils and reduce sediment transport.

b. The SPPP shall identify production and non-production areas that have a high potential for soil erosion or a known soil erosion control problem.

c. Appropriate vegetative, structural, or stabilization measures shall be selected to limit erosion and sediment transport in these areas.

d. In addition, the SPPP shall be in compliance with the Soil Erosion and Sedimentation Control Act N.J.S.A. 4:24-39 et seq. for any land disturbance regulated under that act that may affect stormwater discharges regulated under this permit.

10. Monitoring Locations

a. All samples shall be taken at the monitoring locations specified in this permit and all samples, unless otherwise specified, shall be taken before the discharge joins or is diluted by another waste stream, body of water or substance. Monitoring locations and other discharge points shall not be changed without notification to and approval by the Department.

b. The permittee shall establish a discharge monitoring location at the entrance of the facility. If this is not possible then the permittee shall divert the stormwater to a basin or to another monitoring location, or pave the entranceway to a point where the hydraulic gradient of the road diverts the stormwater away from the entranceway. However, if all the aforementioned BMPs do not work at a specific facility the Department will approve alternate BMPs to handle the stormwater on a case-by-case basis.

11. Monitoring Location and Outfall Tagging

a. All permittees with discharges that flow through an outfall assigned a Discharge Serial Number (DSN) shall identify the outfall with an outfall tag or posted sign. The outfall tag or posted sign shall be:

   i. Legible;

   ii. Attached or posted as near to the end of the outfall pipe or sampling point as possible;

   iii. Made of durable material such as metal; and

   iv. Maintained on a regular basis, cleaned and inspected to ensure a tag (if applicable) is properly attached.

b. The outfall tag or posted sign shall display, at a minimum, the following information:

   i. The name of the facility where the discharge originates;

   ii. The NJPDES number;

   iii. The Department Hotline number (1-877-WARNDEP); and

   iv. The DSN for that particular outfall.

c. The monitoring location(s) shall be clearly delineated and include information from 11.b above. Monitoring location tags or signs shall be located in as close proximity as possible to the monitoring location while also avoiding hazardous conditions.

12. General Prohibition of Discharge to Surface Waters

a. Process wastewater shall not be discharged to surface water.

b. All facilities discharging to surface water are prohibited from discharging foam or causing foaming of the receiving waters that:

i. Forms objectionable deposits on the receiving waters;

ii. Forms floating masses producing a nuisance;

iii. Produces objectionable color or odor; or

iv. Interferes with the designated use of a water body.

C. Specific Requirements

1. Discharges to Ground Water (if applicable)

a. Process wastewater shall not be discharged to ground water unless discharged under a valid NJPDES discharge to ground water (DGW) permit.

b. Stormwater not associated with industrial activity may be infiltrated to ground water and is not subject to the benchmarks or effluent limitations in Part III of this permit.

c. Stormwater associated with industrial activity shall not be diverted to a Borrow Pit. This does not include incidental stormwater and return water from the sand/gravel plant washing area.

d. This permit authorizes discharges of stormwater associated with industrial activity to an infiltration basin(s) provided:

i. The basin(s) is designed and operated in accordance with Part IV.C.5 below and this section; and

ii. The influent to each infiltration basin shall be monitored and shall meet the limits contained in Part III of this permit.

e. Stormwater infiltration basins designed to manage waters associated with 1.b and 1.d above shall be designed to infiltrate the total volume of at least a 2-year 24-hour storm event within seventy-two (72) hours.

f. Stormwater runoff volumes are to be calculated using the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service Data for the facility's specific location.

g. Overflows from an infiltration basin resulting from stormwater runoff volume generated from a storm event greater than a 2-year 24-hour storm event shall not be considered a violation of this permit.

h. Overflows from an infiltration basin resulting from stormwater runoff volume generated from a storm event less than or equal to a 2-year 24-hour storm event is a violation of this permit.

i. The infiltration basin(s) may not have standing water within the basin more than 72 hours after a 2-year 24-hour storm event.

2. Requirements for Facilities with Operating Concrete Products Manufacturing Plants

a. This section shall apply when the Concrete Products Manufacturing Plant shares a common drainage area with the mine or quarry.

b. Stormwater associated with Concrete Manufacturing discharges to surface water:

   i. The permittee shall meet the benchmarks and effluent limitations in Part III, Table III-G-1 of this permit; and

   ii. Discharge monitoring shall be conducted in accordance with Part IV.E of this permit.

c. Process wastewater discharge:

   i. All concrete washout wastewater shall be discharged into a lined washout basin that shall be constructed as a surface impoundment (See 2.f below).

   ii. Concrete washout water and other process wastewaters (as defined by Part IV Definitions B.1.b.xix) shall not be discharged to surface or ground waters of the State.

   iii. The permittee shall collect and dispose of process wastewater in a legally permitted manner.

d. If the Concrete Products Manufacturing plant is operated by another company, that company must apply for and obtain a separate authorization under another general permit or apply for and obtain an individual NJPDES permit for their discharge.

e. If the Concrete Products Manufacturing plant has a separate drainage area the permittee shall apply for an authorization under the applicable general permit or for an individual NJPDES permit for the operation of the Concrete Products Manufacturing plant.

f. Concrete washout basins shall be constructed as a surface impoundment and be maintained to a design permeability of 1x [10-7] cm/sec. The integrity of these surface impoundments must be periodically evaluated. Additionally, the Department may, at any time, require the certification of structural integrity based on visual observations made during facility Compliance Evaluation Inspections or other Department visits.

3. Requirements for Facilities with Operating Hot Mix Asphalt Producer Plants

a. This section shall apply when the Hot Mix Asphalt Producer plant shares a common drainage area with the mine or quarry.

b. Stormwater associated with industrial activity with the Hot Mix Asphalt Plants shall meet benchmarks and effluent limits in Part III, Table III-D-1 and monitor in accordance with Part IV.E of this permit.

c. Monitoring for benzene is not required when:

   i. Cold patch is not stored on-site during the quarterly monitoring period; or

   ii. Cold patch is stored within a permanent structure and is not exposed to stormwater.

   iii. When monitoring is not conducted CODE=N must be reported on the appropriate DMR.

d. Monitoring for surfactants (MBAS) is not required when:

   i. Anionic surfactants are not used or stored on-site during the quarterly monitoring period.

   ii. When monitoring is not conducted CODE=N must be reported on the appropriate DMR.

e. If the Hot Mix Asphalt Producer plant is operated by another company, that company must apply for and obtain a separate authorization under another general permit or apply for and obtain an individual NJPDES permit for their discharge.

f. If the Hot Mix Asphalt Producer plant has a separate drainage area, the permittee shall apply for an authorization under the applicable general permit or for an individual NJPDES permit for the operation of the Hot Mix Asphalt Producer plant.

4. Settling Aids and Gel Logs

a. Stormwater/process wastewater that is treated with flocculants or other settling aids shall not be discharged to unlined basins.

b. The use of settling aids and gel logs are permitted only under controlled conditions as specified in this section. Description of use of settling aids and/or gel logs shall be included in the SPPP as an SOP as detailed in Attachment B, Section V.G. Manufacturer's recommendations and/or training satisfy this requirement provided they are written and satisfy the requirements of this section and Attachment B, Section V.G.

i. The SOP shall define controlled conditions based on flow, dosage level, mixing, pH (where applicable) and the manufacturer's instructions, and shall be based on the conditions present at the facility.

ii. The SOP shall define activities to prevent the discharge of the settling aid and/or gel log in an amount that has a potential to cause toxicity.

iii. The SOP shall include written training procedures used by the facility to ensure effective use of the settling aid. The training shall include the minimum requirement of Attachment B, Section V.G.

iv. Records of training shall be maintained and shall indicate that personnel are aware of the relevance of their activities.

c. Settling aid and gel log feed rates shall not exceed dosage levels that have a potential to cause toxicity.

d. The Department reserves the right to deny use of any settling aid or gel log.

e. Records of the use of all settling aids and gel logs shall be maintained on a monthly usage log including date, time, name of product used, amount of product used, and gallons of water treated and calculated dose. The monthly log shall be verified and signed by an authorized employee.

f. The facility management shall conduct an annual review of the use of settling aids and gel logs to ensure continued conformance to the manufacturer's instructions and to prevent discharge of settling aid at levels that might cause toxicity.

g. Product usage shall not be changed until appropriate controlled conditions are determined by the facility for the product, in accordance with 4.b above.

h. The permittee shall notify the Department in writing thirty (30) days prior to use of new settling aids or gel logs.

i. Updated section of the SPPP shall be included as part of the notification.

j. There shall be no direct connections of chemical solution tanks, feed lines and/or containers to septic tanks or sanitary sewers.

k. Sites using settling aids and/or gel logs shall implement BMPs and engineered systems with controls to ensure that gel logs are used in accordance with manufacturer's recommendations.

l. All imported settling aids and/or gel logs shall be approved for use in the United States in accordance with Federal and State rules and regulations.

m. Gel logs shall only be used at the influent to a settling basin.

n. All chemical feed pumps shall be calibrated monthly to ensure maximum feed rates are not exceeded.

