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Prepared for:

REDS CRIB, LLC
43-45 LAFAYETTE AVENUE
SUFFERN, NEW YORK 10901

WORK PLAN FOR REMEDIAL INVESTIGATION

43-45 LAFAYETTE AVENUE
AMERICAN TWO CLEANERS
BCP #C344085
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK

NOVEMBER 17, 2021

Project number: **SO581/SO1241**

Prepared by: **ENVIROSURE, INC.**

DYNA KRUMICH-OGONOWSKI
NJ/NY DIRECTOR OF OPERATIONS

CHRISTOPHER ZELIZNAK, P.G. (PA & DE)
ENVIRONMENTAL DEPARTMENT DIRECTOR

JAMES LANG, NJ LSRP
QUALIFIED PROFESSIONAL

SIGNATURE OF QUALIFIED ENVIRONMENTAL PROFESSIONAL

We declare that, to the best of our professional knowledge and belief, we meet the definition of Qualified Environmental Professional as defined in NYCCR Part 375 and we have the specific qualifications needed to prepare this Remedial Investigation Work Plan in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). Our qualifications are presented in **Appendix H**.

James Lang, NJ LSRP
Qualified Environmental Professional

Dyna Krumich-Ogonowski
Director of NJ/NY Operations

Christopher Zeliznak, P.G. (PA & DE)
Environmental Department Director

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November 17, 2021 *Project No. SO581/SO1241*

Mr. Michael Kilmer, Environmental Engineer
Division of Environmental Remediation - Region 3
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 12561

RE: **WORK PLAN FOR REMEDIAL INVESTIGATION**
43-45 Lafayette Avenue
Suffern Village
Rockland County, New York

Dear Mr. Kilmer,

We are pleased to provide the Remedial Investigation Work Plan ("the Work Plan") on behalf of Ms. Cynthia Gray with Reds Crib, LLC ("Volunteer") for the property located at 43-45 Lafayette Avenue in Suffern Village, New York, herein referred to as "the Site" or "the Project".

Should you require additional information or have questions regarding the Work Plan, please contact me at 732.741.1110 or via email at dyna@envirosureinc.com.

Sincerely,
ENVIROSURE, INC.

Dyna Krumich-Ogonowski
EnviroSure, Inc.
Director of NJ/NY Operations

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1.0 INTRODUCTION

Presented in this document is the work plan designed to support a Remedial Investigation (RI) at 43-45 Lafayette Avenue in Suffern Village, New York. Refer to **Figure 1** for the approximate Site location and **Figure 2** for the site layout. Reds Crib, LLC, owns the property ("the Volunteer") and will conduct a remedial investigation under the New York DEC Brownfields Cleanup Program (BCP) as BCP No. C344085.

1.1 Site Description and History

The Site is located at 43-45 Lafayette Avenue in the Village of Suffern, Rockland County, New York in a mixed commercial and residential area. The Site is approximately 0.09 acres with a one-story concrete block structure divided into two suites with a flat, asphalt-covered roof. The building has entrances on the north and east sides and has a basement with a sump pump system.

The Site building has two tenant spaces: 43 Lafayette Avenue is vacant and was formerly occupied by American Two Cleaners (ATC); and 45 Lafayette Avenue is currently occupied by a wellness program tenant. ATC occupied the property for at least six years prior with on-site dry cleaning operations. The Volunteer, Reds Crib, LLC, purchased the property in October 2019 and did not own or operate as a dry cleaners.

As per the Volunteer, the dry-cleaning unit was removed from the Site prior to Reds Crib, LLC ownership as was all equipment related to the dry-cleaning operations. The Volunteer contacted the former ATC operator, who indicated they did not recall the type of equipment. As stated in the NYS DOH Fact Sheet Tetrachloroethene (PERC) in Indoor & Outdoor Air (September 2013), PERC was widely used in the dry-cleaning industry to clean fabrics. The historical ownership and dry-cleaning operations occurred at the Site as early as 1950; therefore, the dry-cleaning unit likely used tetrachloroethene (PCE or PERC).

1.1.1 Topography, Geology and Hydrogeology

As noted on the United States Geological Survey (USGS) Ramsey, New Jersey/New York Quadrangle 7.5-minute series map (2020), the Site is at an elevation of approximately 300 feet above mean sea level. The Site topography slopes gently to the south towards the southern adjoining property along Chestnut Street. The Site is located approximately 0.2-miles south of Interstate 287 and approximately 400-feet east of Route 202 on the southwestern corner of Lafayette Avenue and Chestnut Street.

The Site is underlain by the Lower Jurassic and Upper Triassic- aged Passaic Formation. The Passaic Formation is a Quartzite conglomerate unit (JTrpcq) and is reddish-brown pebble conglomerate, pebbly sandstone, and sandstone, in upward-fining sequences 1 to 2 meter (3 to 6 ft) thick. Clasts are subangular to subrounded, quartz and quartzite in sandstone matrix

(https://mrdata.usgs.gov/geology/state/map-us.html#place-picker).

Based on topography of the area surrounding the Site, the inferred direction of regional groundwater flow is southwest, toward the Ramapo River. It should be noted that site-specific groundwater flow may fluctuate based on local geology, local well use, and seasonal variations.

1.2 Project Organization

The following are the lead personnel on the project team and detailed contact information is provided in **Appendix A**:

- Project Manager – Dyna Krumich-Ogonowski
- Qualified Environmental Professional – James Lang, NJ LSRP
- Project Geologist – Christopher Zeliznak, P.G. (PA and DE)
- Project Health and Safety – Dyna Krumich-Ogonowski
- Project QA/QC - Christopher Zeliznak, P.G. (PA and DE)
- Field Scientist - Derek Grothusen
- Analytical Laboratory – Alpha Analytical Laboratories
- Drilling/Excavation Subcontractors – to be determined

2.0 GOALS AND OBJECTIVES

2.1 Overall Remedial Investigation Objectives

In general, a remedial investigation (RI) has the following overall objectives as described in NYCRR Part 375-1.8(e):

- Delineation of the extent of the contamination at, and emanating from, all media at the Site and the nature of that contamination;
- Characterization of the surface and subsurface characteristics of the Site, including topography, surface drainage, stratigraphy, depth to groundwater, and any aquifers that have been impacted or have the potential to be impacted;
- Identification of the sources of contamination, the migration pathways and actual or potential receptors of contaminants;
- Evaluation of actual and potential threats to public health and the environment; and
- Production of data of sufficient quality and quantity to support the necessity for, and the proposed extent of, remediation and to support the evaluation of proposed alternatives.

The scope and goals specific to this work plan are summarized below and are based on the results of investigations completed to date and those remaining to satisfy the objectives listed above. If necessary, the RIWP will be supplemented with additional work plans, as needed, to meet the overall objectives of the RI.

2.2 Specific RI Objectives

Specific objectives of the RI are as follows:

- Assess the Site geology and collect and analyze representative subsurface soil samples to assess the potential source of elevated concentrations in sub-slab soil vapors and indoor air;
- Assess the Site groundwater depth and quality to determine impact and migration; and
- Fill any data gaps resulting from the limited vapor intrusion assessment.

The scope of work to complete these objectives is provided in **Section 5.0** along with a discussion of supplemental field investigations that may be required to fill data gaps.

2.3 Contaminants of Concern

Based on the Limited Vapor Intrusion Investigation Report, the contaminants of concern are chlorinated volatile organic compounds, specifically tetrachloroethylene (PCE) and associated breakdown compounds.

3.0 ENVIRONMENTAL CONDITIONS/PAST INVESTIGATIONS

3.1 Previous Investigations

Historical information indicates the following previous investigations/remedial activities have been completed on the property:

Limited vapor intrusion investigation activities were completed on August 11, 2020 by Environmental Consulting and Management Services, Inc. (ECMS) and EnviroSure on September 15, 2020. As noted in the January 11, 2021 Limited Vapor Intrusion Assessment report (January 2021 Report), EnviroSure concluded that vapor intrusion was a concern for the Site due to PCE and trichloroethylene (TCE) concentrations in sub-slab soil vapors and indoor air greater than the applicable NYSDOH Indoor Air Concentrations Due to Health Exposures Screening Value (IACHE) (Appendix A). The NYSDEC Spill Hotline was notified on September 9, 2020 of the release from historical dry cleaning operations at the Site. The NYSDEC issued Spill No. 2005272 for the case and the owner voluntarily applied to the BCP. The NYSDEC issued a Letter of Completeness on April 30, 2021. The historical investigations environmental reports are included as **Appendix B**.

3.2 Previous Investigation Analytical results

Analytical results from the January 2021 Report, ECMS indoor air samples IA-1 and IA-2 were reported with concentrations of 305 µg/m^3 and 73.9 µg/m^3, respectively. The concentrations are greater than the applicable NYSDOH IACHE of 30 ug/m3. ECMS sub-slab soil vapor samples SS-1 and SS-2 were reported with concentrations of PCE at 3,470 micrograms per cubic meter (µg/m^3) and 7,520 µg/m^3, respectively, and concentrations of TCE at 41.1 µg/m^3 and 202 µg/m^3. The concentrations are greater than the applicable NYSDOH Indoor Air Concentrations due to Health Exposures screening value of 2 ug/m^3. The remaining analyzed compounds from the ECMS

samples were either not detected or were detected below the respective NYSDOH Indoor Air Concentrations due to Health Exposures screening values. Review of the analyzed compounds for the EnviroSure indoor air sample (IA-3) were either not detected or were detected below the respective NYSDOH Indoor Air Concentrations due to Health Exposures screening values.

4.0 INTERIM REMEDIAL MEASURES (IRM)

Based on the recommendations made by EnviroSure, all equipment and debris, left by the American Two Cleaners in August 2020, was removed. In September 2020, the Volunteer placed general purpose fans in the first floor and basement of the former dry cleaning space to circulate and remove indoor air to temporarily mitigate the vapor intrusion concern. In January 2021, the Volunteer contracted Sparta Group Construction to clean and seal the basement floor using RadonSeal Plus. These measures were implemented in order to temporarily limit human exposure from the previously released hazardous materials.

Following the remedial investigation, the need for and design of an IRM will be developed, if necessary.

5.0 REMEDIAL INVESTIGATION SCOPE OF WORK

5.1 Introduction

In order to meet the goals and objectives for the Site, the scope of work will assess the nature and extent of contamination in accordance with NYCRR Part 375-1.8(e). All field work will adhere to the Health and Safety Plan provided in **Appendix C** and will take into account public comments resulting from implementation of the Citizen Participation Plan, in **Appendix D**.

5.2 Geophysical Survey

To evaluate the subsurface conditions, a geophysical survey will be conducted at the Site.

A. Electromagnetic Metal Detection Scan: A Fisher Model TW-6 Twinbox (transmitter/receiver) Metal Detector (TW-6) will be used to assist in locating potential USTs and underground metallic piping at the site. The TW-6 transmitter produces an electromagnetic (EM) radio signal which creates a secondary current in subsurface metal objects. The secondary current creates a magnetic field which is detected by the receiver. The unit audible signal will rise in pitch and the analog meter will indicate a rise in response when the unit is over a metallic object. The operator carries the TW-6 and walks a grid pattern over the areas to be scanned. If the TW-6 indicates the presence of metallic objects, the operator will mark the location.

B. Ground-Penetrating Radar (GPR) Survey: GPR data will be collected with a Sensors and Software Inc. Noggin plus SmartCart GPR System (SmartCart) utilizing a 250 MHz antenna. The antenna, containing both a transmitter and a receiver, is rolled

along the ground surface during the GPR survey. The transmitter radiates short pulses of high-frequency EM energy into the ground. When the wave encounters the interface between two materials having different dielectric constants (dielectric permittivity), a portion of the energy is reflected back. The signal is transmitted to a control unit, displayed on a monitor, and digitally recorded. The Noggin plus system records an image of the subsurface by plotting two-way travel time of the reflected EM pulse on the vertical axis with the distance traveled along the ground surface plotted on the horizontal axis. The depth of the reflecting object or stratum is then determined by using known soil velocity functions and calculating two-way travel time values.

GPR data will be collected in the accessible areas at the Site. The maximum depth of investigation is approximately five feet. The data will be processed using Ekko View software. Generally, the survey will be used to identify subsurface objects such as piping, dry wells, and sumps.

5.3 Environmental Media Investigation

5.3.1 Subsurface Soil Assessment

The subsurface conditions on the Site will be investigated by the advancement of soil borings for visual assessment of the soil conditions and for the collection of soil samples for laboratory analysis. The precise location of the soil borings and sampling will be based on field observations and the geophysical survey results. The samples will specifically target potential contaminant features in an effort to gain representative samples across the area of concern while at the same time ensuring that impacted soils are adequately delineated.

A photoionization detector (PID) will be used to screen soil for total volatile organic compound (VOC) concentrations and observations of soil composition, staining, odors, and PID responses will be recorded for inclusion in the summary report.

A total of eight (8) soil borings are planned and samples will be collected from visually impacted soil, those intervals revealing elevated readings on the PID, the six inch interval above the water table, or at soil interfaces with decreased permeability (**Table 1A**). Up to 16 additional soil samples will be collected from the borehole to further characterize on-site soils throughout the vadose zone if needed. The laboratory will extract and hold these samples for future analysis, pending the initial results. The samples will be analyzed by a NYSDOH ELAP certified laboratory and full Contract Laboratory Program (CLP), NYSDEC Category B, or full CLP-type analytical data package deliverables will be provided. All samples will be analyzed for full Target Compound List (TCL) plus the 30 (10 VOCs and 20 SVOCs) including Tentatively Identified Compounds (TICs); full Target Analyte List (TAL), 1,4-dioxane and Per-and Polyfluoroalkyl Substances (PFAS) (**Table 2**).

5.3.2 Groundwater Investigation

If contamination is suspected then an investigation will be conducted to assess groundwater quality as per the NYS DEC DER-10 Technical Guidance for Site

Investigation and Remediation including an assessment of the nearby surface water bodies and complete an initial desktop survey of nearby public/private drinking water supply wells within one-mile of the Site.

Monitoring Well Installation

A licensed driller will be contracted to install three monitoring wells to assess groundwater flow direction and quality. The permanent monitoring wells will be constructed with a 10-foot length of an 0.010-inch slotted schedule 40 PVC screen. The monitoring wells will be installed to a depth depending on depth to groundwater, and extended to ground surface using 2-inch diameter solid PVC riser pipe. Once the wells are installed through the hollow casing, the casing will be removed, and the remaining annulus spaces will be filled with Filpro Quartz Sand from the bottom of the borehole to one-foot above the well screen. The remaining annulus spaces will be filled with cement/bentonite grout. Flush-mount steel casing/lids set in concrete pads will complete the wells at ground surface and the top of the PVC well casings will be secured with lockable caps.

Following well installation, the permanent monitoring wells will be developed by purging the screened interval using a whale pump for approximately an hour and a half at a rate of 1 gallon per minute, surging every 30-minute interval until the water is free of silt and apparent turbidity.

Groundwater Sampling

Well development, surveying and sampling will be in accordance with NYSDEC sampling protocols. Groundwater samples will be submitted to a New York State approved laboratory and analyzed for full TCL plus the 30 including TICs; full TAL, 1,4-dioxane and PFAS (**Table 2**). All sample analysis will be in accordance with ASP, Cat B requirements and all data will be validated. All detected sample concentrations will be included in a table and compared to NYSDEC Groundwater Standards.

Prior to collecting groundwater samples, the monitoring wells will be gauged for groundwater depth using a decontaminated oil-water interface probe. Two rounds of groundwater sampling are proposed and will include groundwater depth measurements to be used to determine groundwater flow (**Table 1B**). Groundwater samples will be collected from each well using low-flow sampling techniques with recorded water quality indicated parameters. The samples will be placed in laboratory-supplied containers and submitted under chain-of-custody in an ice-filled cooler by a NYSDOH ELAP certified laboratory, Alpha Analytical Laboratories in Westborough, Massachusetts. All samples will be analyzed for volatile organic compounds plus TICs (**Table 2**).

Appropriate Quality Assurance/Quality Control (QA/QC) samples will be collected for the groundwater sampling event including one trip blank and one field blank sample. A copy of the Quality Assurance Project Plan/Quality Assurance Plan is included in **Appendix E**.

Table 2A - Proposed Sample Summary

	Analytical Methods	

Media	Number of Samples	Full TCL +30	Full TAL	1,4-Dioxane	PFAS	QA/QC Samples
Soil	8 Samples; Up to 16 additional samples	X E&H	X E&H	X E&H	X E&H	1
Groundwater	3 Samples	X	X	X	X	2

*E&H - Sample will be collected and the laboratory will extract and hold pending the initial results.

According to "Sampling, Analysis, and Assessment of per- and polyfluoroalkyl substances (PFAS)" dated January 2021, PFAS are typically related to firefighting foams and industrial or manufacturing facilities. To the best of the Volunteer and EnviroSure's knowledge, the Site has never operated as a fire department or training facility nor has there been a fire or manufacturing operations on the property. However, at the request of NYS DEC, the analysis of PFAS will be analyzed as per Table 2.

5.3.3 Vapor Intrusion Investigation

A Vapor Intrusion Investigation (VII) will be conducted at the Site to characterize the sub-slab and indoor air at the Site as per NYS DOH "Guidance for Evaluating Soil Vapor Intrusion", October 2006 and all applicable updates. The VII will include:

- The NYSDOH Indoor Air Quality Questionnaire and Building Inventory will be completed during sampling;
- Sub-slab soil vapor sampling in the basement and tenant space, up to three (3) sub-slab soil vapor samples;
- Co-located indoor air sampling in the basement, first floor of the former ATC and tenant space; up to three (3) indoor air samples
- Background air sampling at the exterior of the Site building, placement will be wind direction dependent; up to one (1) background air sample.

The samples will be collected during the "heating season" and placed in laboratory-supplied SUMMA canisters for submission under chain-of-custody to a NYSDOH ELAP certified laboratory, Alpha Analytical Laboratories in Westborough, Massachusetts for EPA Method TO-15 (**Table 1C**).

Table 2B - Proposed Sample Summary

Media	Number of Samples	Analytical Methods	QA/QC
Sub-slab soil vapor	3	TO-15	1
Indoor Air/Background	3 (IA); 1(BG)	TO-15	1

6.0 ADDITIONAL SUPPLEMENTAL FIELD INVESTIGATION

The data generated during the RI will be evaluated to determine if additional investigation activities are needed. Additional assessment may include a subsurface boring program and sample analysis limited to contaminants identified during the RI program.

7.0 QUALITATIVE EXPOSURE ASSESSMENT

A qualitative exposure assessment will be completed in accordance with DER-10 Sections 3.3(c)4 and Appendix 3B. The assessment will include what impacts site contaminants may have, if any, on all media (ground/surface water, soil, soil vapor, ambient air and biota). Human health and ecological exposure impacts will be assessed as outlined in DER-10 Appendix 3B Qualitative Human Health Exposure Assessment and Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key. The Appendix 3C Fish and Wildlife resources Impact Analysis (FWRIA) Decision Key is provided in **Appendix G**.

The qualitative human health exposure assessment (QHHEA) will evaluate the five elements (DER-l0 Appendix 3B) associated with exposure pathways, and describe how each of these elements pertains to the Site. The exposure pathway elements that will be addressed include:

- A description of the contaminant source(s) including the location of the contaminant release to the environment (any waste disposal area or point of discharge) or if the original source is unknown, the contaminated environmental medium (soil, indoor or outdoor air, biota, water) at the point of exposure;
- An explanation of the contaminant release and transport mechanisms to the exposed population;
- Identification of all potential exposure point(s) where actual or potential human contact with a contaminated medium may occur;
- Description(s) of the route(s) of exposure (i.e., ingestion, inhalation, dermal absorption); and
- A characterization of the receptor populations who may be exposed to contaminants at a point of exposure.

As called for in DER-10, sufficient field information and sampling data will be provided to identify the presence of contamination, if any, that may leave the site to support qualitative off-site exposure assessments by others.

8.0 OVERSIGHT AND REPORTING

A Remedial Investigation Report will be prepared in accordance with the applicable requirements of DER-10 and Part 375 as well as environmental data deliverables (EDDs) along with Data Usability Summary Reports (DUSRs) will be included as

required in DER-10 Section 1.15 and 2.2(a)(1)(ii).

A schedule is provided in **Appendix E**. It is anticipated that upon completion of the 30 day public comment period, the RI field activities will commence within approximately two to three weeks.

CAMP (**Appendix H**) readings will be provided on a weekly basis with all exceedances reported to the Department and NYSDOH the same day or next business day if after hours along with the reason for exceedance, what was done to correct it, and if it was effective. CAMP data collected during the execution of the RIWP will be summarized in a qualitative statement in the body of the Remedial Investigation Report.