5. Requirements for All Basins

a. For the purposes of this permit, "basins" is a collective term used to describe a variety of regulated units at NJPDES permitted facilities. Examples of these basins are infiltration/percolation lagoons, or surface impoundments which may be referenced by this permittee as retention, settling, storage or detention ponds, basins, lagoons, lined or unlined basins. The common feature of these basins is that they are topographic depressions or bermed areas designed to hold, retain, or treat and/or transmit stormwater/ground water and/or pollutants. Borrow Pits are not considered to be basins for the purposes of this permit and are not subject to monitoring requirements outlined in Part III of this permit.

b. Except as allowed in Part IV.C.2 above, process wastewater shall not be discharged into a basin.

c. Unauthorized discharges from basins are prohibited.

d. Surface water discharges from Borrow Pits is prohibited.

e. New Operations that will have basin(s) discharging to surface water shall certify that the basin(s) will hold a 10-year 24-hour storm event. The certified design shall be signed and sealed by a professional engineer.

f. The following items should be addressed in the facility's SPPP:

   i. A schedule of physical inspections of all visible portions and areas surrounding the basin unit(s) to ensure that the berms have remained structurally sound;

   ii. A site map depicting locations of activities, proposed and implemented BMPs, structures, concrete pads, oil/water separators, septic systems, laboratories, dry wells, potable wells, and any nearby water bodies and wetlands;

   iii. Detect evidence of any deterioration, breakout, malfunctions or improper operation of the over-topping control system;

   iv. Detect sudden drops in the level of the basin contents not associated with normal operation of the regulated basin; and

   v. Detect sudden erosion or other signs of deterioration in berms or other containment devices.

g. Earthen dikes shall be constructed to prevent erosion and maintain integrity. In addition, the dikes shall be free of vegetation having invasive root systems that could displace the earthen materials upon which the structural integrity of the dike is dependent.

h. A course of action shall be outlined for procedures to be implemented in the event the basin is removed from service for an extended period of time for reasons other than routine maintenance and/or scheduled rotation of permitted discharge areas. This course of action shall address how the discharge will be handled, which can include diversion of the discharge to a previously approved reserved disposal area.

i. No basin that was removed from service due to structural collapse or overtopping may be restored to service unless that portion of the basin, which failed, was repaired.

j. The basin(s) may not be restored to service unless all inspections and necessary repairs have been made.

D. Discharges to Category One Waters, Trout Production and Trout Maintenance Streams

1. Discharge Requirements

a. Existing facilities (New Permittee or Existing Permittee) are permitted to discharge to C1, TP and TM waters subject to the sampling requirements in Part III Tables of this permit.

b. Temperature limits for mine dewatering discharges to surface waters designated as TM and TP waters in Surface Water Quality Standards (N.J.A.C. 7:9B) are listed in Part III of the permit.

E. Monitoring

1. Monitoring Requirements

a. All samples are to be analyzed by a New Jersey Certified Laboratory.

b. All sampling shall be performed in accordance to the method specified in the NJDEP Field Sampling Procedures Manual.

c. All monitoring shall be conducted in accordance with Part III of the authorization issued under this permit.

d. All stormwater discharges from areas of industrial activity that are not collected and/or diverted for reuse shall be diverted to a monitoring location(s).

2. Temperature Monitoring

a. Mine Dewatering

i. The permittee shall continuously monitor and record discharge temperature as required under Part III of the permit during mine dewatering operations.

ii. The permittee shall calibrate the recorder quarterly. Records of the calibration shall be kept on file for a minimum of five (5) years.

iii. The permittee shall calibrate the temperature sensor quarterly. The sensor shall have an accuracy of not greater than +1 degreesF. Records of the calibration shall be kept on file for a minimum of five (5) years.

iv. The permittee shall record the total gallons discharged and the highest discharge temperature for that day in a daily log. Records of the calibration and the daily log shall be kept on file for a minimum of five (5) years.

F. Site Specific BMPs

1. BMPs - Management of Other Materials

a. Other materials shall include, but are not limited to, cold patch, recyclables, beneficial use materials, petroleum contaminated soil, asphalt millings, recycled asphalt products (RAP), construction debris, treated quarry dredge materials, untreated quarry dredge materials, marketable residual products and waste concrete.

b. Other materials shall be addressed in the SPPP (See Part IV.B.1) and shall be stored in a manner to ensure that stormwater runoff from these materials meets the effluent benchmark concentrations and effluent limitations pursuant to Part III of this permit. In addition, the requirements of 1.c, 1.d and 1.e below shall be met.

c. Salt Storage: The permittee shall store salt and other de-icing materials in a manner consistent with the Department's policy of storing salt in a permanent structure that is completely walled and roofed with a permanent foundation, or the National Salt Institute's guidance on salt storage which can be found in Attachment B, Section I.C.

d. Petroleum contaminated soil:

i. Indoor storage of petroleum contaminated soil shall be done in accordance with storage requirements in N.J.A.C. 7:26A-4.8(b)7.i et seq.;

ii. Outdoor storage of petroleum contaminated soil shall be done in accordance with storage requirements in N.J.A.C. 7:26A-4.8(b)7.ii et seq.;

iii. The permittee shall prevent tracking of petroleum contaminated soil out of the storage area and/or process area.

e. Marketable residual products:

i. Marketable residual products shall be managed in accordance with N.J.A.C. 7:14A-20.

2. BMP - Vehicle/Equipment Rinsing

a. Outdoors water-only vehicle/equipment rinsing is restricted to areas that will not cause a surface water discharge, and not cause ponding or erosion.

b. Rinsing of vehicles/equipment shall be restricted to using water only, with no detergents.

c. Vehicle rinsing shall be of the external parts and undercarriage of the vehicles and limited to the removal of grit, grime, dust, dirt and incidental road salt.

d. Equipment and vehicles used in the application/handling of salt and de-icing materials shall be rinsed with water only, immediately following salt and de-icing material applications. Prior to rinsing with water, all residual salt and de-icing materials shall be removed from equipment and vehicles to the maximum extent practicable using dry cleaning methods (e.g., shoveling and sweeping). Recovered materials are to be returned to storage for reuse or properly discarded.

e. Truck beds and earth moving buckets/clamshells may be rinsed provided the following conditions are met:

i. The equipment was used to move and/or excavate de-icing salt and/or non-hazardous, non-contaminated soil; and

ii. The bulk of the soil and/or salt has been physically removed by shoveling, raking, sweeping or other means.

3. BMPs - Air Compressor Discharge

a. Air compressor condensate discharges shall be collected and managed as wastewater or discharged to a Publically Owned Treatment Works.

b. The permittee shall summarize the management of air compressor condensate discharge(s) in the site SPPP. The summary shall include all of the information listed in Attachment B, Section V.J, including the following information:

i. The location of each air compressor; and

ii. A summary of how air compressor discharge from portable air compressors (including air compressors used by contactors on-site) is collected and managed to prevent discharge to surface or ground waters.

c. Air compressor discharge to septic systems, ground water or surface water is strictly prohibited.

4. BMPs - Facility Entrance

a. All facilities shall establish BMPs for the entrance to the facility to minimize the amount of pollutants leaving the site. The following BMPs shall be established whenever possible:

i. Paving of the entranceway to a point where the hydraulic gradient of the entranceway diverts stormwater away from the entrance;

ii. Creating a means (e.g. culvert, ditch, swale), to divert stormwater to a discharge monitoring location; and

iii. Frequent use of street sweepers to maximize dust control and minimize the tracking of sand, silt, etc. off-site.

G. Operations and Maintenance

1. Operations and Maintenance Requirements

a. The permittee is responsible for the operation and maintenance of this facility, to ensure that BMPs are implemented to achieve compliance with the conditions of the permit, in accordance with the requirements identified in the SPPP. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with conditions of the permit.

H. Record Keeping

1. Standard Record Keeping Requirements

a. Unless otherwise specified in this permit, the permittee shall retain all monitoring information, maintenance records, and copies of all reports required by this permit for a period of five (5) years.

2. Agency Review

a. If requested, the permittee shall make the SPPP available to the owner and operator of a municipal separate storm sewer system through which the permittee discharges stormwater.

b. Upon review by an authorized representative, the Department may notify the permittee at any time that the SPPP does not meet one or more of the minimum permit requirements. Within thirty (30) days of receiving such notification (unless specified by the Department), the SPPP shall be amended to adequately address all deficiencies and written certification of such amendments shall be submitted to the Department.

3. Public Review

a. All SPPP's prepared under this permit shall be available to the public for inspection and duplication upon request, pursuant to N.J.A.C. 7:14A-18.1. The SPPP shall be signed by the permittee and the original retained at the facility for use and NJDEP inspection. Upon request, a copy of the SPPP shall be delivered to the Department within five (5) business days of the time of the request. The permittee may claim any portion of a SPPP confidential in accordance with N.J.A.C. 7:14A-18.3. The Department's decision regarding such claims shall be made in accordance with N.J.A.C. 7:14A-18.5.

b. The permittee shall keep a copy of an updated SPPP, on-site and available for inspection at all times.

c. A copy of all analytical results shall be retained at the facility where the sampling is conducted and be available for inspection at all times.

d. The permittee shall submit DMRs, WCRs and RTRs (if required) beginning from EDPA in accordance with Part III of the permit.

I. Submittals and Reporting Requirements

1. Initial Certifications for New Operations

a. The RFA shall contain the completed SPPP Preparation Certification, and the SPPP Implementation and Inspection Certification, found in the Certification Form.

2. Initial Certifications for New Permittees Not Previously Authorized Under the MQGP

a. Submit the Certification Form, certifying that the SPPP was prepared within six (6) months from the Effective Date of Permit Authorization (EDPA).

b. Submit the Certification Form, certifying that the SPPP was implemented within eighteen (18) months from the Effective Date of Permit Authorization (EDPA).

3. Certifications for All Facilities Authorized under the MQGP

a. All facilities which have implemented their SPPP under the MQGP shall:

i. Submit the Certification Form, certifying that the SPPP was updated, with the annual certification.

ii. Submit the Certification Form, certifying that the annual inspection was conducted, annually.

4. Monitoring Report Submittal Requirements

a. The permittee shall submit the required monitoring data (as specified in Part IV of this permit) on Discharge Monitoring Reports (DMRs) or Wastewater Characterization Reports (WCRs), whichever is required. Sampling results shall be summarized and reported using the NJDEP Electronic Data Interchange (EDI) Online System. The permittee must enroll at www.nj.gov/dep/online. Questions regarding the EDI Online System should be directed to Permit Administration Section at (609) 984-4428, or by email to NJPDES_EDI_SIGNUP@dep.nj.gov.

b. Failure to submit sampling data on DMRs or WCRs is a permit violation and may subject the permittee to civil and administrative penalties pursuant to N.J.S.A. 58:10A-10 et seq.

c. The monitoring period begins upon EDPA.

d. New Permittees shall submit DMRs, WCRs and RTRs (if required) in accordance with Part III of the permit, beginning 6 months from EDPA.

5. Annual Inspections and Annual Reports

a. Annual inspections:

i. Once the SPPP has been implemented in accordance with this permit, the permittee shall conduct annual inspections of the facility to assess all areas contributing to stormwater discharges authorized by this permit, to evaluate whether the SPPP complies with and is implemented in accordance with this permit, and whether additional measures are needed to meet the conditions of the permit.

b. Annual report:

i. The permittee shall prepare an annual report summarizing the annual inspection performed as described above. The annual report is not to be submitted to the Department but shall be made part of the facility's SPPP and made available for inspection. The annual report shall include:
- The date of inspection;
- name(s) and title(s) of the inspectors; and
- a summary of the findings of the annual inspection, including any incidents of non-compliance. Any incidents of non-compliance discovered during the annual inspection shall be listed in the annual report with any remedial actions and/or preventative measures taken.

6. Where to Send All Permit Submittals

a. All permit submittals shall be sent to the following address:

i. New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Permit Administration Section
P.O. Box 420
401 East State Street, 3rd Floor
Trenton, NJ 08625-0420

ATTACHMENT B:
CONTENTS OF THE
STORMWATER
POLLUTION PREVENTION PLAN

For

Mining and Quarry General Permit
June 2017

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Emergency Action Plan (29 CFR Part 1910). A copy of any plans referred to in the SPPP should be kept on-site with the SPPP.

IV. Site Assessment

The Site Assessment shall describe the physical facility and the potential pollutant sources (materials, activities and areas) which may be reasonably expected to affect the quality of stormwater discharges. The key elements of the site assessment shall include, at a minimum, the following requirements:

A. Inventory Requirements

Each facility must develop and update annually, as appropriate, an inventory which includes, at a minimum, the following:

1. list of the general categories of source materials that have been used, loaded/unloaded, stored, treated, spilled, leaked and/or disposed onsite in a manner to allow exposure to stormwater; and

2. list of any domestic wastewater, non-contact cooling water, or process waste water (see definitions in Part IV of permit), that is generated at the facility and discharged through separate storm sewers (see definition in Part IV of permit) to surface waters. List any current NJPDES (New Jersey Pollutant Discharge Elimination System) permits or permit application that the facility may have for such discharges.

B. DCP-Mapping Requirements

A site map drawn to an 1" = 400' scale that clearly shows the following:

1. buildings and other permanent structures;

2. paved areas and roadways;

3. surface water bodies (e.g., rivers, lakes, streams, bays, estuaries) that are located on or about the property which receive or may receive stormwater from the site;

4. all stormwater discharge locations;

5. location of each point or sewer segment, where domestic sewage, process waste water, or non-contact cooling water generated by the facility enters storm sewers that discharge to surface waters;

6. outline of each drainage area within the facility boundaries and a depiction of flow direction (e.g., arrow head) of stormwater in each drainage area;

7. locations where source materials are likely to be exposed to stormwater, and the following activities and/or areas, at a minimum; storage areas, palleted materials, outdoor handling, treatment or disposal areas, loading and/or unloading areas, manufacturing and/or processing areas, waste storage areas, vehicle/equipment maintenance areas, vehicle/equipment fueling areas, hazardous waste storage or disposal areas, areas of spills and/or leaks of source materials, and access routes;

8. location of existing stormwater structural control measures (e.g., containment, berms, detention/retention basins, grassed swales, oil/water separators); and

9. areas of existing and potential soil erosion.