TABLES

Applicant: Reds Crib, LLC
Site Name: American Two Cleaners
Site Address: 43-45 Lafayette Avenue, Suffern, NY
Site County: Rockland
Site Number: C344085

Table 1A - Detailed Proposed Soil Sample Summary

		Analytical Methods				
Proposed Sample Location	**Proposed Number of Samples**	**Sample Location IDs**	**Full TCL +30 and 1,4-Dioxane**	**Full TAL**	**Sampling Rationale**	**QA/QC Samples**
Basement - 43 Lafayette Ave	6	SB-01, SB-04 through SB-07	X	X	Delineate the nature and extent, assess Site geology	One MS/MSD, One Duplicate and One field blank
Exterior North & Northeast- Lafayette Ave	2	SB-02, SB-08	X	X	Delineate the nature and extent	
Exterior Rear door- Chesnut Avenue	1	SB-03	X	X	Delineate the nature and extent	

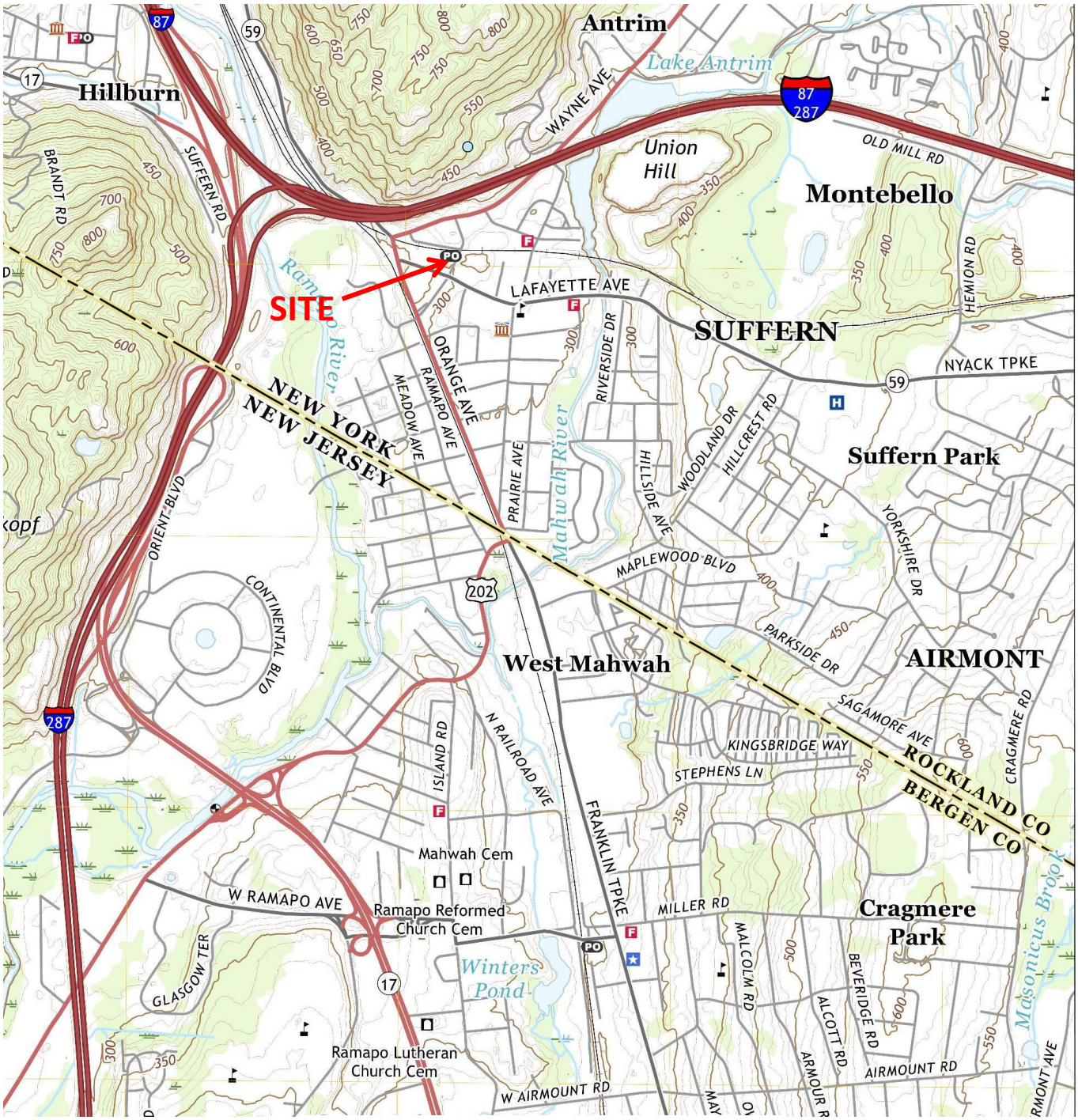
Table 1B - Detailed Proposed Groundwater Sample Summary

		Analytical Methods				
Proposed Sample Location	**Proposed Number of Sampling Rounds**	**Sample Location IDs**	**Full TCL +30 and 1,4-Dioxane**	**Full TAL**	**Sampling Rationale**	**QA/QC Samples**
Basement - Source Well	2	MW-1	X	X	Source well, Delineate the nature and extent	One MS/MSD, One Duplicate and One Trip blank (each sampling round)
Upgradient Well	2	MW-2	X	X	Upgradient well, Delineate the nature and extent	
Downgradient Well	2	MW-3	X	X	Downgradient well, Delineate the nature and extent	

Table 1C - Detailed Proposed Vapor Intrusion Sample Summary

		Analytical Methods				
Proposed Sample Location	**Proposed Number of Samples**	**Sample Location IDs**	**EPA Method TO-15**	**Sub-slab soil vapor (SSSV), Indoor Air (IA), Background (BG)**	**Sampling Rationale**	**QA/QC Samples**
Basement - 43 Lafayette Ave	2	SS-03/IA-04, SS-04/IA-05	X	SSSV and IA	Assessing the basement	One Duplicate
Tenant space - 45 Lafayette Ave	1	SS-05/IA-06	X	SSSV and IA	Assessing the tenant space	
Exterior Front	1	OA-02	X	BG	Background ambient air	

FIGURES



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KILOMETERS 1 0.5 0 1 2

METERS 1000 500 0 1000 2000

MILES 1 0.5 0 1

FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

LEGEND

SOURCE: RAMSEY QUADRANGLE, NEW JERSEY/NEW YORK 7.5 MINUTE SERIES, USGS 2019

N

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APPROVED BY D. OGONOWSKI

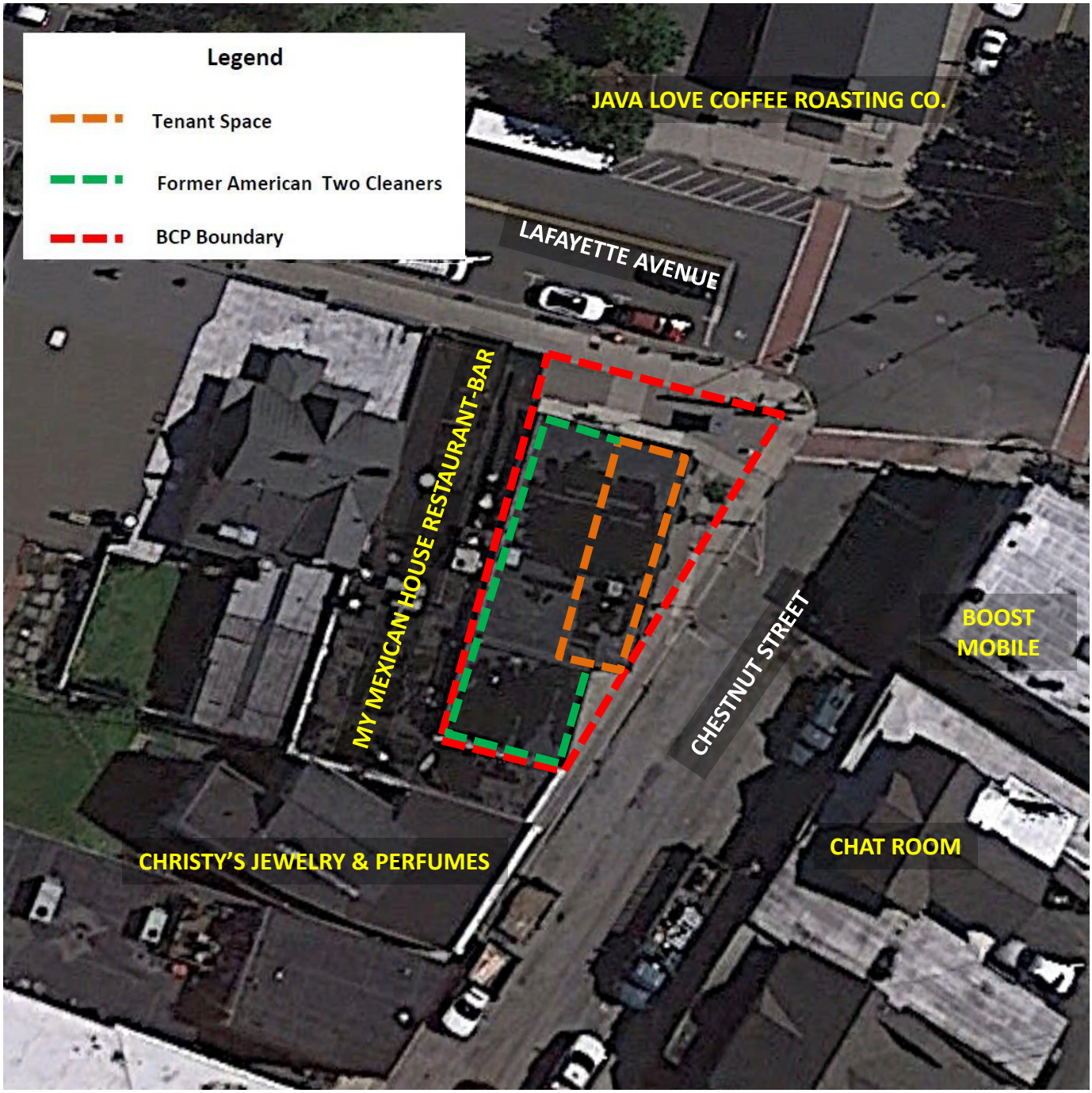
DRAWN BY D. GROTHUSEN

PROJECT DRAWING NO. SO833-1

FIGURE 1

SITE LOCATION MAP
43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK

SCALE	CONTOUR INTERVAL	DATE
1:24,000	10 feet	1/7/2021



LEGEND

SOURCE: GOOGLE EARTH PRO, IMAGE DATE 6/25/2019

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APPROVED BY D. OGONOWSKI

DRAWN BY D. GROTHUSEN

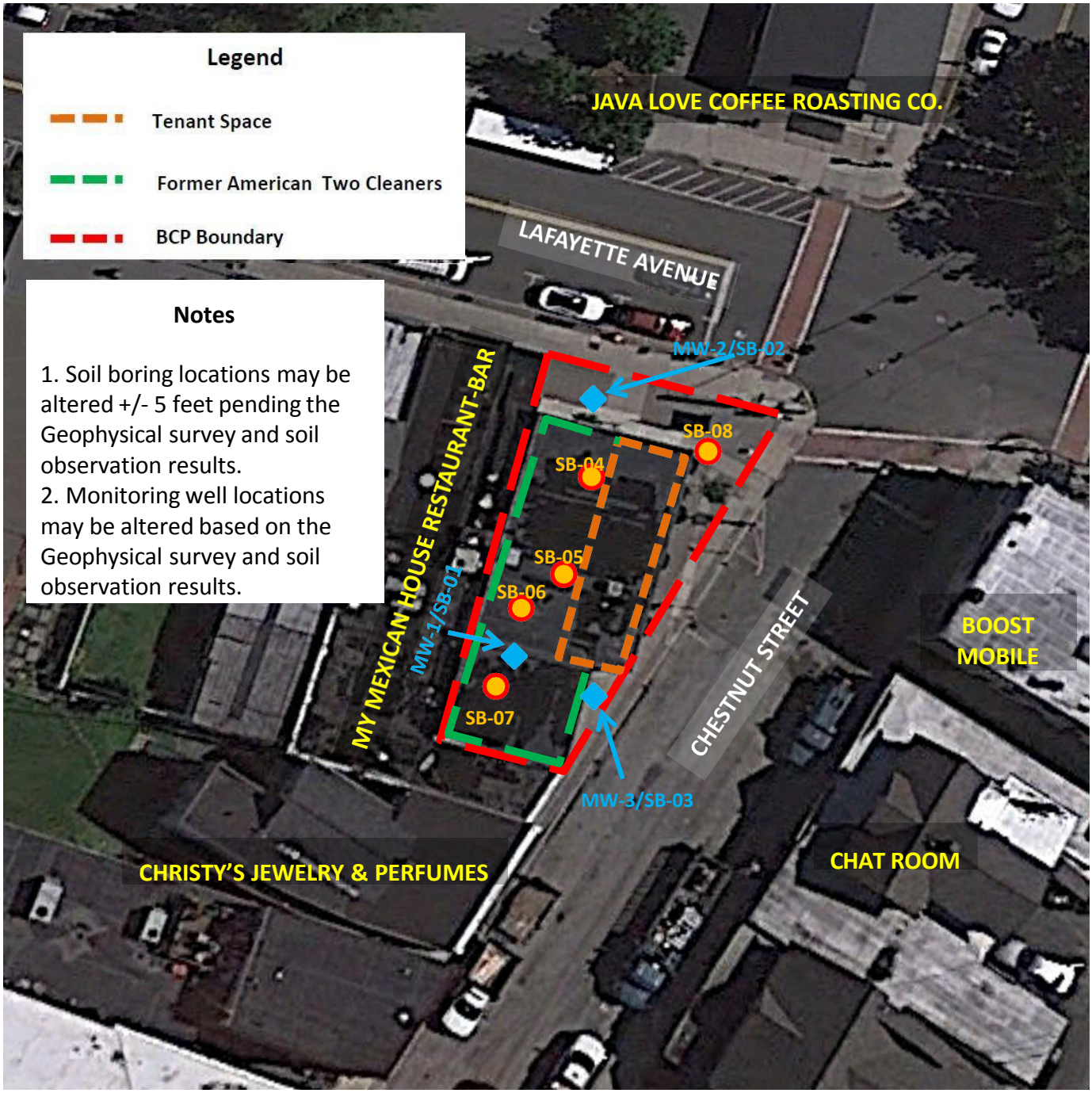
PROJECT DRAWING NO. SO833-2

SCALE 1":38 feet

DATE 1/7/2021

FIGURE 2

SITE LAYOUT MAP
43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK



LEGEND

SOURCE: GOOGLE EARTH PRO, IMAGE DATE 6/25/2019

Proposed Monitoring Well and Soil Boring

Proposed Soil Boring

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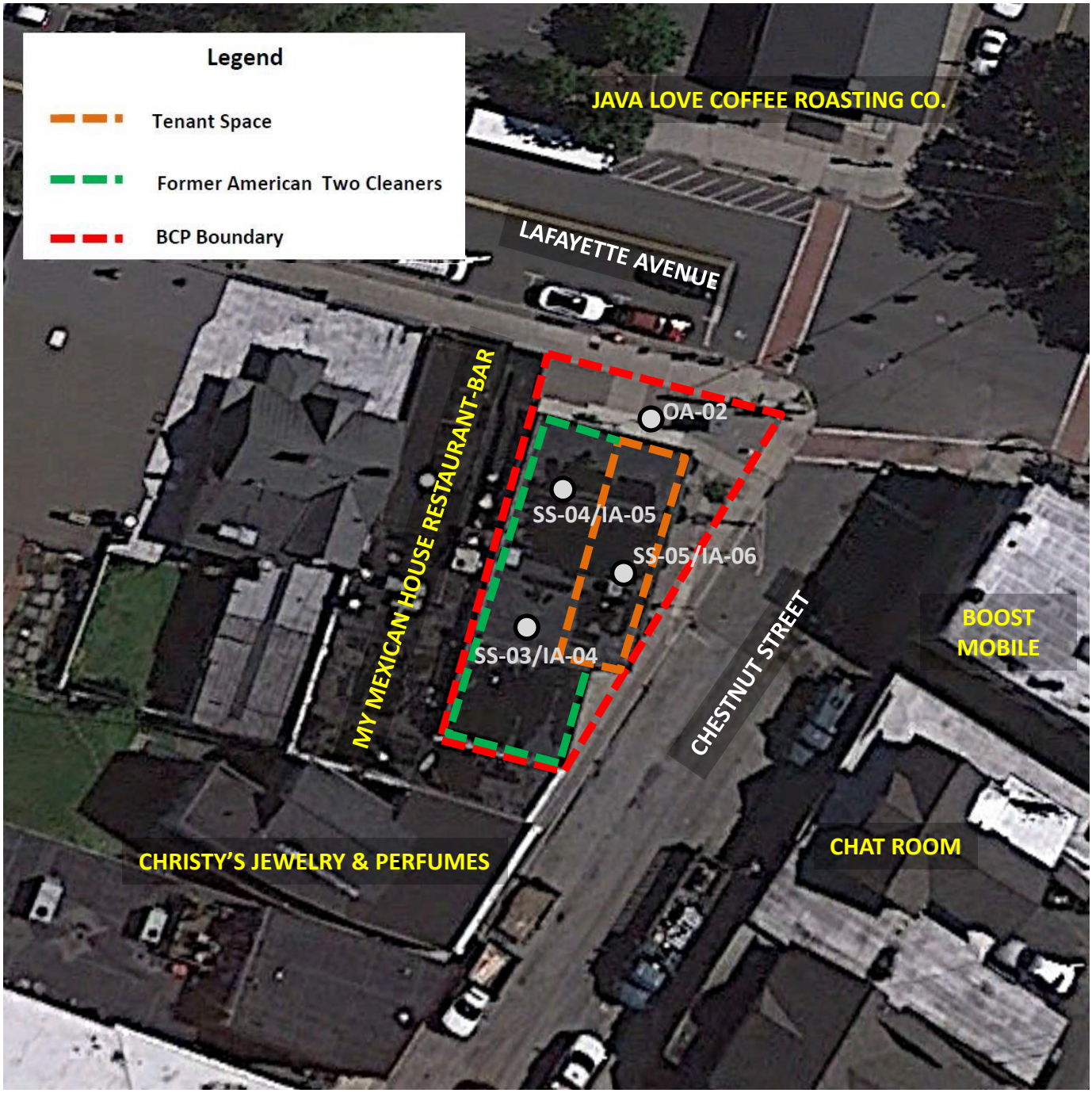
APPROVED BY	D. OGONOWSKI
DRAWN BY	D. GROTHUSEN
PROJECT DRAWING NO.	SO833-2
SCALE	1":38 feet
DATE	1/7/2021

FIGURE 3

PROPOSED SOIL BORING AND MONITORING WELL LOCATION MAP
43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK



LEGEND

SOURCE: GOOGLE EARTH PRO, IMAGE DATE 6/25/2019

Proposed Sub-Slab and Indoor Air Sample Location

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621 SHREWSBURY AVENUE, SUITE 151, SHREWSBURY, NJ 07702

APPROVED BY D. OGONOWSKI

DRAWN BY D. GROTHUSEN

PROJECT DRAWING NO. SO833-2

SCALE 1":38 feet

DATE 11/15/2021

FIGURE 4

PROPOSED SUB-SLAB AND INDOOR AIR SAMPLE LOCATION MAP
43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK

APPENDIX A

PROJECT PERSONNEL

PROJECT PERSONNEL AND CONTACT INFORMATION

- **Dyna Krumich-Ogonowski**; *Project Manager, Project Health and Safety Officer*
  - 621 Shrewsbury Avenue, Suite 151, Shrewsbury, NJ
  - 732.741.1110
  - Dyna@EnviroSureInc.com

- **James Lang**; *NJ LSRP*, *Qualified Environmental Professional*
  - 621 Shrewsbury Avenue, Suite 151, Shrewsbury, NJ
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- **Christopher Zeliznak**; *Project Geologist (PA and DE), Project QA/QC*
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  - Chris@EnviroSureInc.com

- **Derek Grothusen;** *Field Scientist*
  - 621 Shrewsbury Avenue, Suite 151, Shrewsbury, NJ
  - 732.741.1110
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- **Alpha Analytical Laboratories**
  - 508-898-9220
  - cromero@alphalab.com

- **Licensed Drilling Company - TBD**

- **Cynthia Gray, Reds Crib, LLC;** *Owner*
  - 43-45 Lafayette Avenue, Suffern, NY
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  - cynleegray@aol.com

- **Daniel R. Lavoie, Esq**; *Attorney*
  - DRLavoie LLP, 590 Madison Avenue, 21st Floor, New York, NY
  - 203-962-1629
  - Daniel@DRLavoie.com

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ENVIRONMENTAL DEPARTMENT DIRECTOR

Christopher Zeliznak, P.G.