C. Narrative Description of Existing Conditions

The SPPP shall include a narrative description concerning the existing management of all source materials at the facility which are handled, treated, stored, disposed, or which otherwise exist in a manner allowing contact with stormwater. The narrative description shall address the following where appropriate:

1. any discharges of domestic sewage, non-contact cooling water, or process water that are listed in accordance with A.2 above (unless such discharges have been authorized by other NJPDES permits or identified in applications or requests for authorization submitted for other NJPDES permits);

2. description of type of industrial activities and/or areas (e.g., fueling, material handling, manufacturing or processing areas) at the site;

3. the actual or potential pollutant categories associated with each industrial area and/or activity where source materials are likely to be exposed to stormwater including, but not limited to: fueling stations, loading/unloading areas, maintenance shops, areas where spills and/or leaks of source materials frequently occur, equipment or vehicle cleaning areas, outdoor storage areas, outdoor manufacturing or processing areas, onsite waste disposal areas, above ground liquid storage tanks, outside storage of raw materials, by-products, or finished products, (e.g., fueling area - diesel fuels, gasoline, petroleum hydrocarbons); and

4. a description of existing management practices employed to : a) eliminate contact of source materials with stormwater; b) minimize or reduce pollutants from source materials through structural or non-structural measures; c) divert stormwater to specific areas on or off-site, including diversion to containment areas, holding tanks, treatment facilities, or sanitary or combined sewers; d) treat stormwater discharging from the site; and e) prevent or permit any discharges of domestic wastewater, non-contact cooling water, or process wastewater to surface water.

V. Best Management Practices (BMP) Selection and Plan Design

The permittee shall evaluate the information from the site assessment phase of this plan to identify potential and existing sources of stormwater contaminated by source material. **All discharges to surface water of domestic sewage, non-contact cooling water, and process waste water must be eliminated or permitted.** BMPs are measures used to prevent or mitigate pollution from any type of activity. The permittee shall design, implement and maintain BMPs to meet EPA benchmark concentrations and numeric limits specified in this permit. Based upon the site assessment performed, the permittee shall develop BMP's that will effectively eliminate or reduce pollutant loadings in stormwater discharges from the facility in accordance with the following sections. The evaluation and selection of the BMP's addressing each area, and/or activity where source materials are exposed to stormwater discharging to surface water, shall be documented in the SPPP and shall include at a minimum the following BMPs:

A. Non-Stormwater Discharges into Storm Sewers

The facility shall ensure that it does not generate and discharge, through storm sewers to surface waters, any domestic sewage, non-contact cooling water, or process wastewaters, unless that discharge is authorized by another NJPDES permit or identified in an application or request for authorization submitted for another NJPDES permit.

B. Removal, Cover or Control of Industrial Activities

Except as specified and required in Part IV of the permit for certain, specific exposures of source materials, all other source materials shall be moved indoors, covered, used, handled, and/or stored in a manner so as to prevent contact with stormwater that is discharged to surface water. Each BMP that prevents such contact shall be identified and discussed in the SPPP.

C. Diverting Stormwater

Approved diversion of contaminated stormwater to either a domestic or industrial wastewater treatment plant may also be considered when choosing an appropriate BMP where feasible. (Diversion to groundwater may require a separate NJPDES permit. Consult the Bureau of Nonpoint Pollution Control.)

D. Spill Prevention and Response

Areas where actual or potential spills of source materials can occur and are exposed to stormwater discharges shall be identified clearly in the SPPP (the accompanying drainage points shall also be identified). Specific material handling procedures, storage requirements and use of equipment such as diversion valves shall be developed and practiced to prevent and/or eliminate spills and/or leaks of source materials from being exposed to stormwater. A valid SPCC or DPCC shall satisfy this requirement provided the plan includes spill prevention/cleanup for all site chemicals, wastewater and raw materials.

The permittee shall develop and implement a Spill Prevention Plan. At a minimum, the Plan shall include:

7. maintain dry and clean floors and ground surfaces by using brooms, shovels, vacuum cleaners, or cleaning machines; and

8. train employees about good housekeeping practices.

F. Site Stabilization and Dust Control

The SPPP shall include standards for site stabilization and dust control designed to prevent transport of particulate and sediment from areas devoid of vegetation and to prevent downstream soil erosion caused by routine operations and uncontrolled stormwater runoff. At a minimum, the standards shall meet the technical standards found in *the Standards for Soil and Erosion and Sediment Control in New Jersey* and shall include:

1. traffic control to prevent or minimize disturbance of unstabilized areas and to prevent disturbance of vegetative covers and/or other dust control mechanisms;

2. entrance/exit stabilization to prevent or minimize transport of sediment and dust outside the site property line;

3. dust control to prevent or minimize movement of dust and sediment from exposed soil areas;

4. outfall stabilization to reduce stormwater velocity at the outfall to the degree necessary to prevent downstream erosion and/or degradation.

G. Settling Aids and Gel Logs

Use of settling aids and gel logs must be done in accordance with manufacturers' recommendations. The SPPP should demonstrate how the permittee ensures that this is done at the site. The Department retains the right to refuse any type of flocculant or other settling aid for use at the facility. The description should include all of the following:

1. System Design

The SPPP must include a line or block diagram of the system. The line or block diagram must include the chemical(s) injection point(s), type of agitation, flash tanks, mixing tanks, clarifier type, flowmeters, metering pumps, clear water and dirty water discharges, etc. The diagram shall state if the system is "continuous" or "batch" process.

The system must use anti-siphon devices to prevent overfeed of settling aids and other chemical additives. A copy of the manufacturers' recommended system and usage must be kept with the SPPP.

2. Usage and Recordkeeping

b. The permittee must comply with all of Section G and submit an updated Section G to the Bureau prior to implementation of the change.

H. Preventative Maintenance

The SPPP shall include a Preventative Maintenance Program to include timely and regular inspections and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins, drip pans, catch basins, detention basins, covers, treatment units) and routine inspections of facility equipment and operations to detect faulty equipment. Equipment (such as tanks, piping, containers, and drums) should be checked regularly for signs of deterioration.

I. Inspections and Evaluation Process

1. Regular Inspections

   The SPPP shall require regular inspections of the facility's equipment, exposed source materials and industrial areas to provide that all elements of the SPPP are in place and working properly. Inspections shall be conducted by qualified, trained plant personnel. Records of these inspections shall be kept onsite with the SPPP. These inspection records shall consist of the following, at a minimum: date of inspection; location of and problem(s) identified; steps taken to correct problem(s) and prevent recurrence; and inspector's names and title. In addition these inspection records shall record any incidents such as leaks or accidental discharges, and any failures or breakdowns of structural BMPs.

2. Annual Inspections

   The SPPP shall also require an annual inspection and shall include an annual report of the entire facility in accordance with Part IV of this permit.

3. Evaluation Process

   The SPPP shall include a system to routinely and continually evaluate the SPPP for effectiveness, any flaws that may have developed, and maintenance that may be required. The routine evaluation must include, but not be limited to, regular and annual inspections, inspection logs and records, internal reporting, plan revisions to correct any flaws detected in the SPPP or to reflect changes/additions at the facility, and logs of preventative maintenance performed at the facility. In addition, the Annual Reports and Certifications required under Part IV are integral to the evaluation process.

J.Air Compressor Condensate Discharges

The SPPP shall include a detailed summary of management of permanent and portable air compressor discharges including the cfm rating of each air compressor, location(s) and how discharge is managed.

1. Air Compressor Discharge to POTW

    a. The SPPP shall include a description of how each permanent air compressor discharge is directed to the POTW including hard piping, collecting in a container and pumping, pouring, etc. and the type and cfm rating of each permanent air compressor.

    b. The SPPP shall include a description of how each portable air compressor discharge (including air compressors used by contractors) is directed to the POTW including hard piping, collecting in a container and pumping, pouring, etc. Air compressor type and cfm rating of portable air compressors is not required when discharging to a POTW.

2. Air Compressor Discharge Collected as Wastewater

    a. The SPPP shall include a description of how each permanent air compressor discharge is collected and managed, including how it is stored and either treated onsite or shipped offsite for proper disposal and the type and cfm rating of each permanent air compressor.

    b. The SPPP shall include a description of how each portable air compressor discharge (including air compressors used by contractors) is stored and either treated onsite or shipped offsite for proper disposal. Air compressor type and cfm rating of portable air compressors is not required when discharge is collected as wastewater.

VI. Implementation Schedule

The SPPP shall include an implementation schedule for all structural and non-structural BMP's including a schedule(s) for removal, coverage, minimization of exposure of source material to stormwater, and/or stormwater diversion or treatment. The schedule shall meet the deadlines established in the permit in accordance with Part IV.

Upon completion of the initial SPPP, those BMP's (e.g., spill response, good housekeeping) that may readily be implemented shall be done so within 30 days, if not already practiced.

VII. General Plan Requirements

This section provides additional requirements on the administrative requirements related to finalizing your SPPP. It covers (1) required signatures, (2) requirements for plan location and access, and (3) required certifications.

A. Required Signatures for SPPP and the Certification Form.

The SPPP and Certification form shall be signed as follows:

FOR A CORPORATION: a "responsible corporate officer" or duly authorized representative. A "responsible corporate officer" is (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP: a general partner or the proprietor, respectively, or duly authorized representative.

FOR A MUNICIPALITY, STATE, FEDERAL OR OTHER PUBLIC AGENCY: either a principal executive officer or ranking elected official, or duly authorized representative.

A "responsible corporate officer", general partner, proprietor, principal executive officer of a public agency, or ranking elected official may assign his or her signatory authority for this Certification to a duly authorized representative, which is a named person or generic position (e.g., plant manager, superintendent, plant engineer, operations manager, etc.) having overall responsibility for facility operation or the permittee's environmental matters, by submitting a letter to the Bureau of Nonpoint Pollution Control stating said authority and naming the person or position.

Whenever there are two or more permittees for the facility, all of those permittees shall jointly submit this Certification, unless permittees received authorization on different dates and this Certification is therefore due from them at different dates.

B. Plan Location and Public Access

1. The SPPP and inspection and preventative maintenance records or logs shall be maintained on site at all times. These documents must be made available, upon request, to a representative of the Department and to the owner and operator of any municipal separate storm sewer receiving the stormwater discharge.

2. The SPPP shall be made available to the public upon request. The facility may claim any portion of the SPPP as confidential in accordance with the provisions set forth in N.J.A.C. 7:14A-18.2.

3. A copy of the SPPP shall be submitted to the appropriate Regional Bureau of Water Compliance and Enforcement and to the Bureau of Nonpoint Pollution Control. Revisions made to the facility's SPPP shall be submitted also.

C. Certification of Stormwater Pollution Prevention Plan

1. The Certification form with the appropriate box checked off certifying that the SPPP has been prepared, shall be signed and submitted by the permittee to the Department's Bureau of Nonpoint Pollution Control as required by Part IV of the permit.

2. The Certification form with the appropriate box checked off certifying that the SPPP has been implemented shall be signed and submitted by the permittee to the Department's Bureau of Nonpoint Pollution Control as required by Part IV of the permit, and annually thereafter in accordance with the permit.

VIII. Special Requirements

A. Facilities Subject to Emergency Planning and Community Right-to-Know Statute

For facilities subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313, the SPPP shall include, or cite the location of, any spill reports prepared under that Act.

B. Facilities with SPCC Plans, DPCC Plans, or DCR Plans

The SPPP shall include, or cite the location(s) of, any Spill Prevention Control and Countermeasure Plan (SPCC Plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C.§1321; and any discharge prevention, containment and countermeasure plan (DPCC plan) and discharge cleanup and removal plan (DCR plan) prepared under N.J.A.C. 7:1E.

C. Facilities Undergoing Construction Activities

Whenever construction activities are undertaken at the facility, the SPPP shall be amended, if necessary, so that the SPPP continues to be accurate and to meet the requirements of Part I of this permit.

IRM CCR

Appendix J

Field Logs

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

SSDS Startup Log

SITE: 100 S 4th St			ADDRESS: 100 S 4th St, Brooklyn		CREW: HB/TS
SSDS LEG# L-1	SSDS BLOWER# #L-1		LOCATION: Salon + Gym		Project Number: 13817

Date	Time	Hours of Operation	Subslab System Blower Readings								Comments
			SSDS Vacuum @ Blower (Inches H_2O)	Flow Rate (FPM)	Flow Rate (CFM)	Temp (F)	Effluent (ppm)	Summa Cannister Number	Summa Regulator Number	Summa Cannister Sample Time	
11/16/22	1335	0.00	–	869	40.84						
	1350	0.25	–	2020	94.94						
	1405	0.50	–	1899	89.25						
	1420	0.75	–	2172	102.08						
	1435	1.00	–	2070	97.29						
	1450		–	–	–						Sampling

SSDS Startup Log

SITE: 100 S 4th St		ADDRESS: 100 S 4th St., Brooklyn	CREW: TB/TS/CE
SSDS LEG# 2	SSDS BLOWER# 2	LOCATION: Apt 1A, 1C, 1B	Project Number: 13817

Date	Time	Hours of Operation	Subslab System Blower Readings								Comments
			SSDS Vacuum @ Blower (Inches H_2O)	Flow Rate (FPM)	Flow Rate (CFM)	Temp (F)	Effluent (ppm)	Summa Cannister Number	Summa Regulator Number	Summa Cannister Sample Time	
11/17/22	1140	0.00	–	1717	80.70						
	1155	0.25	–	1604	75.39						
	1210	0.50	–	1609	75.62						
	1225	0.75	–	1616	75.95						
	1240	1.00		1600	75.2						

SSDS Startup Log

SITE: 100 S 4th Street			ADDRESS: 100 S 4th St., Brooklyn		CREW: HB/TS/CE
SSDS LEG# 3	SSDS BLOWER# 3		LOCATION: Hallways, 1-F, 1-D		Project Number: 13817

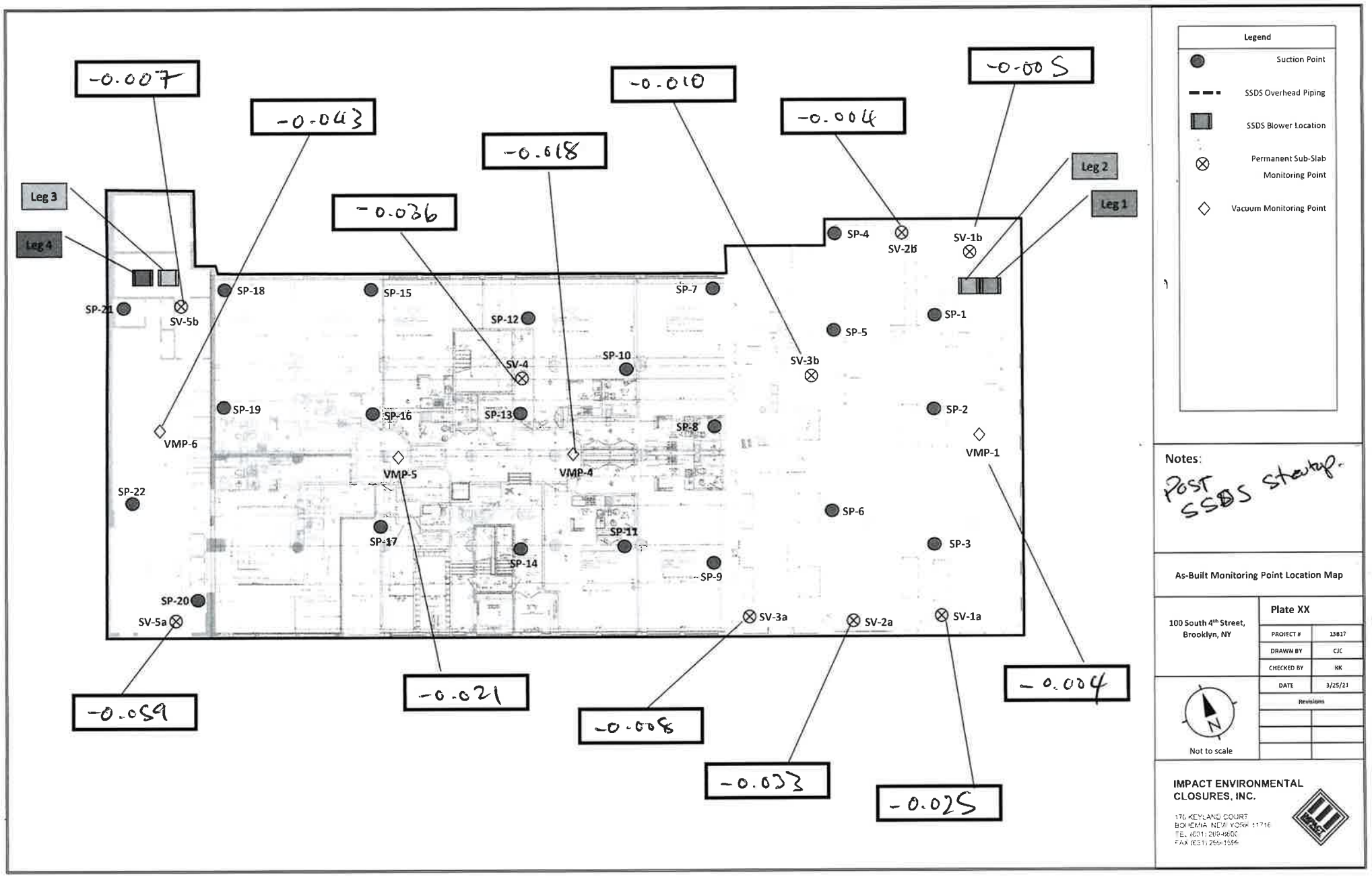
Date	Time	Hours of Operation	Subslab System Blower Readings								Comments
			SSDS Vacuum @ Blower (Inches H_2O)	Flow Rate (FPM)	Flow Rate (CFM)	Temp (F)	Effluent (ppm)	Summa Cannister Number	Summa Regulator Number	Summa Cannister Sample Time	
11/17/22	0935	0.00	-	* 2813 Initial	132.21						* Loose connection on riser
	0950	0.25	-	2020	94.94						
	1005	0.50	-	2065	97.06						
	1020	0.75	-	2132	100.20						
	1035	1.00	-	2321	109.09						