Total Years Experience:

18

Education:

- MS, Temple University, Geology
- BS, Temple University Geology

License(s)/Certification(s):

- Pennsylvania Licensed Professional Geologist PG004537
- Delaware Licensed Professional Geologist S4-0001336

Professional Affiliations:

- Geological Society of America

Publications:

- Zeliznak, Christopher; Goodwin, P.W.; and Anderson, E.J., 1998. The Superposition of a Hierarchic Allocyclic Fabric Across Lateral Facies and Vertical Stratigraphic Boundaries in the Upper Silurian Williamsport Sandstone and Wills Creek Shale. Geological Society of America, Programs with Abstracts, v.30, n. 1, p. 85.
- Zeliznak, Christopher; Brown, S.M.; Goodwin, P.W.; and Anderson, E.J., 1997. Facies Patterns that Define Wills Creek 5th and 6th Order Cycles. Geological Society of America, Programs with Abstracts, v. 29, n. 1, p. 10.

Overview:

Mr. Zeliznak has over 18 years of project management and geologic experience with expertise in environmental remediation. His experience includes leadership roles in most aspects of remediation and his most challenging assignments included being an entry team leader for experimental post-treatment testing related to the Hart Senate Office Building Anthrax Decontamination and team leader/manager of a soil sampling crew at the Libby Asbestos Project, prior to obtaining his Professional Geologist Licensure in the Commonwealth of Pennsylvania and remediating sites through the Pennsylvania Department of Environmental Protection Land Recycling and Corrective Action Process Programs.

Experience:

Project Manager, Coatesville RDA Project, PA. Partnered with the Redevelopment Authority of the City of Coatesville and redeveloper, DEPG Coatesville Associates, LP, to restructure Coatesville as a downtown commercial center. Mr. Zeliznak entered the site into the Pennsylvania Land Recycling Program (Act 2) and completed site investigation efforts that were subsequently summarized in a Remedial Investigation Report and submitted to the PADEP. Coordinated site characterization activities including subsurface geophysical survey to search for underground storage tanks, soil sampling, and installing and sampling a network of groundwater monitoring wells.

Project Manager, Historical Industrial Site, PA. Areas of concern included groundwater impacted with volatile organic compounds (VOCs) including chlorinated VOCs and soil impacted with metals, VOCs, and semi-volatile organic compounds (SVOCs). Issued a Notice of Intent to Remediate (NIR) the site to the PADEP. Coordinated several rounds of groundwater sampling using the existing groundwater monitoring well network. Compiled previous data and recent groundwater sampling data. Created a Work Plan to achieve relief from liability through the Pennsylvania Department of Environmental Protection (PADEP) Land Recycling Program (Act 2).

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Project Manager, Multiple Act 2 Sites in Pennsylvania, Confidential Clients. Conducted site investigations regulated in the PADEP Land Recycling and Storage Tank Cleanup Programs for underground storage tank sites. Managed chlorinated solvent (PCE/TCE) and perfluorinated compound (PFC) remediation sites, evaluating site groundwater conditions using PADEP-approved modeling programs including Biochlor and Pentox groundwater models and Johnson & Ettinger vapor models. Participated in company, office, and personnel management, including staffing, reviews, and mentoring. Served as Company Safety Committee Secretary.

Project Manager/Geologist, Multiple Quarry Sites in Pennsylvania, Confidential Clients. Directed NX corehole drilling operations, performed structural and stratigraphic investigations and interpretation for exploration of potential quarry expansion areas. Incorporated geologic information into Surface Mining Permits and managed projects for submittals to PADEP Bureau of Mines.

Emergency Management Division Committee Member. Acted as environmental science consultant for development of company Emergency Management Division. The Division was developed for natural disaster, fire, and environmental hazard response in Eastern Pennsylvania.

Site Manager/Project Geologist, CERCLIS Investigation, Lansdale, Pennsylvania. Performed site management activities for geologic and hydrogeologic investigation to define DNAPL VOC contaminant plume size, migration and source. Responsibilities included personnel management; coordination between staff, subcontractors, and USGS; and adherence to field protocols for monitoring well installations, sampling, and site safety. Also assisted with video log, downhole geophysical testing, and packer testing data interpretation related to monitoring well installations and placement.

Team Leader, CERCLIS Investigation, Libby, Montana. Participated in citizen and property screening efforts related to asbestos abatement projects for the Town of Libby, Montana, Team leader of direct push soil sampling effort for 200-acre sawmill site characterization.

Team Leader, Hart Senate Office Building Anthrax Response Team, Washington, D.C. Team Leader of bacterial spore test strip placement and retrieval crew. Test strip usage was required to quantify the efficacy of the fumigation process for decontamination of personal items potentially contaminated with anthrax. Managed a 10-20 person crew during seven day per week operation and coordinated crew operations with subcontractor support crews.

O&M Technician & Geologist, CERCLIS Remediation, Hatfield, Pennsylvania. Performed operation and maintenance activities for dual stage air stripping groundwater treatment system. Responsibilities included weekly maintenance, annual cleaning, and monthly NPDES sampling. Conducted quarterly groundwater sampling activities including mobilization, sampling, data reduction and reporting to determine TCE plume concentration and efficacy of treatment system operation. Modeled TCE plume using Rockworks® 2002 subsurface modeling software.

Hydrogeologist, CERCLIS Investigation, Sydney, New York. Performed field operation and oversight of Army Corps of Engineers subcontractor for multiple 72-hour pumping tests relating to groundwater treatment system design.

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Environmental Professional

Dyna Krumich-Ogonowski

Total Years Experience:

15

Education:

- B.S. Marine Science, The Richard Stockton College of New Jersey, Pomona, New Jersey, 2002
- M.S. Environmental Management, University of Maryland University College, Adelphi, Maryland, 2015

License(s)/Certification(s):

- 40-Hour Hazardous Materials Incident Response Operations, OSHA 29 CFR 1910.120(e)(3)(i), 2007
- 8-Hour Hazardous Waste Refresher Course, OSHA 29 CFR 1910.120(e)(8), 2008, 2015, 2018
- 10-Hour Construction Training Course, OSHA 29 CFR 1910.120(e)(3)(i), 2016
- CPR and First Aid Certified, 2018
- Underground Utilities Competent Person, 2009
- Excavation and Trenching Competent Person, 2010
- Boating Safety, U.S. Coast Guard Auxiliary, 2009
- GHS Hazard Communication, 2013
- 30-Hour Construction Safety and Health Training, 2010
- Wetland Delineation Certification, Rutgers University, 2008
- Stream Assessment Training, Stroud Water Research Center, 2006

Overview:

Ms. Krumich-Ogonowski is a versatile, detail-oriented professional with 15 years of environmental consulting and site inspection experience. Field experience includes vapor intrusion investigations, biological sampling, spill response, and monitoring well installation. She is proficient in the use of the Microsoft Office suite of programs, G-Suite, Adobe, GINT, and Corel.

Experience:

Senior Project Manager. Preparation and review of Work Plans, Phase II Investigations, Remedial Investigation and Action reports, Response Action Objective, Vapor Intrusion models, Receptor and Ecological Evaluations in accordance with NJDEP, PADEP, CTDEEP, or NYSDEC. Preparation of proposals for Phase II Investigations, Site Investigations, and Remedial Actions for commercial and municipality clients. Negotiate contracts, manage project budgets, procurement, and invoicing.

Senior Project Scientist. Preparation of Work Plans, letter reports, Remedial Investigation and Action reports, Biennial Certification reporting, Feasibility Study, Proposed Plan, Vapor Intrusion Mitigation reports, Receptor and Ecological Evaluations in accordance with NJDEP, CERCLA, USEPA, or NYSDEC. Preparation of proposal cost estimates and procurement documents, negotiated budgets managed task budgets and invoices. Coordination of contractors, acting as on-site representative for client during spill response activities. Responsible for ensuring contractor adherence to the bid specifications, ensuring site environmental and regulatory compliance. Managed remedial investigation and action activities including full scale vapor intrusion investigations, biological sampling investigations, and spill response. Experience in multi-media sampling, sample management sub-slab soil gas port installation, monitoring well installation, vapor intrusion sampling, and post-excavation sampling.

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Senior Project Manager

James A. Lang, LSRP

Total Years Experience:

30

Education:

- BS, Geology, University of Maryland, 1985

License(s)/Certification(s):

- Licensed Site Remediation Professional, New Jersey, No. 573496, 2012
- 40-Hour OSHA HAZWOPER Training
- 8-Hour OSHA Annual Refresher

Professional Affiliations:

- Licensed Site Remediation Professional Association

Overview:

Mr. Lang has more than 30 years of experience as an environmental professional consulting for private companies, municipalities, and the federal government. He has performed and managed environmental investigations and remediations in NJ, NY, PA, CT, MD, CA, TN, MS, NE, and AZ at a variety of industrial, commercial, agricultural, and government-owned properties. He has performed and managed all phases of investigation including preliminary assessment, site investigation, remedial investigation, remedial actions and feasibility studies under a variety of State and Federal Regulations such as CERCLA/Superfund, NEPA, AAI, Brownfields, ISRA, BUST, and SRRA. Mr. Lang's specialties are Brownfield redevelopment projects and due-diligence. Mr. Lang's project experience ranges from evaluating abandoned industrial properties for inclusion on the NPL, to establishing an environmental baseline prior to property transfer, to remedial action during property redevelopment. Since 2010, Mr. Lang has been the LSRP on 28 sites and has issued Remedial Action Outcomes (RAO) for a variety of commercial and industrial sites.

Experience:

Project Manager, National Environmental Policy Act (NEPA), U.S. Department of Housing and Urban Development, U.S. Department of Veterans Affairs. Mr. Lang has conducted and managed numerous investigations for projects receiving federal funding to comply with NEPA requirements in NJ, NY, CT, and MD. These projects have included housing development in urban centers and enhanced use leasing redevelopment projects at Veterans Administration medical facilities in various states. Reports prepared by Mr. Lang and under his direction include AAI Due-Diligence, Environmental Review Records, Environmental Assessments, Categorical Exemptions, Categorical Exclusions, and Section 106 applicability determinations.

Brownfield Development Areas (BDAs), Municipal and Not-for-Profit Developers. Mr. Lang conducted and managed work in the West Lake Avenue BDA (Neptune), Springwood Avenue BDA (Asbury Park), and Central Valley BDA in New Jersey. He was responsible for the successful application for the Springwood Avenue BDA and assisted with the preparation of the West Lake Avenue BDA application. Once the BDA status was granted, Mr. Lang applied for funding on behalf of the municipality and designated master developer through the HDSRF program and conducted/managed the investigations including PA, SI, and RI. Mr. Lang planned and managed the remedial action for two projects in conjunction with the planned redevelopment. The projects consisted of a much-needed community/senior center and a multipurpose medical building. During the BDA application process and the following investigations and remediations, Mr. Lang worked closely with the developers, the municipalities, architects, and other project professionals to incorporate the remediation into the redevelopment plans, as well as meeting with the Brownfield Redevelopment Interagency Team.

Emergency Response, Diesel Fuel Release at a Petroleum Terminal on the Arthur Kill, New Jersey. Mr. Lang is managing the Phase 2 recovery of a large diesel fuel release to the Arthur Kill and tributaries that occurred in October 2012 as a result of tropical storm Sandy. Mr. Lang is working with the NJDEP Emergency Management to contain and recover the diesel. Mr. Lang, along with the responsible party and LSRP, developed the Site Conceptual Model (SCM) as the basis for characterization of the release and as the basis to proceed with the Site Investigation. Based on the SCM, Mr. Lang developed the Site Investigation Work Plan (SIWP) to evaluate the soil and sediment along the water ways. Preliminary data indicates that the SCM accurately predicted the behavior of the release and the distribution of the diesel fuel. Mr. Lang coordinated with the residents impacted by the release and the responsible party to remove debris and return commercial and private marinas to working order and to gain access to complete the necessary investigation which is on-going.

Due-Diligence, Municipal, Federal, Private Clients. Mr. Lang has conducted and managed due-diligence investigations since 1986 and his clients have included the Resolution Trust Corporation (RTC), the US Department of Veterans Affairs, the City of Asbury Park, Lakewood Township, Newark Housing Authority, and confidential private clients. Often, a due-diligence investigation serves as the foundation for remediation of a property or to identify potential sources of unexpected contamination. Mr. Lang's experience has evolved as regulations and standards were developed by State and Federal Agencies and ASTM. Mr. Lang conducted USEPA and RTC property assessments, ASTM Phase I ESA, USEPA AAI investigations, and NJDEP Preliminary Assessments. The purpose of these due-diligence investigations is varied including pre-purchase base-line evaluations, regulatory compliance for industrial site transfers such as ISRA, and preparation of a site-wide NFA/RAO.

Chlorinated Solvent Investigation at a Shopping Center, Commercial Client, South Freehold, New Jersey. Mr. Lang assumed responsibility of the project after the initial SI was completed. Mr. Lang successfully demonstrated that the soil was not a source of the contamination and that the thick clay sequence located below the site was acting as a barrier to the downward migration of the contaminant. By demonstrating this, he reduced the remedial action cost estimate provided by the previous consultant by more than half. Mr. Lang developed an appropriate remedial action with an estimated cost of approximately $600,000. The remedial action would be coordinated with planned site improvements to control costs further.

APPENDIX B

HISTORICAL INVESTIGATIONS ENVIRONMENTAL REPORT

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Prepared for: **REDS CRIB, LLC**
1 MEMORIAL DRIVE
SUFFERN VILLAGE, NEW YORK 10901

LIMITED VAPOR INTRUSION ASSESSMENT

43-45 LAFAYETTE AVENUE
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

JANUARY 11, 2021

SPILL NO.: 2005272
Project number: **SO581 and SO833**

Prepared by: **ENVIROSURE, INC.**

DYNA KRUMICH-OGONOWSKI
Environmental Professional

CHRISTOPHER ZELIZNAK, P.G. (PA & DE)
ENVIRONMENTAL PROFESSIONAL

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1.0 SUMMARY

Reds Crib, LLC (the "Client") retained EnviroSure, Inc. (EnviroSure) to conduct a Limited Vapor Intrusion Assessment for the property located at 43-45 Lafayette Avenue in the Village of Suffern, Rockland County, New York (the Site). All activities were performed in accordance with New York State (NYS) Department of Health (DOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2016 and May 2017, along with NYS Department of Environmental Conservation (DEC) Technical Guidance for Site Investigation and Remediation (DER-10). EnviroSure's assessment included review of the August 2020 Environmental Consulting and Management Services, Inc. (ECMS) vapor intrusion sampling event and indoor air sampling at the Site conducted by EnviroSure in September 2020.

1.1 Purpose

Based on the historical dry cleaner operations at the Site, vapor intrusion sampling was conducted to assess the indoor air quality at the Site.

1.2 Scope of Work

Assessment activities consisted of the following:

- Review of ECMS sub-slab soil vapor, indoor air, and ambient air sample analytical results
- Collect indoor air sample from occupied tenant space

The Site location and topographic features are identified on **Figure 1**. A Site Layout Map is included as **Figure 2**.

2.0 SITE DESCRIPTION

The Site is located at 43-45 Lafayette Avenue in the Village of Suffern, Rockland County, New York in a mixed commercial and residential area. The Site is located approximately 0.2-miles south of Interstate 287 and approximately 400-feet east of Route 202. The Site is approximately 0.07 acres with a one-story structure split into two suites and identified in the tax records as Tax ID 54.35-2-25 for General Business/Community Commercial land use. The location and key features of the Site are identified on **Figures 1 and 2**. The Site is accessible on foot from Lafayette Avenue and Chestnut Street.

The following information regarding the physical setting of the Site was obtained through a review of various publications, interviews, and on-site observations.

2.1 Site History

The Site building has two tenant spaces; 43 Lafayette Avenue is vacant and was formerly occupied by American Two Cleaners (ATC) and 45 Lafayette Avenue is occupied by a wellness program tenant. The current property owner, Reds Crib, LLC, purchased the property in October 2019 and the ATC occupied the property for at least six years prior.

2.2 Physical Setting

As noted on the United States Geological Survey (USGS) Ramsey, New Jersey/New York Quadrangle 7.5-minute series map (2020), the Site is at an elevation of approximately 300 feet above mean sea level. The Site slopes gently to the south towards the southern adjoining property along Chestnut Street.

2.2.1 Geology

The Site is underlain by the Triassic-aged Hammer Creek Conglomerate located in the Gettysburg-Newark Lowland Section of the Piedmont Physiographic Province. The Hammer Creek conglomerate is a very coarse quartz conglomerate having abundant pebbles and cobbles of gray quartzite. It has minor beds of coarse red sandstone. Beds are thick to massive and well developed. At its type section, it has a measured thickness of approximately 2,580 feet (USGS 2021).

2.2.2 Hydrogeology

Groundwater was not encountered during Site activities; however, groundwater is assumed to be at depths ranging from 10 to 35 feet below ground surface (fbgs). Groundwater flow direction is southwest.

3.0 FIELD INVESTIGATION ACTIVITIES

Vapor intrusion investigation activities were completed on August 11, 2020 by Environmental Consulting and Management Services, Inc. (ECMS) and EnviroSure on September 15, 2020. Discussions of the sampling efforts and analytical results follows.

3.1 Vapor Intrusion Sampling

The subcontractors used during remediation activities are listed below:

- Phoenix Laboratories, Manchester CT (ECMS)
- Alpha Analytical, Mahwah, NJ

Laboratory data packages are provided in **Appendix A and B**.

The Client contracted ECMS of New City, New York to conduct a vapor intrusion assessment at the former drycleaning space in 43 Lafayette Avenue on the Site. On August 11, 2020, ECMS collected two sub-slab soil vapor samples, two indoor air samples, and one ambient air sample from the Site; the sample locations are identified on **Figure 3**. It should be noted that the ECMS field notes were not supplied to EnviroSure for inclusion in this report; only the sample locations and laboratory data package from Phoenix Environmental Laboratories, Inc, of, Manchester, Connecticut were provided for review and discussion in this report. A copy of the laboratory data package is included in **Appendix A** of this report. As noted on the laboratory Chain of Custody in the laboratory package, all samples were collected over an approximately five to six hour time interval. The vapor intrusion sample locations were identified from the laboratory Chain of Custody and are summarized on the following Sample Location Table:

Sample ID	Location
SS-1	Sub-slab soil vapor in main basement area
SS-2	Sub-slab soil vapor in basement boiler room
IA-1	Indoor air in basement boiler room
IA-2	Indoor Air in first floor former drycleaning space
OA-1	Outdoor ambient air sample from southeast exterior wall (along Chestnut Street)

Upon completion of sampling by ECMS, the samples were submitted to Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut (NY Lab Registration No.

11301) under chain of custody protocol for volatile organic compound (VOC) analysis via USEPA method TO-15.

After review of the ECMS sample laboratory analytical results, discussed in **Section 3.2** of this report, EnviroSure determined that vapor intrusion was a concern for the Site. EnviroSure subsequently notified the NYSDEC Spill Hotline on September 9, 2020 of the release from historical dry cleaning operations at the Site. The NYSDEC issued Spill No. 2005272 for the case.

On September 15, 2020, Ms. Dyna Krumich-Ogonowski with EnviroSure conducted a walk-through of the Site building with the property owner, Ms. Cynthia Gray, President of Reds Crib, LLC. The former drycleaning suite at 43 Lafayette Avenue was vacant and empty. Based on the recommendations made by EnviroSure, general purpose fans have been operated in the first floor and basement of the former drycleaning space to circulate and remove indoor air, to temporarily mitigate the vapor intrusion concern. The wellness program tenant in the suite at 45 Lafayette Avenue is fit out with a countertop for retail wellness drink/smoothie sales with minimal furniture, a restroom, and office space. Two employees were working at the time of the site walk. Review of the building construction during the walk through determined that the basement area is isolated and only accessible from the former dry cleaners suite. The basement floor was observed to be in poor condition with numerous large cracks in the surface along with an open air sump.

To evaluate the indoor air in the occupied tenant space at 45 Lafayette Avenue, EnviroSure collected vapor intrusion sample IA-3 from the occupied tenant space in the main area outside of the office and restroom on September 11, 2020, since the suite was not sampled during the August 11, 2020 sampling event. The sample location is depicted on **Figure 3**. Sampling was conducted in accordance with the NYSDOH guidance documents. The sample canister was submitted to Alpha Analytical Laboratory of Westborough, Massachusetts (NY Lab Registration No. 11627) for VOC analysis via USEPA method TO-15.

3.2 Vapor Intrusion Analytical Results

EnviroSure summarized the provided August 11, 2020 ECMS sample analytical results on **Table 1** and the September 15, 2020 sample analytical results on **Table 2** upon receipt and compared both to the NYSDOH Health Exposures Indoor Air Concentrations and NYSDOH Soil Vapor/Indoor Air Matrix A through C. As noted on **Table 1**, ECMS indoor air samples IA-1 and IA-2 were reported with concentrations of 305 µg/m^3 and 73.9 µg/m^3, respectively, greater than the applicable NYSDOH Indoor Air Concentrations due to Health Exposures screening value of 30 ug/m3. ECMS sub-slab soil vapor samples SS-1 and SS-2 were reported with concentrations of tetrachlorethylene (PCE) at 3,470 micrograms per cubic meter (µg/m^3) and 7,520 µg/m^3, respectively, and respective concentrations of trichlorethylene (TCE) at 41.1 µg/m^3 and 202 µg/m^3, greater than the applicable NYSDOH Indoor Air Concentrations due to Health Exposures screening value of 2 ug/m3. The remaining analyzed compounds

from the ECMS samples were either not detected or were detected below the respective NYSDOH Indoor Air Concentrations due to Health Exposures screening values. Review of the analyzed compounds for the EnviroSure indoor air sample (IA-3) were either not detected or were detected below the respective NYSDOH Indoor Air Concentrations due to Health Exposures screening values. Copies of the laboratory reports are provided in **Appendix A and B**.

4.0 FINDINGS AND CONCLUSIONS

EnviroSure conducted an evaluation of August 11, 2020 data from samples collected by ECMS, as well as a limited vapor intrusion assessment for the Site building on September 15, 2020, by collecting two sub-slab soil vapor samples, three indoor air samples and one outdoor ambient air sample for laboratory analysis and comparison to the respective NYSDOH Indoor Air Concentrations due to Health Exposures screening values. Both ECMS sub-slab soil vapor samples SS-1 and SS-2 contained PCE and TCE concentrations above the NYSDOH exposure concentrations and are listed in the applicable matrix as “mitigate”. Both indoor air samples collected by ECMS from the former dry cleaning suite also contained concentrations of PCE above the applicable NYSDOH exposure concentrations and are listed in the applicable matrix as “mitigate”. The indoor air sample concentrations from the 45 Lafayette Avenue suite were not detected above the respective exposure concentrations.

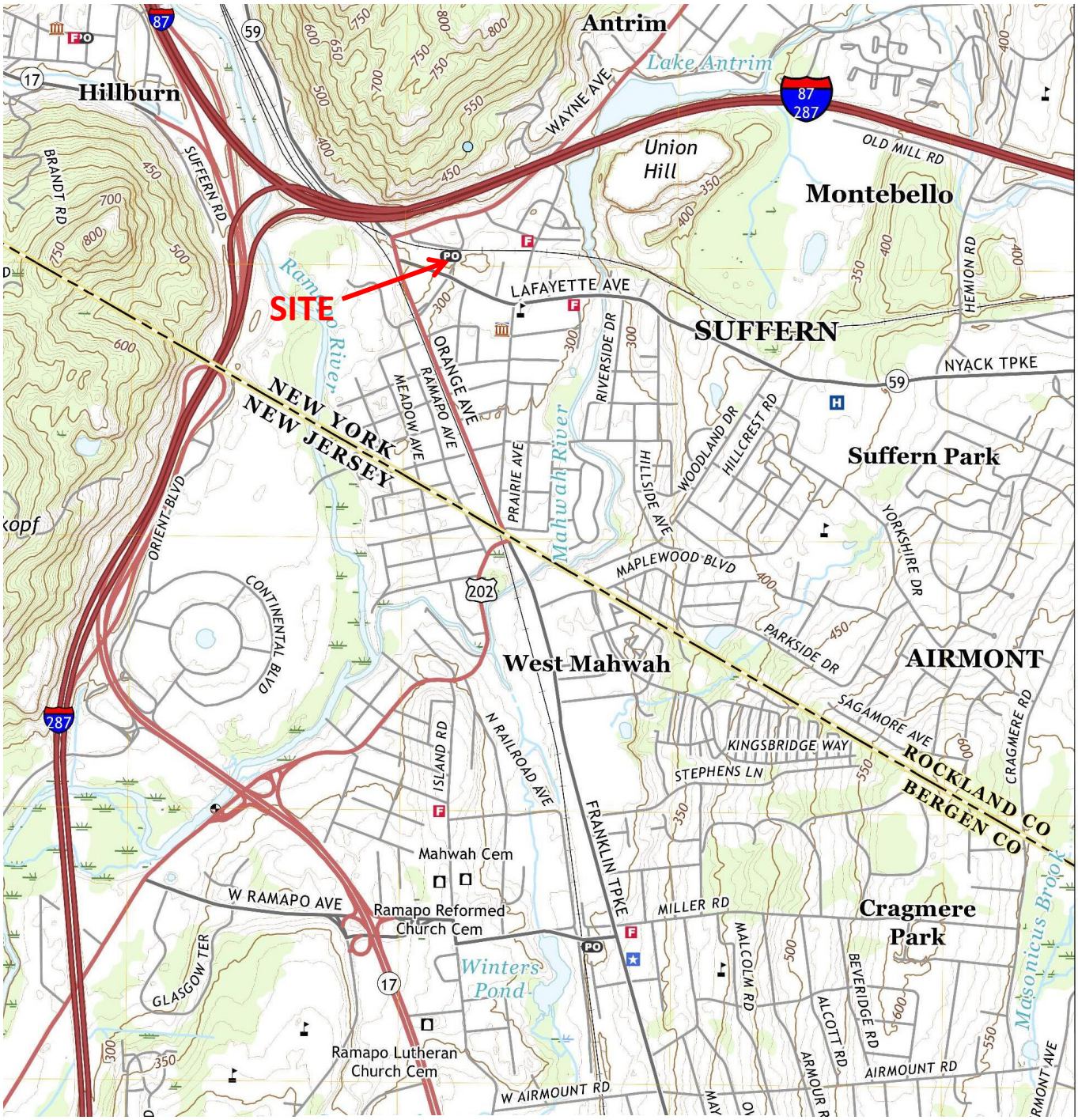
The sub-slab soil vapor and indoor air samples collected from the former dry cleaning space have concentrations that indicate a potential source is below the basement slab. Due to the floor conditions and open sump, the sub-slab soil vapors are migrating into indoor air. However, the soil vapors do not appear to be migrating into the indoor air of the 43 Lafayette Avenue suite.

EnviroSure determined that vapor intrusion was a concern for the Site. Based on that assessment, EnviroSure subsequently notified the NYSDEC Spill Hotline on September 9, 2020 of the release from historical dry cleaning operations at the Site. The NYSDEC issued Spill No. 2005272 for the case. Following the sampling results from the August 2020 sampling event, the Client put temporary house fans in the 45 Lafayette Avenue space to circulate and remove the indoor air.

Based on the findings from the ECMS vapor intrusion investigation as evaluated by EnviroSure, we recommend sealing the basement floor cracks and sump to minimize the vapor intrusion pathways. Furthermore, EnviroSure recommends additional investigation to determine the source, nature, and extent of impacted media. A voluntary Brownfield Cleanup Program (BCP) application will be completed and submitted to the NYSDEC for review and submission to the BCP.

FIGURES

621 Shrewsbury Avenue, Suite 151
Shrewsbury, New Jersey 07702
P 732.741.1110
www.envirosureinc.com



SCALE 1:24 000

KILOMETERS 1 0.5 0 1 2

METERS 1000 500 0 1000 2000

MILES 1 0.5 0 1

FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

LEGEND

SOURCE: RAMSEY QUADRANGLE, NEW JERSEY/NEW YORK 7.5 MINUTE SERIES, USGS 2019

N

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621 SHREWSBURY AVENUE, SUITE 151, SHREWSBURY, NJ 07702

APPROVED BY D. OGONOWSKI

DRAWN BY D. GROTHUSEN

PROJECT DRAWING NO. SO833-1

FIGURE 1

SITE LOCATION MAP
43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK

SCALE	CONTOUR INTERVAL	DATE
1:24,000	10 feet	1/7/2021

0 38 76

LEGEND

SOURCE: GOOGLE EARTH PRO, IMAGE DATE 6/25/2019

N

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621 SHREWSBURY AVENUE, SUITE 151, SHREWSBURY, NJ 07702

APPROVED BY D. OGONOWSKI

DRAWN BY D. GROTHUSEN

PROJECT DRAWING NO. SO833-2

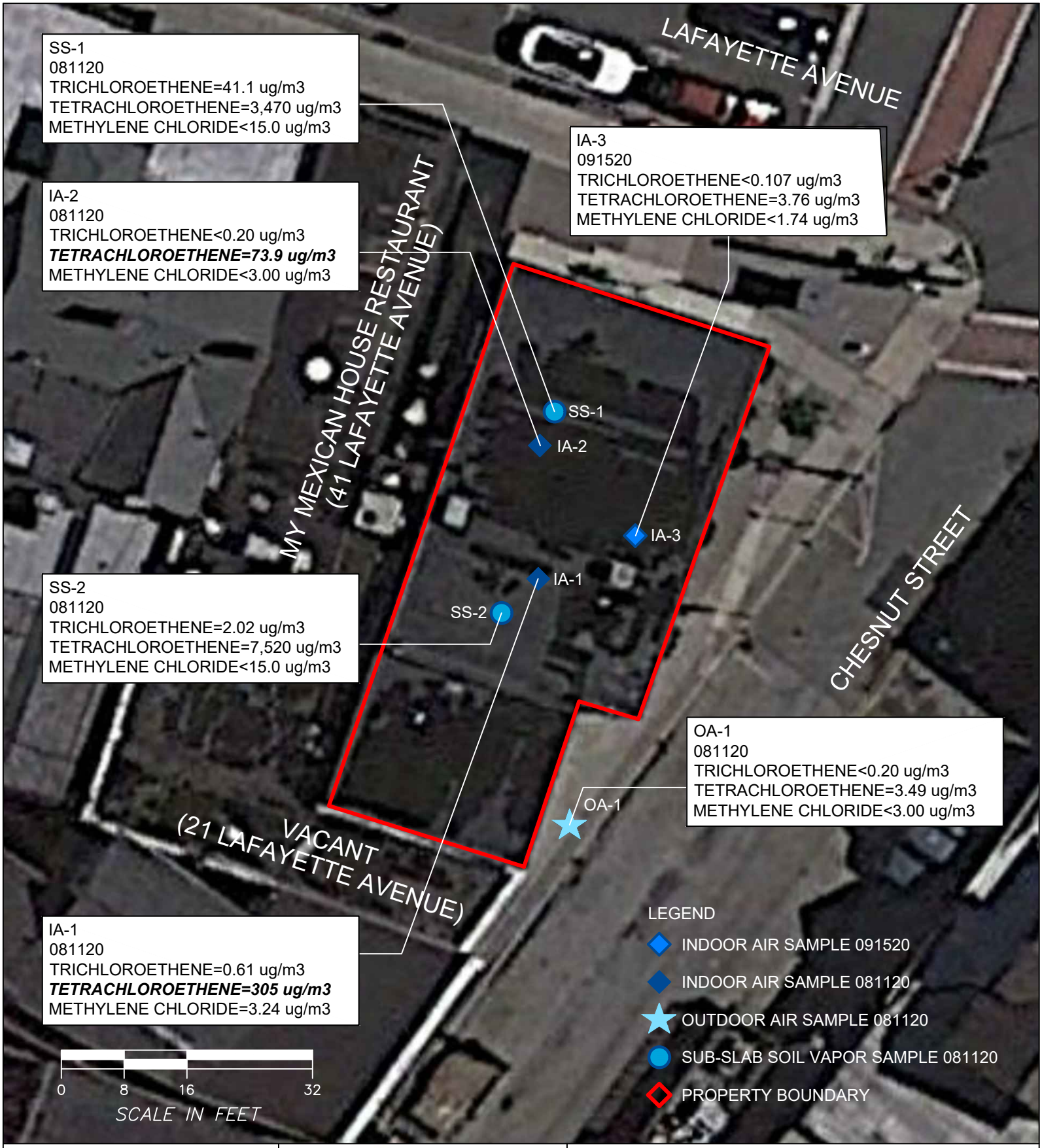
SCALE 1":38 feet

DATE 1/7/2021

FIGURE 2

SITE LAYOUT MAP

43-45 LAFAYETTE AVENUE
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK



LEGEND

SOURCE: GOOGLE EARTH, IMAGE DATE 2019

N

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319 S. HIGH STREET, 1st FLOOR, WEST CHESTER, PA 19382

FIGURE 3

SAMPLE LOCATION ANALYTICAL RESULTS
43-45 LAFAYETTE AVENUE
ROCKLAND COUNTY,
SUFFERN, NEW YORK

APPROVED BY: D. OGONOWSKI				
DRAWN BY: P. MARCINK				
PROJECT NO.: S0833	SCALE: GRAPHIC	DATE: 01/06/21	DRAWING NO.: S0833-3	

TABLES

621 Shrewsbury Avenue, Suite 151
Shrewsbury, New Jersey 07702
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TABLE 1
VAPOR INTRUSITON SAMPLE SUMMARY
43-45 LAFAYETTE AVENUE, SUFFERN, NY
ECMS

	Collection Date		8/11/2020	8/11/2020	8/11/2020	8/11/2020	8/11/2020	NYSDEC/NYSDOH indoor air concentrations due to Health Exposures	NYSDOH Requirements Established in the Soil Vapor / Indoor Air Matrices
	Client Id		OA-1	SS-1	SS-2	IA-1	IA-2		
Project Id : 43 LAFAYETTE ST SUFFERN, NY	Matrix		Air	Air	Air	Air	Air		
	SAMPLE LOCATION		Outside air via sidewalk by backdoor	Basement sub-slab vapors closest to Lafayette	Basement sub-slab vapors in boiler room	Indoor air in boiler room	Indoor air in main tenant space		
Volatiles (TO15) By TO15	**CAS**	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**		
1,1,1-Trichloroethane	71-55-6	ug/m3	< 1.00	< 5.00	< 5.00	< 1.00	< 1.00	No Guidance/standard established	No Further Action
1,1-Dichloroethene	75-35-4	ug/m3	< 0.20	< 1.00	< 1.00	< 0.20	< 0.20	No Guidance/standard established	No Further Action
Carbon Tetrachloride	56-23-5	ug/m3	0.48	< 1.00	< 1.00	0.54	0.41	No Guidance/standard established	No Further Action
Cis-1,2-Dichloroethene	156-59-2	ug/m3	< 0.20	< 1.00	52.3	< 0.20	< 0.20	No Guidance/standard established	No Further Action
Methylene Chloride	75-09-2	ug/m3	< 3.00	< 15.0	< 15.0	3.24	< 3.00	60	No Further Action
Tetrachloroethene	127-18-4	ug/m3	3.49	3,470	7,520	**305**	**73.9**	30	**Mitigate**
Trichloroethene	79-01-6	ug/m3	< 0.20	41.1	202	0.61	< 0.20	2	**Mitigate**
Vinyl Chloride	75-01-4	ug/m3	< 0.20	< 1.00	< 1.00	< 0.20	< 0.20	No Guidance/standard established	No Further Action

TABLE 2
INDOOR AIR SAMPLE SUMMARY
43-45 LAFAYETTE AVENUE, SUFFERN, NY
ENVIROSURE PROJECT No. SO581; NYS DEC SPILL No. 2005272

	Collection Date		9/15/2020		NYSDEC/NYSDOH indoor air concentrations due to Health Exposures	NYSDOH Requirements Established in the Soil Vapor / Indoor Air Matrices
	Client Id		IA-3			
	Matrix		Air			
	SAMPLE LOCATION		Indoor Air - Rear of occupied tenant space			
Volatiles (TO15) By TO15	**CAS**	**Units**	**Result**	**RL**		
1,1,1-Trichloroethane	71-55-6	ug/m3	<0.109	1.00	No Guidance/standard established	No Further Action
1,1-Dichloroethene	75-35-4	ug/m3	<0.079	0.20	No Guidance/standard established	No Further Action
Carbon Tetrachloride	56-23-5	ug/m3	0.39	0.20	No Guidance/standard established	No Further Action
Cis-1,2-Dichloroethene	156-59-2	ug/m3	<0.079	0.20	No Guidance/standard established	No Further Action
Methylene Chloride	75-09-2	ug/m3	<1.74	3.00	60	No Further Action
Tetrachloroethene	127-18-4	ug/m3	3.76	1.50	30	No Further Action
Trichloroethene	79-01-6	ug/m3	<0.107	0.20	2	No Further Action
Vinyl Chloride	75-01-4	ug/m3	<0.051	0.20	No Guidance/standard established	No Further Action

Values that Exceed NYSDOH Health Exposure Guidance **(boldened value)**

Yellow highlighted compound/concentration on Soil Vapor/Indoor Air Matrix A

Light Blue highlighted compound/concentration on Soil Vapor/Indoor Air Matrix B

Light Green highlighted compound/concentration on Soil Vapor/Indoor Air Matrix C

Concentration detected

ENVIROSURE, INC.
621 Shrewsbury Avenue, Suite 151
Shrewsbury, New Jersey

APPENDIX A

LABORATORY ANALYTICAL RESULTS PACKAGE - AUGUST 2020

621 Shrewsbury Avenue, Suite 151
Shrewsbury, New Jersey 07702
P 732.741.1110
www.envirosureinc.com

PHOENIX
Environmental Laboratories, Inc.

Monday, August 17, 2020

Project ID: 43 LAFAYETTE
SDG ID: GCG52680
Sample ID#s: CG52680 - CG52684

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.

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
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

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

Sample Id Cross Reference

August 17, 2020

SDG I.D.: GCG52680

Project ID: 43 LAFAYETTE

Client Id	Lab Id	Matrix
SS-1	CG52680	AIR
OA-1	CG52681	AIR
IA-2	CG52682	AIR
SS-2	CG52683	AIR
IA-1	CG52684	AIR

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Analysis Report

FOR:

August 17, 2020

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	HS	08/11/20	15:54
Location Code:		Received by:	SW	08/12/20	17:16
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	19732				

Laboratory Data

SDG ID: GCG52680
Phoenix ID: CG52680

Project ID: 43 LAFAYETTE
Client ID: SS-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Helium (% volume/volume)	ND	*10*	ND		08/14/20	KCA	1	1
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	08/13/20	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	ND	*5.00*	08/13/20	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	08/13/20	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	ND	*5.00*	08/13/20	KCA	5	
1,1-Dichloroethane	ND	*1.24*	ND	*5.02*	08/13/20	KCA	5	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	08/13/20	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	ND	*5.00*	08/13/20	KCA	5	
1,2,4-Trimethylbenzene	22.5	*1.02*	111	*5.01*	08/13/20	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	ND	*5.00*	08/13/20	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,2-Dichloroethane	ND	*1.24*	ND	*5.02*	08/13/20	KCA	5	
1,2-dichloropropane	ND	*1.08*	ND	*4.99*	08/13/20	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	ND	*5.00*	08/13/20	KCA	5	
1,3,5-Trimethylbenzene	6.13	*1.02*	30.1	*5.01*	08/13/20	KCA	5	
1,3-Butadiene	ND	*2.26*	ND	*5.00*	08/13/20	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,4-Dioxane	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	ND	*4.99*	08/13/20	KCA	5	1
4-Ethyltoluene	6.74	*1.02*	33.1	*5.01*	08/13/20	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	ND	*5.00*	08/13/20	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	ND	*4.99*	08/13/20	KCA	5	
Acetone	21.8	*2.11*	51.8	*5.01*	08/13/20	KCA	5	
Acrylonitrile	ND	*2.31*	ND	*5.01*	08/13/20	KCA	5	
Benzene	1.80	*1.57*	5.75	*5.01*	08/13/20	KCA	5	