SSDS Startup Log

SITE: Bar			ADDRESS: 100 S 47th St	CREW: HB / TS
SSDS LEG# 4	SSDS BLOWER#		LOCATION: Bar + Apt 1-G	Project Number: 13817

Date	Time	Hours of Operation	Subslab System Blower Readings								Comments
			SSDS Vacuum @ Blower (Inches H_2O)	Flow Rate (FPM)	Flow Rate (CFM)	Temp (F)	Effluent (ppm)	Summa Cannister Number	Summa Regulator Number	Summa Cannister Sample Time	
11/16/22	0930	0.00	0.000	—		—	—	—	—	—	
	10:45	0.25	—	1781	83.71	—	—	—	—	—	
	11:00	0.50	—	1885	85.59	—	—	—	—	—	
	11:15	0.75		2040	95.88	—	—	—	—	—	
	11:30	1.00		1994	93.72	—	—	—	—	—	
	11:55	1.25		—						11:55	

Luis.M 11/18/22



IRM CCR

Appendix K
OM&M WP

98, 100, and 104 South 4th Street, Brooklyn, NY

BCP #C224260

IMPACT ENVIRONMENTAL
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Bohemia, New York 11716
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APPENDIX K

OPERATIONS, MAINTENANCE, AND MONITORING WORK PLAN

Former El Puente Site
98, 100, and 104 South 4th Street
Brooklyn, NY
Block: 2443 Lot: 13
NYSDEC BCP Site Number C224260

Based on the results of the post installation monitoring, detailed in the IRM CCR, the NYSDEC and NYSDOH will determine the frequency of operation, maintenance, and monitoring (OM&M) of the SSDS. Typically, OM&M is performed on an annual basis for a period of at least 3-5 years, or until such time that subsequent sub-slab soil vapor and indoor air sample results deem that active SSDS is no longer required by the NYSDEC/NYSDOH. OM&M of the SSDS will include the following:

1. Inspection of the building slab and sub-grade basement walls to determine if any new or previously undetected cracks or fissures are present. Such structural deficiencies should be sealed.
2. System efficacy testing, performed in accordance with the SSDS startup testing detailed in section 4.2.8.2 of this IRM CCR, to ensure the system is promoting sufficient sub-slab depressurization.
    a. Initially, the rooftop blower for each individual leg will be activated and left to run for approximately 60-minutes, after which pressure differential readings will be collected from associated test points in the building slab within 98c and 98b South 4th Street using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates can be adjusted to ensure pressure readings remain within the recommended levels. Once the recommended pressure readings are achieved, the blower will be deactivated for a minimum of 15 minutes before testing of subsequent legs.
    b. The Leg #4 rooftop blower will be the first to be activated. It will be allowed to run for approximately 60 minutes, after which pressure differential readings will be

collected from associated test points in the building slab within 98b and 98c South 4th Street, along with points located in the western portion of 100 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates can be adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings are achieved, the Leg #1 blower will be deactivated for a minimum of 15 minutes.

c. The Leg #1 rooftop blower will next be activated and left to run for approximately 60 minutes, after which pressure differential readings will be collected from associated test points in the building slab within 98b and 98c South 4th Street, along with points located in the western portion of 100 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates can be adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings are achieved, the Leg #2 blower will be deactivated for a minimum of 15 minutes.
d. The Leg #3 rooftop blower will next be activated and left to run for approximately 60 minutes, after which pressure differential readings will be collected from associated test points in the building slab within the central and eastern portions of 100 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates can be adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings are achieved, the Leg #1 blower will be deactivated for a minimum of 15 minutes.
e. The Leg #2 rooftop blower will then activated and left to run for approximately 60 minutes, after which pressure differential readings will be collected from associated test points in the building slab within the eastern portion of 100 South 4th Street and 104 South 4th Street, using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved. Blower suction rates can be adjusted to ensure pressure readings remain at the recommended levels. Once the recommended pressure readings are achieved (see **Appendix J**), the Leg #1 blower was deactivated for a minimum of 15 minutes.
f. Once each blower is confirmed to be running effectively, all four (4) blowers will be activated. Pressure readings from across the entire Site will be collected using a digital manometer, to ensure pressure readings of at least -0.004 wci are achieved in all test

ports. During the full SSDS operation, pressure readings will be collected and recorded from test ports installed in the effluent portion of each Leg.

g. Finally, effluent grab samples will be collected from each of the Blower Legs testing port using lab certified clean 2.75 or 6-liter summa canisters, to determine the effluent concentrations. The summa canisters will be fitted with a simple on/off (open/closed) valve, and once connected to the effluent sample port, it is opened and remain open until the cannister has a pressure reading of less than -4 psi, at which time the sample is considered sufficient, and the valve closed. The four (4) effluent samples will be analyzed for full list VOCs by USEPA test method TO-15.