Project ID: 43 LAFAYETTE
Client ID: SS-1

Phoenix I.D.: CG52680

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By		
Benzyl chloride	ND	*0.966*	ND	*5.00*	08/13/20	KCA	5	
Bromodichloromethane	ND	*0.747*	ND	*5.00*	08/13/20	KCA	5	
Bromoform	ND	*0.484*	ND	*5.00*	08/13/20	KCA	5	
Bromomethane	ND	*1.29*	ND	*5.01*	08/13/20	KCA	5	
Carbon Disulfide	ND	*1.61*	ND	*5.01*	08/13/20	KCA	5	
Carbon Tetrachloride	ND	*0.159*	ND	*1.00*	08/13/20	KCA	5	
Chlorobenzene	ND	*1.09*	ND	*5.01*	08/13/20	KCA	5	
Chloroethane	ND	*1.90*	ND	*5.01*	08/13/20	KCA	5	
Chloroform	ND	*1.02*	ND	*4.98*	08/13/20	KCA	5	
Chloromethane	ND	*2.42*	ND	*4.99*	08/13/20	KCA	5	
Cis-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	08/13/20	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	08/13/20	KCA	5	
Cyclohexane	ND	*1.45*	ND	*4.99*	08/13/20	KCA	5	
Dibromochloromethane	ND	*0.587*	ND	*5.00*	08/13/20	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	ND	*4.99*	08/13/20	KCA	5	
Ethanol	135	*2.66*	254	*5.01*	08/13/20	KCA	5	1
Ethyl acetate	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	1
Ethylbenzene	18.0	*1.15*	78.1	*4.99*	08/13/20	KCA	5	
Heptane	3.91	*1.22*	16.0	*5.00*	08/13/20	KCA	5	
Hexachlorobutadiene	ND	*0.469*	ND	*5.00*	08/13/20	KCA	5	
Hexane	3.15	*1.42*	11.1	*5.00*	08/13/20	KCA	5	
Isopropylalcohol	24.1	*2.04*	59.2	*5.01*	08/13/20	KCA	5	
Isopropylbenzene	ND	*1.02*	ND	*5.01*	08/13/20	KCA	5	
m,p-Xylene	76.3	*1.15*	331	*4.99*	08/13/20	KCA	5	
Methyl Ethyl Ketone	ND	*1.70*	ND	*5.01*	08/13/20	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	
Methylene Chloride	ND	*4.32*	ND	*15.0*	08/13/20	KCA	5	
n-Butylbenzene	1.17	*0.911*	6.42	*5.00*	08/13/20	KCA	5	1
o-Xylene	24.4	*1.15*	106	*4.99*	08/13/20	KCA	5	
Propylene	ND	*2.91*	ND	*5.01*	08/13/20	KCA	5	1
sec-Butylbenzene	ND	*0.911*	ND	*5.00*	08/13/20	KCA	5	1
Styrene	ND	*1.17*	ND	*4.98*	08/13/20	KCA	5	
Tetrachloroethene	512	*1.11*	3470	*7.52*	08/13/20	KCA	30	
Tetrahydrofuran	3.03	*1.70*	8.93	*5.01*	08/13/20	KCA	5	1
Toluene	60.2	*1.33*	227	*5.01*	08/13/20	KCA	5	
Trans-1,2-Dichloroethene	ND	*1.26*	ND	*4.99*	08/13/20	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	08/13/20	KCA	5	
Trichloroethene	7.66	*0.186*	41.1	*1.00*	08/13/20	KCA	5	
Trichlorofluoromethane	ND	*0.891*	ND	*5.00*	08/13/20	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	ND	*5.00*	08/13/20	KCA	5	
Vinyl Chloride	ND	*0.391*	ND	*1.00*	08/13/20	KCA	5	
QA/QC Surrogates/Internals								
% Bromofluorobenzene (5x)	101	*%*	101	*%*	08/13/20	KCA	5	
% IS-1,4-Difluorobenzene (5x)	101	*%*	101	*%*	08/13/20	KCA	5	
% IS-Bromochloromethane (5x)	101	*%*	101	*%*	08/13/20	KCA	5	
% IS-Chlorobenzene-d5 (5x)	103	*%*	103	*%*	08/13/20	KCA	5	
% Bromofluorobenzene (30x)	100	*%*	100	*%*	08/13/20	KCA	30	
% IS-1,4-Difluorobenzene (30x)	99	*%*	99	*%*	08/13/20	KCA	30	
% IS-Bromochloromethane (30x)	102	*%*	102	*%*	08/13/20	KCA	30	

Project ID: 43 LAFAYETTE
Client ID: SS-1

Phoenix I.D.: CG52680

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5 (30x)	99	%	99	%	08/13/20	KCA	30

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 at RL/PQL
BRL=Below Reporting Level L=Biased Low
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:

Helium is reported in units of percent (%)

Elevated reporting limits have been reported due to the presence of reported 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
August 17, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

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

FOR:

August 17, 2020

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	HS	08/11/20	16:12
Location Code:		Received by:	SW	08/12/20	17:16
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	23332				

Laboratory Data

SDG ID: GCG52680
Phoenix ID: CG52681

Project ID: 43 LAFAYETTE
Client ID: OA-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethene	ND	*0.051*	ND	*0.20*	08/13/20	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	08/13/20	KCA	1	
1,2,4-Trimethylbenzene	35.6	*3.05*	175	*15.0*	08/13/20	KCA	15	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	08/13/20	KCA	1	
1,3,5-Trimethylbenzene	10.7	*0.204*	52.6	*1.00*	08/13/20	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	08/13/20	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	1
4-Ethyltoluene	12.5	*0.204*	61.4	*1.00*	08/13/20	KCA	1	1
4-Isopropyltoluene	0.904	*0.182*	4.96	*1.00*	08/13/20	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	
Acetone	120	*6.32*	285	*15.0*	08/13/20	KCA	15	
Acrylonitrile	ND	*0.461*	ND	*1.00*	08/13/20	KCA	1	
Benzene	5.47	*0.313*	17.5	*1.00*	08/13/20	KCA	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	08/13/20	KCA	1	

Project ID: 43 LAFAYETTE
Client ID: OA-1

Phoenix I.D.: CG52681

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By		
Bromodichloromethane	ND	*0.149*	ND	*1.00*	08/13/20	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	08/13/20	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	08/13/20	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	08/13/20	KCA	1	
Carbon Tetrachloride	0.076	*0.032*	0.48	*0.20*	08/13/20	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	08/13/20	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	08/13/20	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	08/13/20	KCA	1	
Chloromethane	0.711	*0.485*	1.47	*1.00*	08/13/20	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	ND	*0.20*	08/13/20	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	08/13/20	KCA	1	
Cyclohexane	2.32	*0.291*	7.98	*1.00*	08/13/20	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	08/13/20	KCA	1	
Dichlorodifluoromethane	0.377	*0.202*	1.86	*1.00*	08/13/20	KCA	1	
Ethanol	35.6	*0.531*	67.0	*1.00*	08/13/20	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	1
Ethylbenzene	33.8	*0.230*	147	*1.00*	08/13/20	KCA	1	
Heptane	9.90	*0.244*	40.5	*1.00*	08/13/20	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	08/13/20	KCA	1	
Hexane	6.30	*0.284*	22.2	*1.00*	08/13/20	KCA	1	
Isopropylalcohol	1.66	*0.407*	4.08	*1.00*	08/13/20	KCA	1	
Isopropylbenzene	1.64	*0.204*	8.06	*1.00*	08/13/20	KCA	1	
m,p-Xylene	137	*3.46*	595	*15.0*	08/13/20	KCA	15	
Methyl Ethyl Ketone	5.68	*0.339*	16.7	*1.00*	08/13/20	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	08/13/20	KCA	1	
n-Butylbenzene	2.21	*0.182*	12.1	*1.00*	08/13/20	KCA	1	1
o-Xylene	41.4	*3.46*	180	*15.0*	08/13/20	KCA	15	
Propylene	4.48	*0.581*	7.71	*1.00*	08/13/20	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	08/13/20	KCA	1	1
Styrene	1.26	*0.235*	5.36	*1.00*	08/13/20	KCA	1	
Tetrachloroethene	0.515	*0.037*	3.49	*0.25*	08/13/20	KCA	1	
Tetrahydrofuran	0.729	*0.339*	2.15	*1.00*	08/13/20	KCA	1	1
Toluene	124	*3.98*	467	*15.0*	08/13/20	KCA	15	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	08/13/20	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	08/13/20	KCA	1	
Trichloroethene	ND	*0.037*	ND	*0.20*	08/13/20	KCA	1	
Trichlorofluoromethane	0.258	*0.178*	1.45	*1.00*	08/13/20	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	08/13/20	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	08/13/20	KCA	1	
QA/QC Surrogates/Internals								
% Bromofluorobenzene	101	%	101	%	08/13/20	KCA	1	
% IS-1,4-Difluorobenzene	99	%	99	%	08/13/20	KCA	1	
% IS-Bromochloromethane	98	%	98	%	08/13/20	KCA	1	
% IS-Chlorobenzene-d5	112	%	112	%	08/13/20	KCA	1	
% Bromofluorobenzene (15x)	100	%	100	%	08/13/20	KCA	15	
% IS-1,4-Difluorobenzene (15x)	100	%	100	%	08/13/20	KCA	15	
% IS-Bromochloromethane (15x)	101	%	101	%	08/13/20	KCA	15	
% IS-Chlorobenzene-d5 (15x)	100	%	100	%	08/13/20	KCA	15	

Project ID: 43 LAFAYETTE
Client ID: OA-1

Phoenix I.D.: CG52681

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By

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 at RL/PQL
BRL=Below Reporting Level L=Biased Low
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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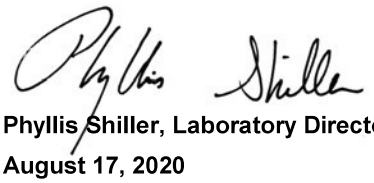


Phyllis Shiller, Laboratory Director
August 17, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

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

FOR:

August 17, 2020

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	HS	08/11/20	16:18
Location Code:		Received by:	SW	08/12/20	17:16
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	12864				

Laboratory Data

SDG ID: GCG52680
Phoenix ID: CG52682

Project ID: 43 LAFAYETTE
Client ID: IA-2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethene	ND	*0.051*	ND	*0.20*	08/13/20	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	08/13/20	KCA	1	
1,2,4-Trimethylbenzene	0.782	*0.204*	3.84	*1.00*	08/13/20	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	08/13/20	KCA	1	
1,3,5-Trimethylbenzene	0.242	*0.204*	1.19	*1.00*	08/13/20	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	08/13/20	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	08/13/20	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	08/13/20	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	
Acetone	9.16	*0.421*	21.7	*1.00*	08/13/20	KCA	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	08/13/20	KCA	1	
Benzene	ND	*0.313*	ND	*1.00*	08/13/20	KCA	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	08/13/20	KCA	1	

Project ID: 43 LAFAYETTE
Client ID: IA-2

Phoenix I.D.: CG52682

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By		
Bromodichloromethane	ND		*0.149*	ND	*1.00*	08/13/20	KCA	1	
Bromoform	ND		*0.097*	ND	*1.00*	08/13/20	KCA	1	
Bromomethane	ND		*0.258*	ND	*1.00*	08/13/20	KCA	1	
Carbon Disulfide	ND		*0.321*	ND	*1.00*	08/13/20	KCA	1	
Carbon Tetrachloride	0.066		*0.032*	0.41	*0.20*	08/13/20	KCA	1	
Chlorobenzene	ND		*0.217*	ND	*1.00*	08/13/20	KCA	1	
Chloroethane	ND		*0.379*	ND	*1.00*	08/13/20	KCA	1	
Chloroform	ND		*0.205*	ND	*1.00*	08/13/20	KCA	1	
Chloromethane	0.649		*0.485*	1.34	*1.00*	08/13/20	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.051*	ND	*0.20*	08/13/20	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	08/13/20	KCA	1	
Cyclohexane	ND		*0.291*	ND	*1.00*	08/13/20	KCA	1	
Dibromochloromethane	ND		*0.118*	ND	*1.00*	08/13/20	KCA	1	
Dichlorodifluoromethane	0.367		*0.202*	1.81	*1.00*	08/13/20	KCA	1	
Ethanol	94.4	E	*0.531*	178	*1.00*	08/13/20	KCA	1	1
Ethyl acetate	0.809		*0.278*	2.91	*1.00*	08/13/20	KCA	1	1
Ethylbenzene	ND		*0.230*	ND	*1.00*	08/13/20	KCA	1	
Heptane	ND		*0.244*	ND	*1.00*	08/13/20	KCA	1	
Hexachlorobutadiene	ND		*0.094*	ND	*1.00*	08/13/20	KCA	1	
Hexane	ND		*0.284*	ND	*1.00*	08/13/20	KCA	1	
Isopropylalcohol	1.17		*0.407*	2.87	*1.00*	08/13/20	KCA	1	
Isopropylbenzene	ND		*0.204*	ND	*1.00*	08/13/20	KCA	1	
m,p-Xylene	0.337		*0.230*	1.46	*1.00*	08/13/20	KCA	1	
Methyl Ethyl Ketone	1.45		*0.339*	4.27	*1.00*	08/13/20	KCA	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	ND	*1.00*	08/13/20	KCA	1	
Methylene Chloride	ND		*0.864*	ND	*3.00*	08/13/20	KCA	1	
n-Butylbenzene	ND		*0.182*	ND	*1.00*	08/13/20	KCA	1	1
o-Xylene	ND		*0.230*	ND	*1.00*	08/13/20	KCA	1	
Propylene	ND		*0.581*	ND	*1.00*	08/13/20	KCA	1	1
sec-Butylbenzene	ND		*0.182*	ND	*1.00*	08/13/20	KCA	1	1
Styrene	ND		*0.235*	ND	*1.00*	08/13/20	KCA	1	
Tetrachloroethene	10.9		*0.037*	73.9	*0.25*	08/13/20	KCA	1	
Tetrahydrofuran	3.45		*0.339*	10.2	*1.00*	08/13/20	KCA	1	1
Toluene	0.418		*0.266*	1.57	*1.00*	08/13/20	KCA	1	
Trans-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	08/13/20	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	08/13/20	KCA	1	
Trichloroethene	ND		*0.037*	ND	*0.20*	08/13/20	KCA	1	
Trichlorofluoromethane	0.222		*0.178*	1.25	*1.00*	08/13/20	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	ND	*1.00*	08/13/20	KCA	1	
Vinyl Chloride	ND		*0.078*	ND	*0.20*	08/13/20	KCA	1	
QA/QC Surrogates/Internals									
% Bromofluorobenzene	102		*%*	102	*%*	08/13/20	KCA	1	
% IS-1,4-Difluorobenzene	104		*%*	104	*%*	08/13/20	KCA	1	
% IS-Bromochloromethane	104		*%*	104	*%*	08/13/20	KCA	1	
% IS-Chlorobenzene-d5	104		*%*	104	*%*	08/13/20	KCA	1	

Project ID: 43 LAFAYETTE
Client ID: IA-2

Phoenix I.D.: CG52682

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By

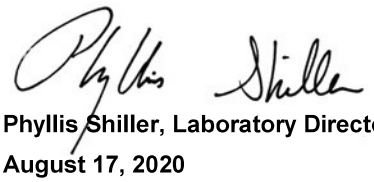
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
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
August 17, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

FOR:

August 17, 2020

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	HS	08/11/20	15:40
Location Code:		Received by:	SW	08/12/20	17:16
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	216				

Laboratory Data

SDG ID: GCG52680
Phoenix ID: CG52683

Project ID: 43 LAFAYETTE
Client ID: SS-2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Helium (% volume/volume)	ND	*10*	ND		08/14/20	KCA	1	1
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	08/13/20	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	ND	*5.00*	08/13/20	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	08/13/20	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	ND	*5.00*	08/13/20	KCA	5	
1,1-Dichloroethane	ND	*1.24*	ND	*5.02*	08/13/20	KCA	5	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	08/13/20	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	ND	*5.00*	08/13/20	KCA	5	
1,2,4-Trimethylbenzene	21.0	*1.02*	103	*5.01*	08/13/20	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	ND	*5.00*	08/13/20	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,2-Dichloroethane	ND	*1.24*	ND	*5.02*	08/13/20	KCA	5	
1,2-dichloropropane	ND	*1.08*	ND	*4.99*	08/13/20	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	ND	*5.00*	08/13/20	KCA	5	
1,3,5-Trimethylbenzene	5.70	*1.02*	28.0	*5.01*	08/13/20	KCA	5	
1,3-Butadiene	ND	*2.26*	ND	*5.00*	08/13/20	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	ND	*5.00*	08/13/20	KCA	5	
1,4-Dioxane	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	ND	*4.99*	08/13/20	KCA	5	1
4-Ethyltoluene	6.26	*1.02*	30.8	*5.01*	08/13/20	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	ND	*5.00*	08/13/20	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	ND	*4.99*	08/13/20	KCA	5	
Acetone	34.9	*2.11*	82.9	*5.01*	08/13/20	KCA	5	
Acrylonitrile	ND	*2.31*	ND	*5.01*	08/13/20	KCA	5	
Benzene	1.59	*1.57*	5.08	*5.01*	08/13/20	KCA	5	

Project ID: 43 LAFAYETTE
Client ID: SS-2

Phoenix I.D.: CG52683

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By		
Benzyl chloride	ND	*0.966*	ND	*5.00*	08/13/20	KCA	5	
Bromodichloromethane	ND	*0.747*	ND	*5.00*	08/13/20	KCA	5	
Bromoform	ND	*0.484*	ND	*5.00*	08/13/20	KCA	5	
Bromomethane	ND	*1.29*	ND	*5.01*	08/13/20	KCA	5	
Carbon Disulfide	ND	*1.61*	ND	*5.01*	08/13/20	KCA	5	
Carbon Tetrachloride	ND	*0.159*	ND	*1.00*	08/13/20	KCA	5	
Chlorobenzene	ND	*1.09*	ND	*5.01*	08/13/20	KCA	5	
Chloroethane	ND	*1.90*	ND	*5.01*	08/13/20	KCA	5	
Chloroform	ND	*1.02*	ND	*4.98*	08/13/20	KCA	5	
Chloromethane	ND	*2.42*	ND	*4.99*	08/13/20	KCA	5	
Cis-1,2-Dichloroethene	13.2	*0.252*	52.3	*1.00*	08/13/20	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	08/13/20	KCA	5	
Cyclohexane	ND	*1.45*	ND	*4.99*	08/13/20	KCA	5	
Dibromochloromethane	ND	*0.587*	ND	*5.00*	08/13/20	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	ND	*4.99*	08/13/20	KCA	5	
Ethanol	157	*2.66*	296	*5.01*	08/13/20	KCA	5	1
Ethyl acetate	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	1
Ethylbenzene	16.0	*1.15*	69.4	*4.99*	08/13/20	KCA	5	
Heptane	3.39	*1.22*	13.9	*5.00*	08/13/20	KCA	5	
Hexachlorobutadiene	ND	*0.469*	ND	*5.00*	08/13/20	KCA	5	
Hexane	2.78	*1.42*	9.8	*5.00*	08/13/20	KCA	5	
Isopropylalcohol	23.3	*2.04*	57.2	*5.01*	08/13/20	KCA	5	
Isopropylbenzene	ND	*1.02*	ND	*5.01*	08/13/20	KCA	5	
m,p-Xylene	67.9	*1.15*	295	*4.99*	08/13/20	KCA	5	
Methyl Ethyl Ketone	4.05	*1.70*	11.9	*5.01*	08/13/20	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	ND	*5.01*	08/13/20	KCA	5	
Methylene Chloride	ND	*4.32*	ND	*15.0*	08/13/20	KCA	5	
n-Butylbenzene	1.06	*0.911*	5.82	*5.00*	08/13/20	KCA	5	1
o-Xylene	21.8	*1.15*	94.6	*4.99*	08/13/20	KCA	5	
Propylene	ND	*2.91*	ND	*5.01*	08/13/20	KCA	5	1
sec-Butylbenzene	ND	*0.911*	ND	*5.00*	08/13/20	KCA	5	1
Styrene	ND	*1.17*	ND	*4.98*	08/13/20	KCA	5	
Tetrachloroethene	1110	*2.77*	7520	*18.8*	08/13/20	KCA	75	
Tetrahydrofuran	6.36	*1.70*	18.7	*5.01*	08/13/20	KCA	5	1
Toluene	50.8	*1.33*	191	*5.01*	08/13/20	KCA	5	
Trans-1,2-Dichloroethene	2.15	*1.26*	8.52	*4.99*	08/13/20	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	08/13/20	KCA	5	
Trichloroethene	37.6	*0.186*	202	*1.00*	08/13/20	KCA	5	
Trichlorofluoromethane	ND	*0.891*	ND	*5.00*	08/13/20	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	ND	*5.00*	08/13/20	KCA	5	
Vinyl Chloride	ND	*0.391*	ND	*1.00*	08/13/20	KCA	5	
QA/QC Surrogates/Internals								
% Bromofluorobenzene (5x)	104	%	104	%	08/13/20	KCA	5	
% IS-1,4-Difluorobenzene (5x)	100	%	100	%	08/13/20	KCA	5	
% IS-Bromochloromethane (5x)	100	%	100	%	08/13/20	KCA	5	
% IS-Chlorobenzene-d5 (5x)	103	%	103	%	08/13/20	KCA	5	
% Bromofluorobenzene (75x)	98	%	98	%	08/13/20	KCA	75	
% IS-1,4-Difluorobenzene (75x)	101	%	101	%	08/13/20	KCA	75	
% IS-Bromochloromethane (75x)	101	%	101	%	08/13/20	KCA	75	

Project ID: 43 LAFAYETTE
Client ID: SS-2

Phoenix I.D.: CG52683

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5 (75x)	100	%	100	%	08/13/20	KCA	75

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 at RL/PQL
BRL=Below Reporting Level L=Biased Low
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:

Helium is reported in units of percent (%)

Elevated reporting limits have been reported due to the presence of reported 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
August 17, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

FOR:

August 17, 2020

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	HS	08/11/20	15:33
Location Code:		Received by:	SW	08/12/20	17:16
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	11289				

Laboratory Data

SDG ID: GCG52680
Phoenix ID: CG52684

Project ID: 43 LAFAYETTE
Client ID: IA-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Helium (% volume/volume)	ND	*10*	ND		08/14/20	KCA	1	1
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	08/13/20	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,1-Dichloroethene	ND	*0.051*	ND	*0.20*	08/13/20	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	08/13/20	KCA	1	
1,2,4-Trimethylbenzene	3.33	*0.204*	16.4	*1.00*	08/13/20	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	08/13/20	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	08/13/20	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	08/13/20	KCA	1	
1,3,5-Trimethylbenzene	1.00	*0.204*	4.91	*1.00*	08/13/20	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	08/13/20	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	08/13/20	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	1
4-Ethyltoluene	0.662	*0.204*	3.25	*1.00*	08/13/20	KCA	1	1
4-Isopropyltoluene	0.496	*0.182*	2.72	*1.00*	08/13/20	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	
Acetone	20.1	*0.421*	47.7	*1.00*	08/13/20	KCA	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	08/13/20	KCA	1	
Benzene	ND	*0.313*	ND	*1.00*	08/13/20	KCA	1	

Project ID: 43 LAFAYETTE
Client ID: IA-1

Phoenix I.D.: CG52684

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By		
Benzyl chloride	ND	*0.193*	ND	*1.00*	08/13/20	KCA	1	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	08/13/20	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	08/13/20	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	08/13/20	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	08/13/20	KCA	1	
Carbon Tetrachloride	0.086	*0.032*	0.54	*0.20*	08/13/20	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	08/13/20	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	08/13/20	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	08/13/20	KCA	1	
Chloromethane	0.733	*0.485*	1.51	*1.00*	08/13/20	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	ND	*0.20*	08/13/20	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	08/13/20	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	08/13/20	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	08/13/20	KCA	1	
Dichlorodifluoromethane	0.364	*0.202*	1.80	*1.00*	08/13/20	KCA	1	
Ethanol	167	*3.19*	314	*6.01*	08/13/20	KCA	6	1
Ethyl acetate	2.86	*0.278*	10.3	*1.00*	08/13/20	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	08/13/20	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	08/13/20	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	08/13/20	KCA	1	
Hexane	0.562	*0.284*	1.98	*1.00*	08/13/20	KCA	1	
Isopropylalcohol	2.53	*0.407*	6.22	*1.00*	08/13/20	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	08/13/20	KCA	1	
m,p-Xylene	0.680	*0.230*	2.95	*1.00*	08/13/20	KCA	1	
Methyl Ethyl Ketone	7.69	*0.339*	22.7	*1.00*	08/13/20	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	08/13/20	KCA	1	
Methylene Chloride	0.933	*0.864*	3.24	*3.00*	08/13/20	KCA	1	
n-Butylbenzene	0.210	*0.182*	1.15	*1.00*	08/13/20	KCA	1	1
o-Xylene	0.404	*0.230*	1.75	*1.00*	08/13/20	KCA	1	
Propylene	ND	*0.581*	ND	*1.00*	08/13/20	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	08/13/20	KCA	1	1
Styrene	0.544	*0.235*	2.32	*1.00*	08/13/20	KCA	1	
Tetrachloroethene	45.0	*0.221*	305	*1.50*	08/13/20	KCA	6	
Tetrahydrofuran	33.3	*0.339*	98.2	*1.00*	08/13/20	KCA	1	1
Toluene	1.22	*0.266*	4.59	*1.00*	08/13/20	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	08/13/20	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	08/13/20	KCA	1	
Trichloroethene	0.114	*0.037*	0.61	*0.20*	08/13/20	KCA	1	
Trichlorofluoromethane	0.241	*0.178*	1.35	*1.00*	08/13/20	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	08/13/20	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	08/13/20	KCA	1	
QA/QC Surrogates/Internals								
% Bromofluorobenzene	101	%	101	%	08/13/20	KCA	1	
% IS-1,4-Difluorobenzene	100	%	100	%	08/13/20	KCA	1	
% IS-Bromochloromethane	100	%	100	%	08/13/20	KCA	1	
% IS-Chlorobenzene-d5	104	%	104	%	08/13/20	KCA	1	
% Bromofluorobenzene (6x)	99	%	99	%	08/13/20	KCA	6	
% IS-1,4-Difluorobenzene (6x)	101	%	101	%	08/13/20	KCA	6	
% IS-Bromochloromethane (6x)	102	%	102	%	08/13/20	KCA	6	

Project ID: 43 LAFAYETTE
Client ID: IA-1

Phoenix I.D.: CG52684

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5 (6x)	101	%	101	%	08/13/20	KCA	6

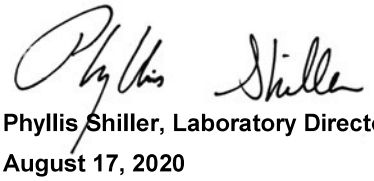
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
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:

Helium is reported in units of percent (%)

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
August 17, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

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

Canister Sampling Information

FOR:

August 17, 2020

Location Code:

SDG I.D.: GCG52680

Project ID: 43 LAFAYETTE

						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
SS-1	CG52680	19732	6.0L	5619	08/10/20	-30	-2	21.7	23.1	6.3	-29	-3.5	08/11/20 12:02	08/11/20 15:54
OA-1	CG52681	23332	6.0L	5615	08/10/20	-30	-2	21.7	21.5	0.9	-30	-2	08/11/20 12:04	08/11/20 16:12
IA-2	CG52682	12864	6.0L	5061	08/10/20	-30	-2	21.7	21.8	0.5	-29	-2.5	08/11/20 12:06	08/11/20 16:18
SS-2	CG52683	216	6.0L	7034	08/10/20	-30	-3	21.7	23.3	7.1	-29	-3	08/11/20 12:09	08/11/20 15:40
IA-1	CG52684	11289	6.0L	2889	08/10/20	-30	-3	21.7	23.2	6.7	-25.5	-3	08/11/20 12:08	08/11/20 15:33

PHOENIX

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

August 17, 2020

QA/QC Data

SDG I.D.: GCG52680

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	LCSD %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 541227 (ppbv), QC Sample No: CG52615 (CG52680 (5X) , CG52681, CG52682, CG52683 (5X) , CG52684)													
Volatiles													
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	99	98	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.200	ND	1.09	102	102	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	111	110	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.183	ND	1.00	104	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.247	ND	1.00	98	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.100	ND	0.40	103	102	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	88	85	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	113	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	108	106	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.150	ND	0.90	106	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.247	ND	1.00	105	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.217	ND	1.00	105	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	104	102	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	108	107	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.452	ND	1.00	106	106	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.150	ND	0.90	101	108	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.150	ND	0.90	116	105	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.278	ND	1.00	114	116	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.244	ND	1.00	123	122	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.204	ND	1.00	113	111	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.182	ND	1.00	103	103	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	116	115	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	1.00	ND	2.37	104	103	12.7	12.5	5.33	5.27	1.1	70 - 130	25
Acrylonitrile	ND	0.461	ND	1.00	93	91	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.050	ND	0.16	104	104	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.193	ND	1.00	125	123	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.149	ND	1.00	104	102	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	98	97	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.258	ND	1.00	105	103	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.321	ND	1.00	101	99	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.020	ND	0.13	102	101	0.40	0.41	0.064	0.065	NC	70 - 130	25
Chlorobenzene	ND	0.200	ND	0.92	102	102	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.379	ND	1.00	106	106	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.205	ND	1.00	102	101	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.485	ND	1.00	103	101	1.16	1.19	0.563	0.577	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	105	105	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	109	107	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.291	ND	1.00	107	106	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.118	ND	1.00	103	104	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	101	98	2.01	1.87	0.407	0.379	NC	70 - 130	25
Ethanol	ND	0.531	ND	1.00	180	181	16.4	15.7	8.70	8.32	4.5	70 - 130	25

QA/QC Data

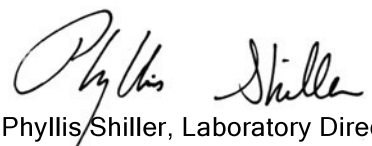
SDG I.D.: GCG52680

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	LCSD %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	0.278	ND	1.00	99	102	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	0.150	ND	0.65	109	108	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.244	ND	1.00	110	109	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	83	81	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.284	ND	1.00	110	109	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.407	ND	1.00	148	146	2.14	2.09	0.872	0.849	NC	70 - 130	25	I
Isopropylbenzene	ND	0.204	ND	1.00	101	100	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.150	ND	0.65	112	111	ND	ND	ND	ND	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	102	114	1.24	1.27	0.420	0.431	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	104	104	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.400	ND	1.39	98	98	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.182	ND	1.00	112	110	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.150	ND	0.65	109	107	ND	ND	ND	ND	NC	70 - 130	25	
Propylene	ND	0.581	ND	1.00	107	107	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.182	ND	1.00	113	112	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.235	ND	1.00	115	113	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.100	ND	0.68	103	103	ND	ND	ND	ND	NC	70 - 130	25	
Tetrahydrofuran	ND	0.339	ND	1.00	110	111	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.200	ND	0.75	108	107	0.87	0.87	0.232	0.230	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	107	106	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	109	108	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	102	102	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.150	ND	0.84	102	102	6.91	6.91	1.23	1.23	0.0	70 - 130	25	
Trichlorotrifluoroethane	ND	0.150	ND	1.15	101	100	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.020	ND	0.05	106	107	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	98	%	98	%	102	101	99	99	99	99	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	101	%	101	%	104	105	99	99	99	99	NC	60 - 140	25	
% IS-Bromochloromethane	101	%	101	%	105	106	100	100	100	100	NC	60 - 140	25	
% IS-Chlorobenzene-d5	100	%	100	%	112	113	99	99	99	99	NC	60 - 140	25	
QA/QC Batch 541381 (ppbv), QC Sample No: CG53294 (CG52680 (30X) , CG52681 (15X) , CG52683 (75X) , CG52684 (6X))														
Volatiles														
1,2,4-Trimethylbenzene	ND	0.500	ND	2.46	111		ND	ND	ND	ND	NC	70 - 130	25	
Acetone	ND	0.500	ND	1.19	109		32.8	33.2	13.8	14.0	1.4	70 - 130	25	
Ethanol	ND	0.500	ND	0.94	192		286 E	294	152 E	156	2.6	70 - 130	25	I
m,p-Xylene	ND	1.00	ND	4.34	109		ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.500	ND	2.17	107		ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.200	ND	1.36	99		4.83	4.92	0.712	0.726	NC	70 - 130	25	
Toluene	ND	0.500	ND	1.88	105		3.11	3.26	0.826	0.866	NC	70 - 130	25	
% Bromofluorobenzene	97	%	97	%	102		100	99	100	99	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	102	%	102	%	106		99	95	99	95	NC	60 - 140	25	
% IS-Bromochloromethane	102	%	102	%	107		98	97	98	97	NC	60 - 140	25	
% IS-Chlorobenzene-d5	100	%	100	%	113		99	96	99	96	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
August 17, 2020

Monday, August 17, 2020

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCG52680 -

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.

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

August 17, 2020 SDG I.D.: GCG52680

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

WCIP 2.7

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

800-827-5426
email: greg@phoenixlabs.com

P.O. # | Page 1 of 1

Data Delivery:
- ☐ Fax #:
- ☒ Email:
- ☒ Phone #:

Report to:
Customer:
Address:
1

Project Name: 43 Lafayette

Data Format: (Circle) Equis (Excel) Other:

Requested Deliverable:
RCP ASP CAT B
MCP NJ Deliverables

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	Helium
	THIS SECTION FOR LAB USE ONLY												MATRIX			ANALYSES		
52680	SS-1	19732	6.0	-30	-2	5619	21.7	1202	1554	8/11	29	3.5	X	X		X		X
52681	OA-1	23332			-2	5615		1204	1612	8/11	30+	2	X			X		
52682	IA-2	12864			-2	5061		1206	1618	8/11	29	2.5	X			X		
52683	SS-2	216			-3	7034		1209	1540	8/11	29	3		X		X		X
52684	IA-1	11289			-3	2889		1208	1533	8/11	25.5	3	X			X		X

Relinquished by: [signature] Date: 8/12/20 Time: 10:40

Accepted by: [signature] Date: 8-12-20 Time: 15:35

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: [signature] Date: 8/11/20

State Where Samples Collected: NY

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:
(5)(6.0)(4hr)

[signature] Tim 8/12 1716

Turnaround Time:
- 1 Day ☐
- 2 Day ☐
- 3 Day ☐
- 4 Day ☐
- 5 Day ☒

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

PEL-115 Rev. 9/2019

APPENDIX B

LABORATORY ANALYTICAL RESULTS PACKAGE - SEPTEMBER 2020

621 Shrewsbury Avenue, Suite 151
Shrewsbury, New Jersey 07702
P 732.741.1110
www.envirosureinc.com

ANALYTICAL REPORT

Lab Number:	L2038538
Client:	EnviroSure, Inc. 621 Shrewsbury Avenue Suite 151 Shrewsbury, NJ 07702
ATTN:	Dyna Krumich-Ogonowski
Phone:	(732) 741-1110
Project Name:	SO581 (43-45 LAFAYETTE AVE)
Project Number:	SO581
Report Date:	09/22/20

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: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581

Lab Number: L2038538
Report Date: 09/22/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2038538-01	IA-03	AIR	43-45 LAFAYETTE AVE, SUFFERN NY	09/15/20 14:40	09/16/20

Project Name:	SO581 (43-45 LAFAYETTE AVE)	**Lab Number:**	L2038538
Project Number:	SO581	**Report Date:**	09/22/20

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:	SO581 (43-45 LAFAYETTE AVE)	**Lab Number:**	L2038538
Project Number:	SO581	**Report Date:**	09/22/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 14, 2020. The canister certification results are provided as an addendum.

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: 09/22/20

AIR

Project Name: SO581 (43-45 LAFAYETTE AVE) ***Lab Number:*** L2038538

Project Number: SO581 ***Report Date:*** 09/22/20

SAMPLE RESULTS

Lab ID: L2038538-01
Client ID: IA-03
Sample Location: 43-45 LAFAYETTE AVE, SUFFERN NY

Date Collected: 09/15/20 14:40
Date Received: 09/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/21/20 21:42
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.421	0.200	--	2.08	0.989	--		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	471	5.00	--	887	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.98	1.00	--	11.8	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.98	0.500	--	4.87	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	0.704	0.500	--	2.54	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.46	0.500	--	4.31	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: SO581 (43-45 LAFAYETTE AVE) **Lab Number:** L2038538

Project Number: SO581 **Report Date:** 09/22/20

SAMPLE RESULTS

Lab ID: L2038538-01
Client ID: IA-03
Sample Location: 43-45 LAFAYETTE AVE, SUFFERN NY

Date Collected: 09/15/20 14:40
Date Received: 09/16/20
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								
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	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	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
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

Project Name: SO581 (43-45 LAFAYETTE AVE) ***Lab Number:*** L2038538

Project Number: SO581 ***Report Date:*** 09/22/20

SAMPLE RESULTS

Lab ID: L2038538-01
Client ID: IA-03
Sample Location: 43-45 LAFAYETTE AVE, SUFFERN NY

Date Collected: 09/15/20 14:40
Date Received: 09/16/20
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								
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	93		60-140
chlorobenzene-d5	98		60-140

Project Name: SO581 (43-45 LAFAYETTE AVE) ***Lab Number:*** L2038538

Project Number: SO581 ***Report Date:*** 09/22/20

SAMPLE RESULTS

Lab ID: L2038538-01
Client ID: IA-03
Sample Location: 43-45 LAFAYETTE AVE, SUFFERN NY

Date Collected: 09/15/20 14:40
Date Received: 09/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/21/20 21:42
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Chloromethane	0.374	0.200	--	0.772	0.413	--		1
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	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.554	0.020	--	3.76	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140

Project Name: SO581 (43-45 LAFAYETTE AVE) **Lab Number:** L2038538

Project Number: SO581 **Report Date:** 09/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/21/20 14:33

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 Batch: WG1412637-4								
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: SO581 (43-45 LAFAYETTE AVE) **Lab Number:** L2038538

Project Number: SO581 **Report Date:** 09/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/21/20 14:33

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 Batch: WG1412637-4								
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: SO581 (43-45 LAFAYETTE AVE) **Lab Number:** L2038538

Project Number: SO581 **Report Date:** 09/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/21/20 14:33

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 Batch: WG1412637-4								
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: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581
Lab Number: L2038538
Report Date: 09/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 09/21/20 15:12

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): 01 Batch: WG1412638-4								
Chloromethane	ND	0.200	--	ND	0.413	--		1
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: SO581 (43-45 LAFAYETTE AVE)

Project Number: SO581

Lab Number: L2038538

Report Date: 09/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1412637-3								
Dichlorodifluoromethane	84		-		70-130	-		
Chloromethane	**68**	Q	-		70-130	-		
Freon-114	77		-		70-130	-		
Vinyl chloride	74		-		70-130	-		
1,3-Butadiene	78		-		70-130	-		
Bromomethane	80		-		70-130	-		
Chloroethane	74		-		70-130	-		
Ethanol	77		-		40-160	-		
Vinyl bromide	73		-		70-130	-		
Acetone	60		-		40-160	-		
Trichlorofluoromethane	78		-		70-130	-		
Isopropanol	58		-		40-160	-		
1,1-Dichloroethene	79		-		70-130	-		
Tertiary butyl Alcohol	72		-		70-130	-		
Methylene chloride	81		-		70-130	-		
3-Chloropropene	79		-		70-130	-		
Carbon disulfide	73		-		70-130	-		
Freon-113	85		-		70-130	-		
trans-1,2-Dichloroethene	97		-		70-130	-		
1,1-Dichloroethane	101		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
2-Butanone	100		-		70-130	-		
cis-1,2-Dichloroethene	106		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)

Project Number: SO581

Lab Number: L2038538

Report Date: 09/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1412637-3								
Ethyl Acetate	85		-		70-130	-		
Chloroform	97		-		70-130	-		
Tetrahydrofuran	82		-		70-130	-		
1,2-Dichloroethane	93		-		70-130	-		
n-Hexane	90		-		70-130	-		
1,1,1-Trichloroethane	96		-		70-130	-		
Benzene	90		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	90		-		70-130	-		
1,2-Dichloropropane	89		-		70-130	-		
Bromodichloromethane	99		-		70-130	-		
1,4-Dioxane	92		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	92		-		70-130	-		
Heptane	90		-		70-130	-		
cis-1,3-Dichloropropene	96		-		70-130	-		
4-Methyl-2-pentanone	94		-		70-130	-		
trans-1,3-Dichloropropene	84		-		70-130	-		
1,1,2-Trichloroethane	94		-		70-130	-		
Toluene	90		-		70-130	-		
2-Hexanone	89		-		70-130	-		
Dibromochloromethane	100		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)

Project Number: SO581

Lab Number: L2038538

Report Date: 09/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1412637-3								
Tetrachloroethene	96		-		70-130	-		
Chlorobenzene	96		-		70-130	-		
Ethylbenzene	93		-		70-130	-		
p/m-Xylene	95		-		70-130	-		
Bromoform	100		-		70-130	-		
Styrene	95		-		70-130	-		
1,1,2,2-Tetrachloroethane	99		-		70-130	-		
o-Xylene	96		-		70-130	-		
4-Ethyltoluene	97		-		70-130	-		
1,3,5-Trimethylbenzene	98		-		70-130	-		
1,2,4-Trimethylbenzene	101		-		70-130	-		
Benzyl chloride	92		-		70-130	-		
1,3-Dichlorobenzene	100		-		70-130	-		
1,4-Dichlorobenzene	101		-		70-130	-		
1,2-Dichlorobenzene	100		-		70-130	-		
1,2,4-Trichlorobenzene	94		-		70-130	-		
Hexachlorobutadiene	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)

Project Number: SO581

Lab Number: L2038538

Report Date: 09/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01 Batch: WG1412638-3								
Chloromethane	70		-		70-130	-		25
Vinyl chloride	74		-		70-130	-		25
1,1-Dichloroethene	80		-		70-130	-		25
cis-1,2-Dichloroethene	103		-		70-130	-		25
1,1,1-Trichloroethane	92		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Trichloroethene	91		-		70-130	-		25
Tetrachloroethene	95		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581

Lab Number: L2038538
Report Date: 09/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1412637-5 QC Sample: L2038538-01 Client ID: IA-03						
Dichlorodifluoromethane	0.421	0.431	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	471	472	ppbV	0		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	4.98	5.02	ppbV	1		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	1.98	1.90	ppbV	4		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	0.704	0.707	ppbV	0		25
Chloroform	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581

Lab Number: L2038538
Report Date: 09/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1412637-5 QC Sample: L2038538-01 Client ID: IA-03						
Tetrahydrofuran	1.46	1.47	ppbV	1		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		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	ND	ND	ppbV	NC		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
p/m-Xylene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581

Lab Number: L2038538
Report Date: 09/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1412637-5 QC Sample: L2038538-01 Client ID: IA-03						
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): 01 QC Batch ID: WG1412638-5 QC Sample: L2038538-01 Client ID: IA-03						
Chloromethane	0.374	0.376	ppbV	1		25
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	0.062	0.060	ppbV	3		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.554	0.558	ppbV	1		25

Project Name: SO581 (43-45 LAFAYETTE AVE)

Project Number: SO581

Lab Number: L2038538

Report Date: 09/22/20

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
L2038538-01	IA-03	0562	Flow 5	09/14/20	330114		-	-	-	Pass	4.5	4.2	7
L2038538-01	IA-03	328	2.7L Can	09/14/20	330114	L2036387-01	Pass	-29.5	-2.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/04/20 18:44
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: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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	95		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2036387

Project Number: CANISTER QC BAT **Report Date:** 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/04/20 18:44
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:** L2036387

Project Number: CANISTER QC BAT **Report Date:** 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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: L2036387
Report Date: 09/22/20

Air Canister Certification Results

Lab ID: L2036387-01
Client ID: CAN 327 SHELF 7
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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	101		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	96		60-140

Project Name: SO581 (43-45 LAFAYETTE AVE)
Project Number: SO581

Lab Number: L2038538
Report Date: 09/22/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2038538-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	SO581 (43-45 LAFAYETTE AVE)	**Lab Number:**	L2038538
Project Number:	SO581	**Report Date:**	09/22/20

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.
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.