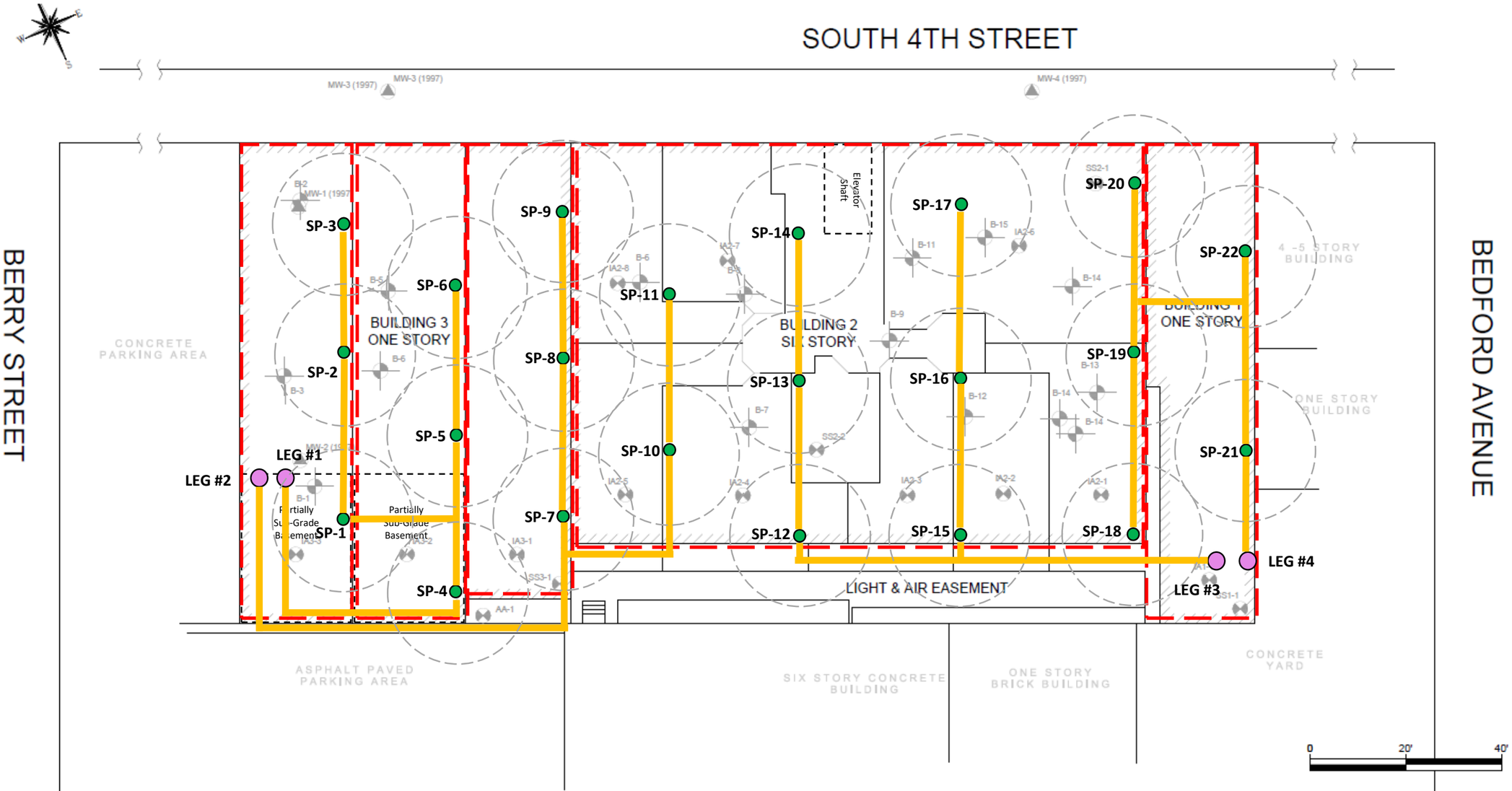
3. A round of sub-slab soil vapor, indoor air, and outdoor air sampling will be performed, as per section 4.2.8.3 of this IRM CCR, to determine the existing vapor and indoor air conditions at the site, and to ensure that indoor air conditions have improved with the operation of the SSDS. Effluent grab samples will also be collected from each leg of the SSDS to determine the concentrations of VOCs being removed from beneath the buildings.

Attachments

Attachment 1 – As Built SSDS Installation Map

Attachment 2 – SSDS Suction Point/Riser Design

Attachment 3 – Vacuum Reading Location Map



Legend

- Suction Point Location
- Roof mounted Blower
- Overhead SSDS Piping
- Anticipated Radius of Influence

Proposed SSDS Installation Plan

100 South 4th Street, Brooklyn, NY

Plate 8

PROJECT #	13817
DRAWN BY	CJC
CHECKED BY	KK
DATE	3/25/21
Revisions	

Not to scale

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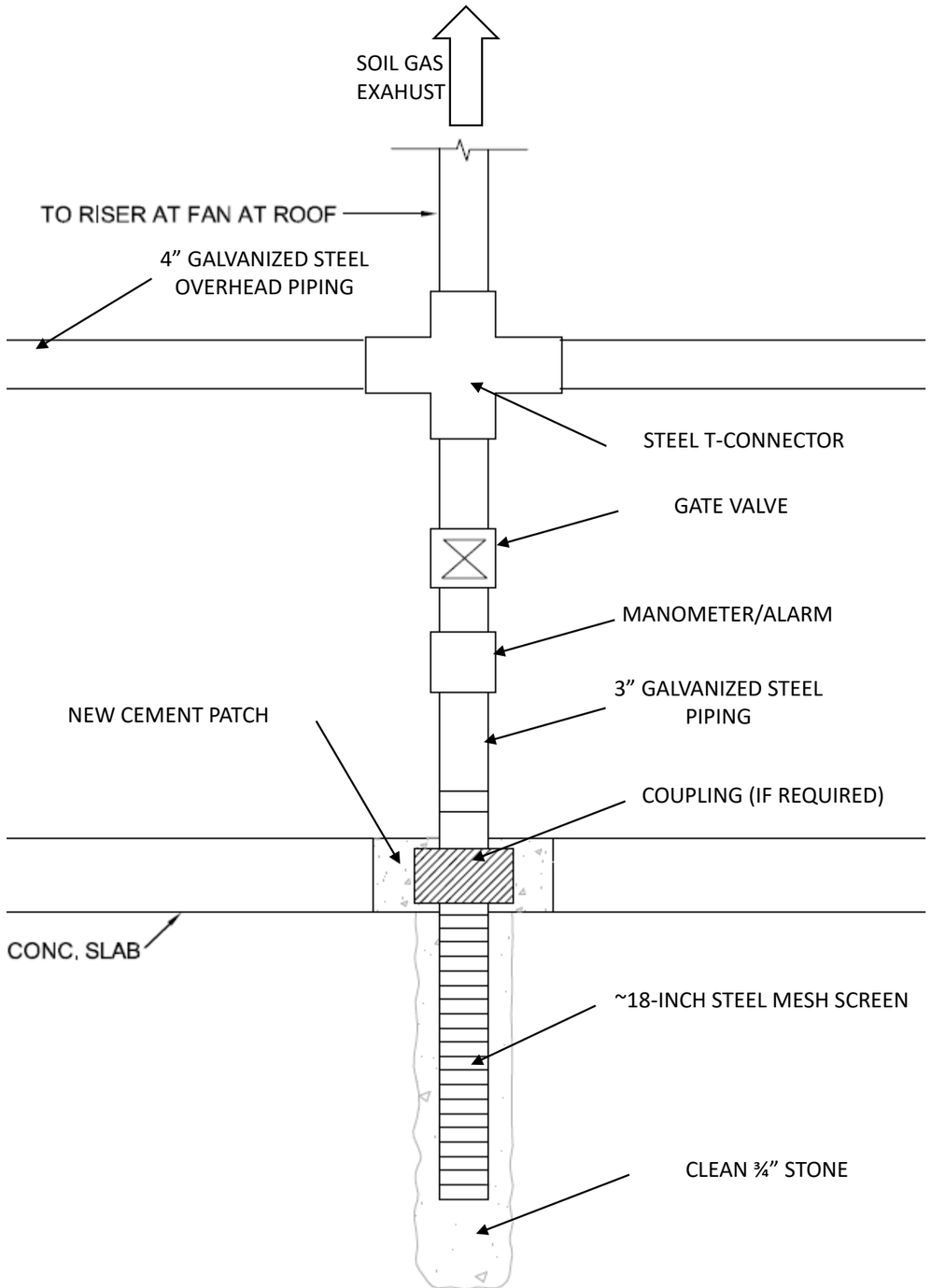
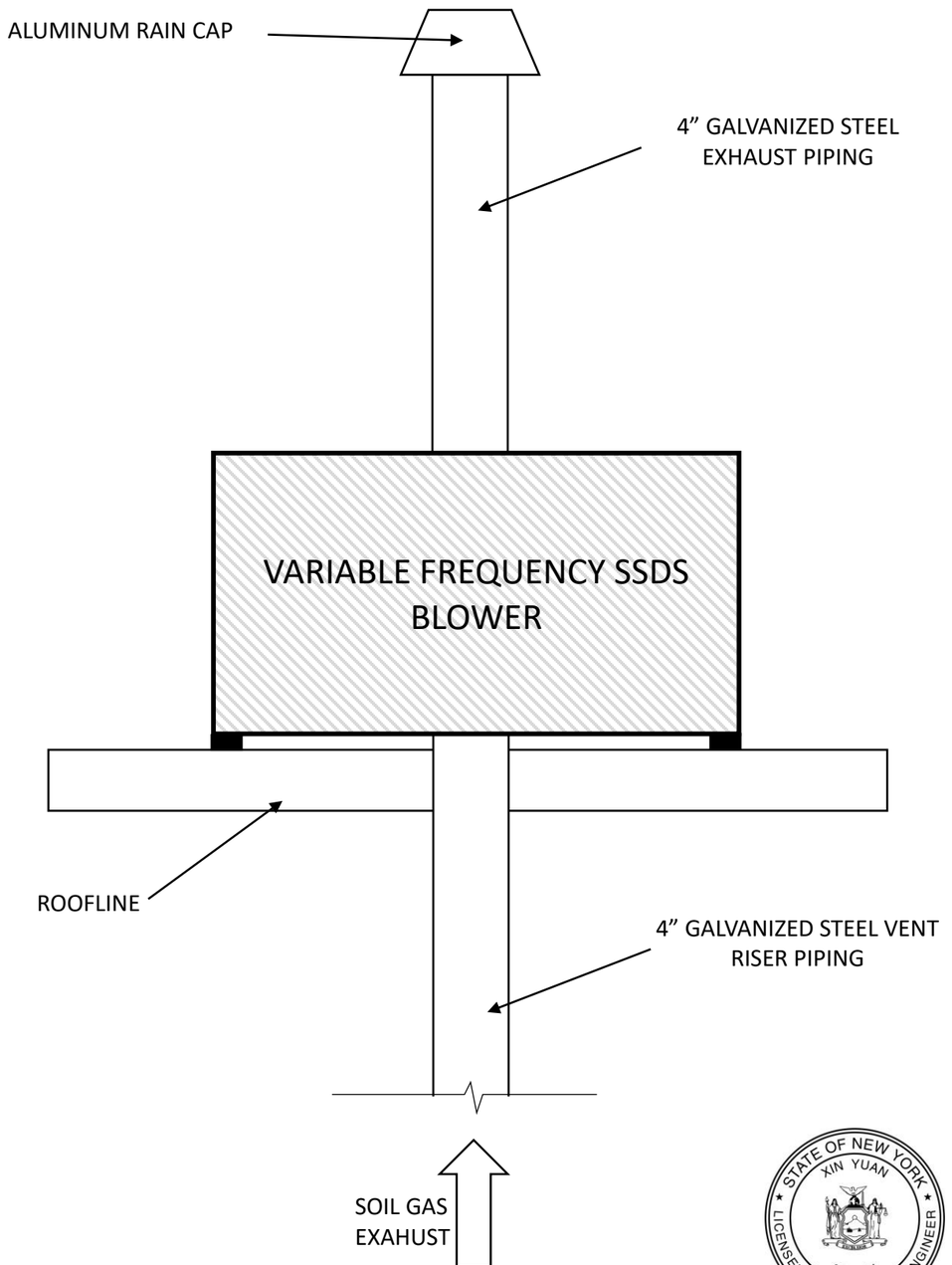