Footnotes

Report Format: Data Usability Report

Project Name:	SO581 (43-45 LAFAYETTE AVE)	**Lab Number:**	L2038538
Project Number:	SO581	**Report Date:**	09/22/20

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. 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 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

Report Format: Data Usability Report

Project Name:	SO581 (43-45 LAFAYETTE AVE)	**Lab Number:**	L2038538
Project Number:	SO581	**Report Date:**	09/22/20

Data Qualifiers

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

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: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: 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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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.**

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.

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 1

ALPHA ANALYTICAL — CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 9/17/20

ALPHA Job #: L2038538

Client Information

Client: Enviro Sure
Address: 621 Shrewsbury Ave Shrewsbury, NJ 07702
Phone: 7327411110
Fax: —
Email: Dyna@EnviroSureInc.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 5058 (345 Lafayette Ave)
Project Location: 345 Lafayette Ave Suffern NY
Project #: SO 581
Project Manager: Dyna Ogonowski
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 5 days 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 #: SO581

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NY		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 (Subject Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
38538-01	IA-03	9/15/20	0834	1440	29.79	6.2	IA	DKO	1	328	0662	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:
	9/16/20 1040		9/16/20 1030
	9/16/20 1800		9/17/20 0730

Form No: 301-03 Rev: (25-Sep-15)

APPENDIX C

HEALTH AND SAFETY PLAN

EnviroSure Inc
Quality. Integrity. Reliability.

Date:	**June 10, 2021**
BCP # / Name:	**C344085/AMERICAN TWO CLEANERS**
Address:	**43-45 LAFAYETTE AVENUE**
	SUFFERN, NY

EnviroSure Site Representative/H&S Officer:	DYNA KRUMICH-OGONOWSKI
Site Contact / Phone Number:	DEREK GROTHUSEN/609-707-7284
Project Manager / Phone Number:	DYNA KRUMICH-OGONOWSKI/732-688-3274
EnviroSure H&S Officer / Phone Number:	Scott Smith, P.E. - 610 405-1959

Project Activities: Geophysical Survey of the basement, extrior near front door and exterior near rear door. Subsurface Soil Investigation involving advancing up to 12 soil borings in the basement and exterior of the building. Soil samples will be collected for VOC analysis. Installation of three monitoring wells; proposed locations are in the basement and two exterior wells. Groundwater samples collected via low-flow sampling method.

Chemical Hazards (list all & attach SDS):
Confirmed chlorinated VOCs in sub-slab soil vapor and indoor air.

Physical Hazards (list all):
Direct push drill rig, manual drilling equipment
Slips, trip, falls
Heat/cold exhaustion
Hand tools

COVID-19 Precautions:
EnviroSure and subcontractors will follow all recommended CDC and OSHA protocol regarding mitigating and preventing the spread of COVID-19 in the workplace.
https://www.osha.gov/coronavirus/safework

N	**Confined Space Entry? (Include Confined Space Entry Plan)**
N	**Work conducted in roadway? (Include traffic control plan)**

PPE / H&S Equipment:
Modified level D - nitrile gloves, steel toe boots, hard hat when drill rig is operating, safety goggles
Face coverings when working inside or in close proximately to others as per COVID-19 protocol.

EnviroSure Inc
Quality. Integrity. Reliability.

Date:	**June 10, 2021**
BCP # / Name:	**C344085/AMERICAN TWO CLEANERS**
Address:	**43-45 LAFAYETTE AVENUE**
	SUFFERN, NY

EMERGENCY CONTACTS:

Hospital Emergency Room: Good Samaritan Hospital

Address: 255 Lafayette Avenue
Suffern, NY

Phone Number: 845-368-5000

Police: Suffern Police Department / 845-357-2300

Fire: Suffern Fire Department / 845-357-6066

Ambulance: 911

Chemtrec: **800 424-9300**

Hospital Directions: **Map and turn by turn directions at back of HASP.**

Template Authorized by:

Scott Smith, P.E. - EnviroSure Corporate Health & Safety Manager

Authorized by:

Dyna Krumich-Ogonowski - NJ/NY Operations Manager

Site Workers (sign every day on site after H&S meeting):

Name:	**Signature:**	**Date:**

APPENDIX D

CITIZEN PARTICIPATION PLAN

NEW YORK STATE | Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for

AMERICAN TWO CLEANERS

October 2021

Contents

* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **Reds Crib, LLC ("Applicant")**
Site Name: **American Two Cleaners ("Site")**
Site Address: **43-45 Lafayette Avenue, Suffern, NY**
Site County: **Rockland County**
Site Number: **C344085**

1. What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants who conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at:
http://www.dec.ny.gov/chemical/8450.html .

2. Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well-being. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interested in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment

- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process

- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process

- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community

- Encouraging dialogue to promote the exchange of information among the affected/interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

This Citizen Participation (CP) Plan provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some

documents may be placed on the NYSDEC web site. If this occurs, NYSDEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.
The site contact list includes, at a minimum:

- chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- residents, owners, and occupants of the site and properties adjacent to the site;
- the public water supplier which services the area in which the site is located;
- any person who has requested to be placed on the site contact list;
- the administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

Note: The first site fact sheet (usually related to the draft Remedial Investigation Work Plan) is distributed both by paper mailing through the postal service and through DEC Delivers, its email listserv service. The fact sheet includes instructions for signing up with the appropriate county listserv to receive future notifications about the site. See http://www.dec.ny.gov/chemical/61092.html .

Subsequent fact sheets about the site will be distributed exclusively through the listserv, except for households without internet access that have indicated the need to continue to receive site information in paper form. Please advise the NYSDEC site project manager identified in Appendix A if that is the case. Paper mailings may continue during the investigation and cleanup process for some sites, based on public interest and need.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.

- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.

This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

NYSDEC must determine if the site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

As of the date the declaration (page 2) was signed by the NYSDEC project manager, the significant threat determination for the site had not yet been made. To verify the significant threat status of the site, the interested public may contact the NYSDEC project manager identified in Appendix A.

For more information about TAGs, go online at
http://www.dec.ny.gov/regulations/2590.html

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page:

Citizen Participation Activities	Timing of CP Activity(ies)
Application Process:	
● Prepare site contact list ● Establish document repository(ies)	At time of preparation of application to participate in the BCP.
● Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period ● Publish above ENB content in local newspaper ● Mail above ENB content to site contact list ● Conduct 30-day public comment period	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement (BCA):	
● Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation **Note:** Applicant must submit CP Plan to NYSDEC for review and approval within 20 days of the effective date of the BCA.
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
● Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan ● Conduct 30-day public comment period	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
● Distribute fact sheet to site contact list that describes RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
● Distribute fact sheet to site contact list about draft RWP and announcing 45-day public comment period ● Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager) ● Conduct 45-day public comment period	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
● Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
● Distribute fact sheet to site contact list that announces that cleanup action has been completed and that NYSDEC is reviewing the Final Engineering Report ● Distribute fact sheet to site contact list announcing NYSDEC approval of Final Engineering Report and issuance of Certificate of Completion (COC)	At the time the cleanup action has been completed. **Note:** The two fact sheets are combined when possible if there is not a delay in issuing the COC.

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

Major issues have not been identified regarding the local residents, town board or other stakeholders. The environmental and health concerns are currently limited to the Site boundaries.

4. Site Information

Appendix C contains a map identifying the location of the site.

Site Description

- **Location - 43-45 Lafayette Avenue, Suffern Village, Rockland County, New York**
- **Setting - Suburban**
- **Site size - 0.09 acre**
- **Adjacent properties -**
  My Mexican House Restaurant-Bar (41 Lafayette Ave) - Owner: Ghassan Rabadi and Al Nada Rabadi, (845) 368-0388

  Cristy's Jewelry and Perfumes (23 Chestnut Street) - Owner: Maria Miranda (845)558-0591

  Java Love Coffee Roasting Co. (50 Lafayette Ave) - Owner: 50 Lafayette Ave LLC (Capital One Real Estate Administration); Contact Information Unknown.

  Boost Mobile (47 Lafayette Ave) - Owner: Kiplou Realty Corp; 40 Wayne Avenue #A, Suffern, NY 10901 (845) 369-9210

  Chat Room (20 Chestnut Street) - Owner: Kiplou Realty Corp; 40 Wayne Avenue #A, Suffern, NY 10901 (845) 369-9210

History of Site Use, Investigation, and Cleanup

- The Site building has two tenant spaces - 43 Lafayette Avenue is vacant and was formerly occupied by American Two Cleaners (ATC) and 45 Lafayette Avenue is occupied by a wellness program tenant. The current property owner, Reds Crib, LLC, purchased the property in October 2019 and ATC occupied the property for

at least six years prior. The contaminants related to the site that are known or suspected are solvents used for dry cleaning operations and it is currently known that sub-slab soil vapors under the Site building have been impacted. A limited vapor intrusion investigation has been conducted at the Site in August and September 2020.

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination onsite, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the site.

The Applicant in its Application proposes that the site will be used for restricted purposes.

To achieve this goal, the Applicant will conduct investigation activities at the site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the site.

Investigation

The Applicant has completed a partial site investigation before it entered into the BCP. For the partial investigation, NYSDEC will determine if the data are useable.

The site investigation has several goals:

1) define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;
2) identify the source(s) of the contamination;
3) assess the impact of the contamination on public health and the environment; and
4) provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

The Applicant submits a draft “Remedial Investigation Work Plan” to NYSDEC for review and approval. NYSDEC makes the draft plan available to the public review during a 30-day public comment period.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by NYSDEC.

NYSDEC will use the information in the investigation report to determine if the site poses a significant threat to public health or the environment. If the site is a “significant threat,” it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Interim Remedial Measures

An Interim Remedial Measure (IRM) is an action that can be undertaken at a site when a source of contamination or exposure pathway can be effectively addressed before the site investigation and analysis of alternatives are completed. If an IRM is likely to represent all or a significant part of the final remedy, NYSDEC will require a 30-day public comment period.

Remedy Selection

When the investigation of the site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend in its investigation report that no action is necessary at the site. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. NYSDEC would then issue a “Certificate of Completion” (described below) to the Applicant.

or

2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a “Remedial Work Plan”. The Remedial Work Plan describes the Applicant’s proposed remedy for addressing contamination related to the site.

When the Applicant submits a draft Remedial Work Plan for approval, NYSDEC would announce the availability of the draft plan for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy. The selected remedy is formalized in the site Decision Document.

The Applicant may then design and perform the cleanup action to address the site contamination. NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a final engineering report that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve the final engineering report. NYSDEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

The purpose of site management is to ensure the safe reuse of the property if contamination will remain in place. Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

An *institutional control* is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all uses.

An *engineering control* is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that pumps and treats groundwater. Site management continues until NYSDEC determines that it is no longer needed.

Appendix A -
Project Contacts and Locations of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Mr. Michael Kilmer
Project Manager
NYSDEC
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, NY 12561-1696
845-633-5463

New York State Department of Health (NYSDOH):

Christine Vooris
Project Manager
NYSDOH
145 Huguenot Street, 6th Floor
New Rochelle, NY 10801-5291
914-654-7000

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

Suffern Free Library
210 Lafayette Avenue
Suffern, NY 10901
Phone: 845-357-1237

Hours:
Monday-Thursday: 10:00am-9:00pm
Friday-Saturday: 10:00am-5:00pm
Sunday: 12:00pm-5:00pm

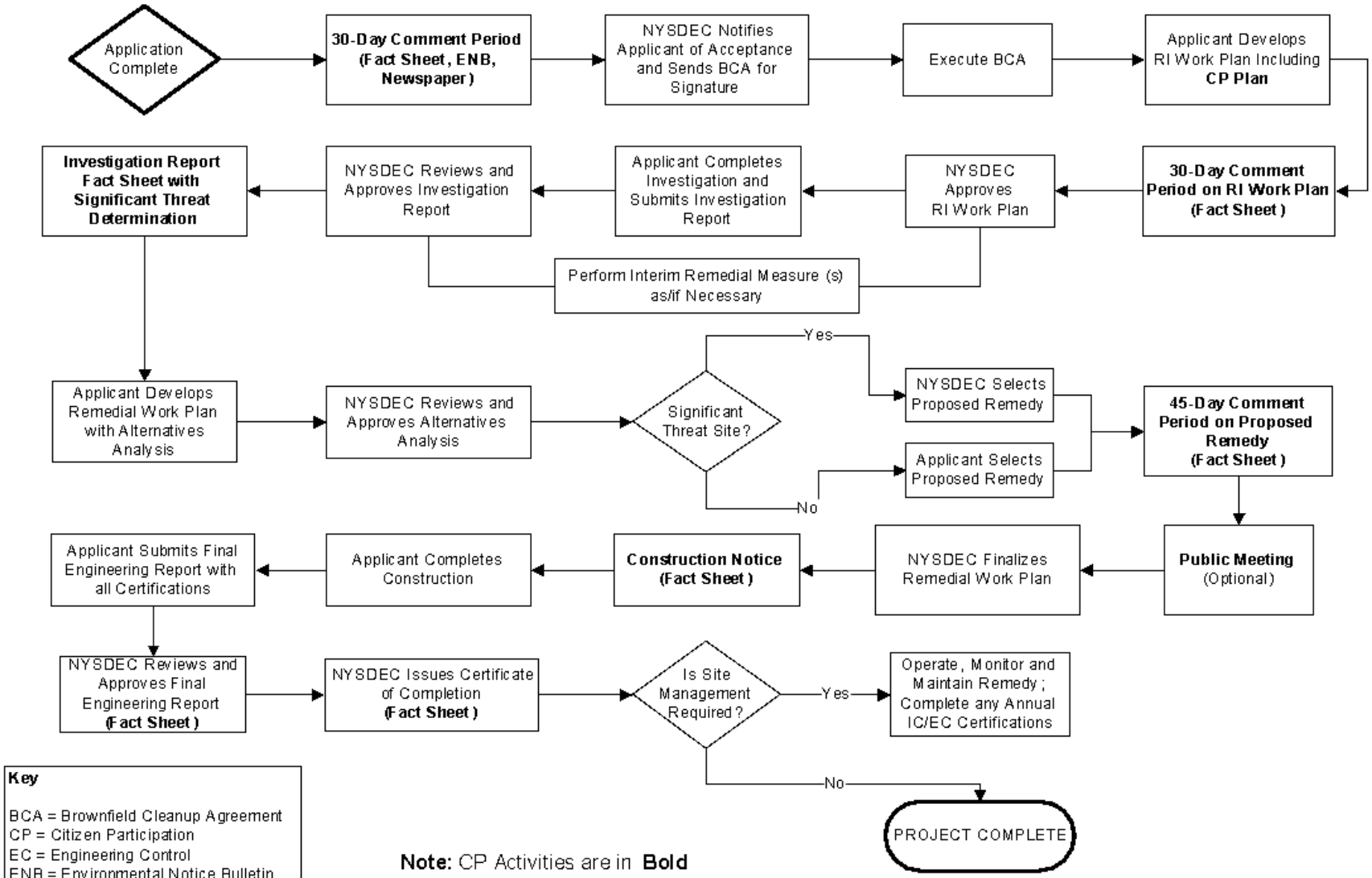
Appendix B - Site Contact List

- Project Manager, Project Health and Safety Officer
  Dyna Krumich-Ogonowski, NJ/NY Director of Operations
  EnviroSure, Inc.
  621 Shrewsbury Avenue, Suite 151, Shrewsbury, New Jersey 07702
  (732) 741-1110
  Dyna@EnviroSureInc.com
- Planning Board Chairperson -
  - Rockland County: Ms. Donna G. Silberman, Clerk, 845-638-5221
    1 South Main Street, Suite 100, New City, New York 10956
  - Village of Suffern: Ms. Amy Paffenroth, Clerk, 845-357-2600
    61 Washington Avenue, Suffern, New York 10901
    clerk@suffernny.gov
- Adjoining or adjacent properties -
  - North: Java Love Coffee Roasting Co.
    Owner: 50 Lafayette Ave LLC (Capital One Real Estate Administration)
    50 Lafayette Avenue, Suffern, New York 10901
    Company Phone: (845) 918-1282
  - South: Vacant and Cristy's Jewelry
    Owner: Maria Miranda
    21-23 Chestnut Street, Suffern, New York 10901
    (845) 558-0591
  - East: The Chat Room and Tease Hair Studios
    22 Chestnut Street, Suffern, New York
    Owner Kiplou Realty Corp
    40 Wayne Avenue #A, Suffern, New York 10901
    (845) 369-9210
  - West: My Mexican House Restaurant
    Owner: Ghassan Rabadi and Al Nada Rabadi
    41 Lafayette Avenue, Suffern, New York
    (845) 368-0388
- Public Water Supplier -
  - Village of Suffern Department of Public Works/Water Department
    61 Washington Avenue, Suffern, New York 10901
    (845) 357-1617

Appendix C - Site Location Map

{Instruction to preparer: Insert a map locating the site under the above heading. Alternately, replace this page with such a map. Be sure to label the page/map as Appendix C - Site Location Map and number the page consecutively with the others.}

Appendix D– Brownfield Cleanup Program Process



Key

BCA = Brownfield Cleanup Agreement
CP = Citizen Participation
EC = Engineering Control
ENB = Environmental Notice Bulletin
IC = Institutional Control
RI = Remedial Investigation

Note: CP Activities are in **Bold**

APPENDIX E

QUALITY ASSURANCE/QUALITY CONTROL PLAN

Prepared for:

REDS CRIB, LLC
43-45 LAFAYETTE AVENUE
SUFFERN, NEW YORK 10901

BROWNFIELD CLEANUP PROGRAM
QUALITY ASSURANCE PROJECT PLAN

43-45 LAFAYETTE AVENUE
AMERICAN TWO CLEANERS
BCP #C344085
SUFFERN VILLAGE
ROCKLAND COUNTY, NEW YORK

November 17, 2021

Prepared by: **ENVIROSURE, INC.**

DYNA KRUMICH-OGONOWSKI
NJ/NY DIRECTOR OF OPERATIONS

CHRISTOPHER ZELIZNAK, P.G. (PA & DE)
ENVIRONMENTAL DEPARTMENT DIRECTOR

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1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) details the protocols and procedures that will be followed during the proposed Remedial Investigation (RI) that will occur at the American Two Cleaners site. The purpose of these protocols and procedures is to ensure that all project activities will be performed in a manner consistent with the data quality objectives (DQOs) established for the project and all data collected during the RI are precise, accurate, representative, comparable, and complete.

1.1 Project Description

The American Two Cleaners site is located at 43-45 Lafayette Avenue in the Village of Suffern, Rockland County, New York in a mixed commercial and residential area. The Site is approximately 0.09 acres with a one-story concrete block structure with a basement that is divided into two suites with a flat, asphalt-covered roof. The building has entrances on the north and east sides and a sump pump system is used in the basement.

The investigation associated with this QAPP is intended to address the results of the limited vapor intrusion investigation. The Site is being investigated in accordance with the NYSDEC Brownfields Cleanup Program (BCP). The RI is designed to delineate the extent of the former dry cleaning impacts observed during the limited vapor intrusion investigation performed in August 2020 and September 2020.

1.2 Scope of work

The scope of work at the Site is described in the May 2009 Remedial Investigation Work Plan. The following tasks will be performed as a part of the RI:

- Pre-investigation coordination (i.e., access agreements)
- Utility clearance
- Mobilization
- Soil boring advancement, subsurface soil sampling and analysis
- Monitoring well installation and development
- Groundwater sampling and analysis
- Additional sub-slab soil vapor and indoor air sampling and analysis (if necessary)
- Investigation-derived waste management
- Data validation evaluation, and reporting

1.3 Data Quality Objectives

The goal of the RI is to bias samples towards suspected areas of highest contamination associated with a potential discharge from the tanks. If no PCE/TCE is detected in the on-site soil, the spill event will be reported to the NYSDEC as an unknown source related to other potential off-site discharges.