SUCTION POINT DETAIL (N.T.S)



SSDS BLOWER DETAIL (N.T.S)

Legend

Example SSDS Suction Point/Blower Design

100 South 4th Street, Brooklyn, NY

Plate 9

PROJECT #	13817
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Revisions	

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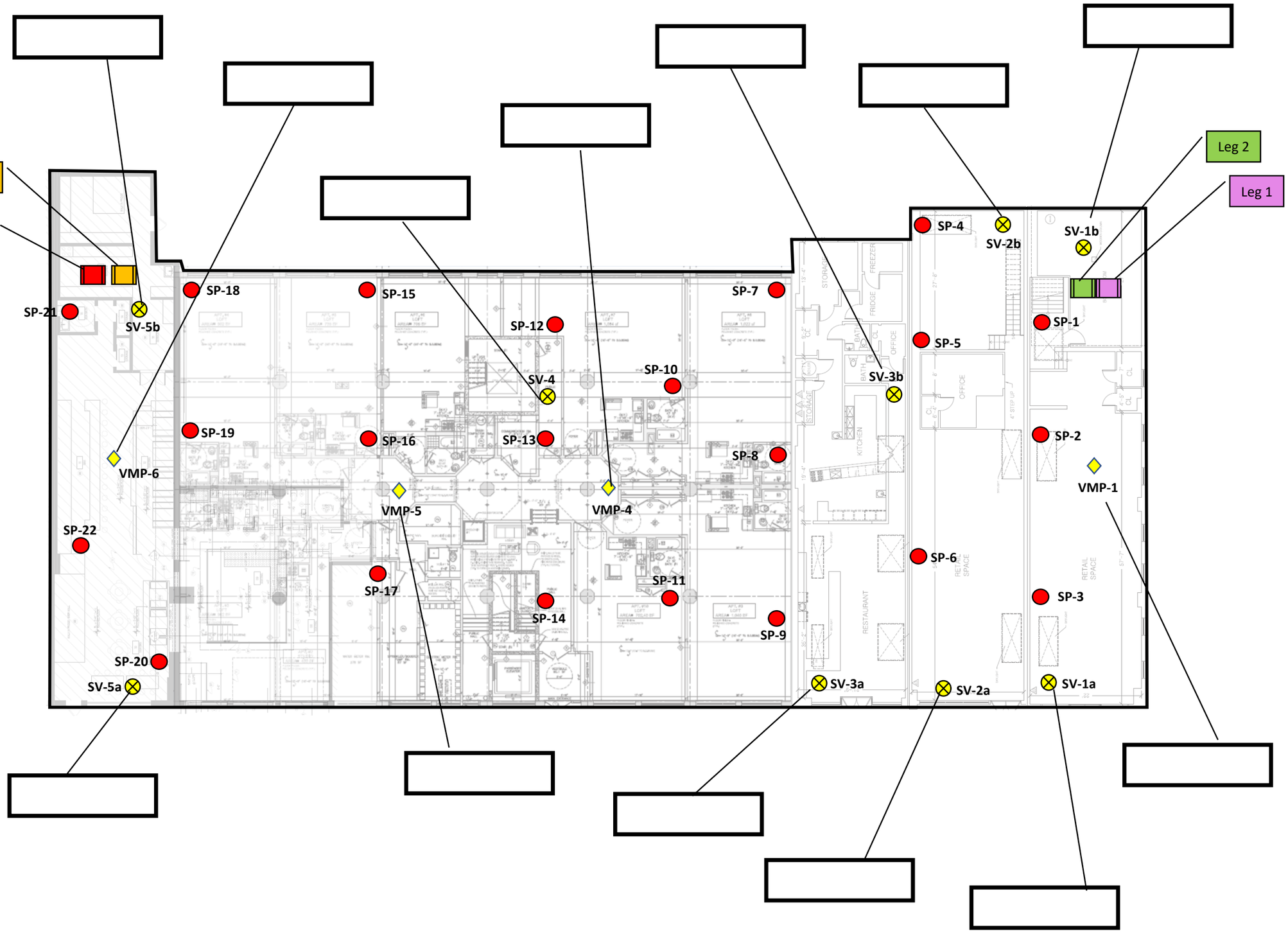

Legend

- Suction Point
- SSDS Overhead Piping
- SSDS Blower Location
- Permanent Sub-Slab Monitoring Point
- Vacuum Monitoring Point

Notes:

As-Built Monitoring Point Location Map

100 South 4th Street,
Brooklyn, NY

Plate XX

PROJECT #	13817
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