The objective of the RI would be to:

- Delineate the horizontal and vertical extent of contaminants in all evaluated media at the site to the applicable remediation standard(s).
- Determine the general surface and subsurface characteristics of the site, including, without limitation, the depth to ground water.
- Delineate contamination by determining the innermost line of samples that meet the appropriate cleanup standards.
- Identify the migration paths and actual or potential receptors of contaminants.
- Collect and evaluate all data necessary to evaluate remedial action alternatives. Data collection to evaluate remedial action alternatives is typically initiated as soon as the general extent of contamination is known, usually after the first delineation phase. These studies should be initiated, and sampling conducted, once the extent of contamination is generally understood.
- Collect data when needed in order to develop permits for any remediation activities.
- Identify and implement containment and/or stabilization remedies for all media to prevent contaminant exposure to receptors and to prevent the offsite migration of contaminants while remedial alternatives are being evaluated.

2.0 PROJECT/TASK ORGANIZATION

This RI will be completed by EnviroSure, Inc., an environmental consulting firm, who will arrange for the drilling and analytical services, conduct the onsite oversight to perform the soil logging, soil sampling, surveying, and groundwater sampling and perform the data interpretation and reporting tasks. Personnel involved in project implementation are listed in the table below.

Table 2.0: Project Implementation Personnel

Professional	Role in Project	Organizational Affiliation
James Lang, LSRP	Qualified Professional	EnviroSure Inc.
Christopher Zeliznak	QA Manager/Officer	EnviroSure Inc.
Dyna Krumich-Ogonowski	Project Manager/ H&S Officer	EnviroSure Inc.
Derek Grothusen	Field Technician	EnviroSure Inc.
Cynthia Romero	Laboratory Project Manager	Alpha Analytical

3.0 LABORATORIES

All samples for VOC analysis will be delivered to Alpha Analytical Laboratories located in Westborough, Massachusetts, a NYSDOH ELAP certified laboratory.

4.0 PROJECT ORGANIZATION

The EnviroSure Project Manager will be responsible for the following activities:

- Produce and update Health and Safety Plan, as needed;
- Maintain official, approved QAPP;
- Oversee implementation of Work Plan; and
- Issue environmental reports to NYS DEC, NYS DOH, Rockland County Health Department and/or Property Owner, as appropriate.

Table 4.0: Schedule of Major Project Tasks

Task Name	Task Description	Start Date	End Date
Goals identification	Evaluation of previous investigation report, Confirmation of Ground Water Flow Direction, Identification of Potential On-Site Source Areas	July 2021	September 2021
Measures identification	Geophysical survey, Collect soil samples from the soil for TCL+30, TAL and 1,4-dioxane analysis. Compare the contaminant concentrations to the appropriate standards. Install ground water monitoring wells and collect samples for TCL+30, TAL and 1,4-dioxane analysis. Survey well elevations and calculate ground water flow.	July 2021	September 2021
Data analysis	Analysis of baseline and site-specific media results.	August 2021	September 2021
Reporting to NYSDEC and Property Owner	Reporting shall include a final RI report with recommendations for follow up.	September 2021	October 2021

5.0 ANALYTICAL METHODS/QUALITY ASSURANCE

Applicable NYSDEC protocol regarding sampling and analytical methodologies are followed. Parameters, sample containers, preservation, holding time, and analytical methods are presented in the following table.

Table 5.0: Analytical Methods

Analytical Parameter	Container	Preservation	Holding Time	Method
Soil				
TCL+30	Encore or Terracore Samplers and laboratory-provided amber glass jars	Cool, 4°C Dark	14 days	USEPA Method SW-846 8260C and 8270D
TAL	laboratory-provided amber glass jars			USEPA 6010C/7471B
1,4-Dioxane				USEPA 8270
PFAS				USEPA 537
Ground Water				
TCL+30	Glass vial, 40 ml (1), Teflon liner.	Cool, 4°C Dark	14 days	SW-846 8260
TAL	laboratory-provided amber glass jars			USEPA 6010C/7471B
1,4-Dioxane				USEPA 8270-SIM
PFAS				USEPA 537
Soil Vapor/Indoor Air				
VOC	1-liter stainless steel Summa canister	NA		TO-15

Table 5.1: Analytical Methods/Quality Assurance Summary Table

Matrix	Number/Frequency of Samples	Field/Trip Blanks	Split Samples	Analytical Parameters
Soil	24	1	1	TCL, TAL, 1,4-dioxane, PFAS
Ground Water	3	2	NA	TCL, TAL, 1,4-dioxane, PFAS
Soil Vapor/Indoor Air	6	NA	NA	VOC

6.0 FIELD AND METHOD BLANKS

A field blank, duplicate and MS/MSD will be collected for the soil investigation. A trip blank and duplicate will be collected for the ground water investigation.

Special Analytical Services (SAS) are only required when initial sampling data at the site is suspect, therefore no SAS will be collected. The laboratory is required to run method blanks as part of its internal QA/QC program and the laboratory analytical results report will be formatted to meet NYSDEC deliverable requirements.

7.0 SAMPLING PROCESS DESIGN

The NYSDEC required sample collection procedures will be utilized for obtaining soil, ground water, and soil gas samples. This procedure represents methods that are used to address the validity of the collection and handling procedures for multi-media data. Sampling methods in the QAPP follow the NYSDEC rules and guidance, as provided in DER-10 Technical Guidance for Site Investigation and Remediation.

7.1 Equipment

A list of equipment that will potentially be used during the sampling events.

1. Disposable sampling trowel, stainless steel sampling tool, disposable polyethylene sampling tube;
2. A sample shuttle containing all appropriate glassware for sample parameters;
3. Photoionization Detector;
4. Two plastic pails;
5. Distilled water;
6. Liquinox/distilled water solution;
7. Acetone (only if the sample is to be analyzed for organic compounds);
8. Stainless Steel or Disposable mixing bowls for homogenization;
9. Sampling TerraCores (VOCs only);
10. Fiber brush;
11. Latex sampling gloves;
12. Mixing bowls (Stainless Steel or Disposable);
13. Clean paper towels.
14. Drill and concrete drill bit
15. Bucket for vacuum sealing soil gas sampling point
16. Brass or Teflon vapor sampling point
17. Polyethylene tubing
18. Helium gas
19. Submersible pump with heat shield

7.2 Personnel and Procedure

EnviroSure Field Samplers/Manager - Dyna Krumich-Ogonowski or Derek Grothusen

Procedure

Sample location will be determined by field assessment based on the areas most likely to be impacted by dry cleaning operations and as outlined in the Work Plan. Samples will be collected in accordance with the applicable NYSDEC guidance documents. If ground water is encountered in the soil borings, soil samples will be collected above the water table based on observed lithology and photoionization detector (PID) readings. Samples will be collected using a direct push sampling device. Field screening methods to basis sample collection will include screening with a calibrated photoionization detector, visual observations, odors, and lithology changes from coarse grained to fine grained. All sampling to be completed in accordance with the appropriate guidance.

1. The soil samples will be collected utilizing a disposable trowel or dedicated sampler from the disposable polyethylene sampling tube. For Volatile Organic samples, a small diameter soil core sampling device (TerraCore) will be used to collect 5 grams of sample (plus or minus 2 grams), and transfer to a preserved glass vial, from the undisturbed material in the sleeve prior to any other sample collection, but after field assessment. The sample will be sealed in accordance with the manufacturer's instructions.
2. Ground water samples will be collected directly from the submersible pump after the monitored parameters have stabilized in accordance with the USEPA Low Flow Sampling Protocol. Ground water will be placed into laboratory supplied 40 ml glass jars preserved with HCl.
3. If needed, sub-slab soil gas samples will be collected directly into the laboratory supplied stainless steel SUMMA canisters. Sample collection will be completed in accordance with NYSDEC/DOH guidance and monitoring will be conducted to demonstrate no ambient air contamination of the sample.
4. A label will be affixed to each sample container identifying the project name, sample number, depth, date, and sampler's initials.
5. The sample containers will be placed in a storage cooler at 4 degrees Centigrade (blue ice or ice cubes) for transport to the laboratory.
6. A chain of custody will be filled out for the samples.

7.3 Sample Collection Documentation

This section of the QAPP describes field documentation procedures that will be followed for this project. Records of field data will be made throughout the project to document critical data that might be needed at a later time, such as during preparation of the report, or for use by the investigators who were not present when the data were collected. Field data will be recorded on the following logs, forms, and/or notebooks.

- Daily Personnel Logs
- Field Notebooks
- Field Data Forms
- Photographs
- Equipment Calibration Logs

- Health and Safety Logs

The Field Manager has the responsibility to maintain the various logs, forms, and notebooks that document daily field activities as discussed below. Individual responsibilities will be delegated to other field staff, as appropriate. Special emphasis will be placed on the completeness and accuracy of all information recorded in the field, and will contain statements that are legible, accurate, and include documentation of project activities. Because the logbooks, field data forms, and chain-of-custody forms provide the basis for future reports, they must contain accurate facts and observations. The language used in recording all field data will be objective, factual, and free of personal interpretations or other terminology that may prove inappropriate. The following sections describe how data collected in the field will be documented, tracked, and controlled.

7.3.1 Health and Safety - Daily Personnel Log

A log will be maintained on site to record the identities of all personnel who are on-site for the duration of the project. The log will record the following information.

Names of field personnel:

- Names of subcontractor personnel
- Names of visitors
- Affiliation of each person on-site
- Time of entry and exit.

7.3.2 Field Logbooks

Field logbooks will provide the means of recording the chronology of data collection activities performed during the investigation. As such, entries will be described in as much detail as possible so that a particular situation could be reconstructed without reliance on memory. Field logbooks will be bound field survey books or notebooks. Logbooks will be assigned to field personnel but will be stored in the project files when not in use. Each logbook will be identified by the project-specific document number. All logbooks will be water resistant and have sequentially numbered pages. The title page of each logbook will contain the following:

- Person to whom the logbook is assigned,
- The logbook number,
- Project name and number,
- Site name and location,
- Site location by longitude and latitude, if known,
- Project start date, and
- End date.

Entries into the logbook will contain a variety of information. At the beginning of each entry, the date, start time, weather, and names of all sampling team members present

will be entered. Each page of the logbook will be signed and dated by the person making the entry. Field activities will be fully documented. All entries will be made in permanent ink, signed, and dated and no erasures or obliterations will be made. If an incorrect entry is made, the information will be crossed out with a single strike mark which is initialled and dated by the sampler. The correction shall be written adjacent to the error. Information included in the logbook will include, but may not be limited to:

- Chronology of activities, including entry and exit times;
- Names of all people involved in sampling activities and organizational affiliations;
- Level of personal protection used;
- Any changes made to planned protocol;
- Names of visitors to the site during sampling and reason for their visit;
- Sample location and identification;
- Weather conditions, including temperature and relative humidity;
- Dates (month/day/year) and times (military) of sample collection;
- Measurement equipment identification (model/manufacturer) and calibration information;
- Field screening results;
- Site observations;
- Sample collection methods and equipment;
- Sample collection date and time;
- Sample depths;
- Whether grab or composite sample collected;
- How sample composited, if applicable;
- Sample description (color, odor, texture, etc.);
- Sample identification code;
- Tests or analyses to be performed;
- Sample preservation and storage conditions;
- Equipment decontamination procedures;
- QC sample collection;
- Unusual observations;
- Record of photographs;
- Sketches or diagrams; and
- Signature of person recording the information

Field logbooks will be reviewed on a daily basis by the Field Manager. Each field logbook will be numbered, a log will be kept denoting the date each notebook was issued, and the field activity corresponding to each notebook.

Upon receipt of the field logbook for a particular activity, the designated person recording the notes will begin recording notes on a new page. The person recording the notes will indicate the date, time, and weather conditions, prior to recording information about the field activity. The field logbook will indicate whether any Field Data Forms are used and the serial numbers of all forms will be recorded for reference. When the designated person recording the notes either relinquishes the field logbook to another team member or turns the book in at the end of the day, the person relinquishing the

field logbook will affix a signature and date to the bottom of the last page used. If the page is not complete, a diagonal line will be struck across the blank portion of the page.

7.3.3 Field Data Forms

Field forms were designed to minimize the potential for critical data loss from the field. Field personnel are instructed to utilize these forms, when appropriate, to record critical data during the field activities for which each form was designed. As with the field logbooks, all documentation will be recorded in permanent ink. Corrections to errors in documentation or recorded calculations will be made by first striking out the error with a single line so as not to obliterate the original entry. Then the replacement entry or value will be inserted where appropriate. The person originating the change will initial and date each separate change. All revisions, deletions, and changes will be made in indelible ink. No field forms are expected to be utilized in this investigation.

7.3.4 Photographs

Field personnel will be instructed to photodocument field activities where possible. Examples of items that may require photographic documentation include:

- General site topography
- Sampling locations
- Existing monitoring locations
- Physical appearance of environmental samples
- Physical appearance of soil, recovered drums, drum waste, and sediment
- A field logbook entry or Photograph Log will be used to record the date and time of all photographs taken at the site.

7.3.5 Equipment Calibration Log

A field logbook entry or daily log will be used to record which instruments were calibrated each day (identified by manufacturer, model number and serial number), the individual who performed the calibration, and any notes regarding the maintenance of the instrument.

7.3.6 Health and Safety Log

A field logbook entry or a Health and Safety Log will be used to record any Health and Safety issues that arise during field activities. Any injuries, illnesses, use of first aid supplies, use of personal protective equipment (for levels A, B or C only, if needed), or possible work-related symptoms will be recorded in the log together with the date, the name(s) of the affected individual(s), and a description of the incident.

7.3.7 Sample Identification and Labeling

The establishment of a standard sample designation/labeling protocol is essential to ensure adequate quality assurance/quality control and to allow tracking of each sample and the associated analytical data. Proper labeling allows for the tracking of samples beginning from the time of sample collection, through analysis, and following project completion should future data correlation be deemed necessary. The proper labeling of samples is also critical in ensuring that samples are analyzed within the required sample holding times.

All samples will be identified using a unique sample identification scheme suitable to the project and the sampling protocol. The sample identification number will be recorded on the chain-of-custody forms accompanying each sample shipment submitted for analysis and will be recorded in the field logbooks.

7.4 Field Sample Custody

Evidence of sample traceability and integrity is provided by chain-of-custody (COC) procedures. The procedures document the sample traceability from the selection and preparation of the sample containers by the laboratory, to sample collection, to sample shipment, to laboratory receipt and analysis. A sample is considered to be in a person's custody if the sample is:

- In a person's possession
- Maintained in view after possession is accepted and documented
- Locked and tagged with Custody Seals so that no one can tamper with it after having been in physical custody
- In a secured area which is restricted to authorized personnel

A COC record accompanies the sample containers from selection and preparation at the laboratory, during shipment to the field for sample collection and preservation, and during the return to the laboratory (**Attachment 1**). Triplicate copies of the COC must be completed for each sample set collected.

The COC lists the field personnel responsible for taking samples, the project name and number, the name of the analytical laboratory to which the samples are sent, and the method of sample shipment. Also listed on the COC is a unique description of every sample bottle in the set. If samples are split and sent to different laboratories, a copy of the COC record will be sent with each sample.

The REMARKS or COMMENTS space on the COC is used to indicate if the sample is a matrix spike, matrix spike duplicate, or any other sample information for the laboratory. Since they are not specific to any one sample point, trip and field blanks are indicated on separate rows. Once all sample containers are properly accounted for on the form, a sampler will write his or her signature and the date and time on the first RELINQUISHED BY space. The sampler will also write the method of shipment, the shipping cooler identification number, and the shipper airbill number on the top of the

COC. Errors in field records will be crossed out with a single line in ink and initiated by the author. The cooler lid is closed, custody seals provided by the laboratory are affixed to the latch and across the back and front lids of the cooler, and the person relinquishing the samples signs their name across the seal. The seal is taped. Following the RECEIVED BY signature of the laboratory-employed courier, one copy of the COC is retained by sampling personnel and the other two copies remain with the laboratory courier. The COC seal must be broken to open the container. Breakage of the seals before receipt at the laboratory may indicate tampering. If tampering is apparent, the laboratory will contact the Project Manager, and the sample will not be analyzed.

7.4.1 Laboratory sample custody

The Project Manager or Field Team Leader will notify the laboratory of upcoming field sampling activities and the subsequent shipment of samples to the laboratory. This notification will include information concerning the number and type of samples to be shipped as well as the anticipated date of arrival.

The following laboratory sample custody procedures will be used:

- The laboratory will designate a sample custodian who will be responsible for maintaining custody of the samples and for maintaining all associated records documenting that custody.
- Upon receipt of the samples, the custodian will check cooler temperature, and check the original COC documents and compare them with the labeled contents of each sample container for correctness and traceability. The sample custodian will sign the COC record and record the date and time received.
- Care will be exercised to annotate any labeling or descriptive errors. In the event of documentation or sample integrity issues, the laboratory will immediately contact the Project Manager or Field Team Leader as part of the corrective action process. A qualitative assessment of each sample container will be performed to note any anomalies, such as broken or leaking bottles. This assessment will be recorded as part of the incoming COC procedure.
- The soil, water, and air samples will be stored in a secured area until analyses commence, at a temperature of approximately 4 ± 2 °C if required.
- A laboratory tracking record will accompany the sample or sample fraction through final analysis for control.

A copy of the tracking record will accompany the laboratory report and will become a permanent part of the project records

7.5 LABORATORY DATA REPORTING FORMATS

This section of the QAPP describes how project data and information will be documented, tracked and managed by the laboratory.

7.5.1 Fixed Laboratory Data Package Deliverables

At a minimum, the data packages from the analytical chemistry laboratories will include the following:

1. Case narrative
    - summary of analytical methods used
    - correlation of field sample identifications and laboratory sample identifications
    - data qualifier definitions
    - deviations from established QA/QC procedures with corrective action
2. Sample results
    - project name
    - field sample identification
    - batch number
    - collection/extraction/analysis dates
    - detection limits
    - dilution factors
    - percent moisture
3. Sample documentation
    - original chains-of-custody
    - shipping documents
    - cooler receipt forms
4. Quality Assurance/Quality Control
    - spike recoveries (surrogates, MS/MSDs, LCSs)
    - measures of precision (laboratory duplicates, MS/MSDs)
    - control limits for accuracy and precision
5. Raw data, including chromatograms, quantitation reports, and spectra

Results for all soil and sediment samples will be reported on a dry weight basis. The laboratories will report values detected between the method detection limit and reportable limit and qualify these results as estimated. The laboratory will report tentatively identified compounds (TICs) for the VOC and SVOC analyses of soil, sediment, and aqueous samples. Up to 10 TICs for VOCs and 15 TICs for SVOCs will be reported for each sample.

7.5.2 Laboratory Data Reporting Formats

Laboratory records will be reviewed by the Project Manager to verify adherence to documentation requirements. Information will not be erased or obliterated. Corrections will be made by drawing a single line through the error and entering the correct information adjacent to the cross-out. All changes will be initialled, dated, and, if appropriate, accompanied by a brief explanation.

7.5.3 Laboratory Internal Reviews

Prior to the release of any data from the laboratory, the data will be verified and approved by laboratory personnel. The review will consist of a tiered review by the person performing the work, a qualified peer, and by supervisory personnel. Details of the review are provided below. Prior to being released as final, laboratory data will proceed through a tiered review process. Data verification starts with the analyst or technician who performs a 100 percent review of the data to ensure the work was done correctly the first time. It is the responsibility of the analyst or technician to ensure that the verification of data in his or her area is complete. The data reduction and initial verification process must ensure that:

- Sample preparation and analysis information is correct and complete,
- Results are correct and complete,
- The appropriate EPA methods or laboratory Standard Operating Procedures (OPS) have been followed and are identified in the project records,
- Proper documentation procedures have been followed,
- All non-conformances have been documented,
- Project-specific requirements have been met.

Following the completion of the initial verification by the analyst or technician, a systematic check of the data will be performed by the Laboratory. A narrative to accompany the final report will be finalized by the Laboratory Project Manager. This narrative will include relevant comments, including data anomalies and non-conformances. The check will be performed to ensure that initial review has been completed correctly and thoroughly. Included in this review will be an assessment of the acceptability of the data with respect to:

- Adherence of the procedure used to EPA methods and laboratory SOPs, and any project specific methods and specific instructions;
- Correct interpretation of data (e.g., mass spectra, chromatographic interferences, etc.);
- Correctness of numerical input when computer programs are used (checked randomly);
- Numerical correctness of calculations and formulas (checked randomly), Acceptability of QC data;
- Documentation that instruments were operating according to method specification (calibrations, performance checks, etc.);
- Documentation of dilution factors, standard concentrations, etc.;
- Sample holding time assessment;
- Nonconforming events have been addressed by corrective action as defined on a nonconformance memo;
- Results are present for every sample in the analytical batch or reporting group;
- Every parameter or target compound requested is reported;
- The correct units and correct number of significant figures are utilized;

- All non-conformances, including holding time violations, and data evaluation statements that impact the data quality are accompanied by clearly expressed comments from the laboratory;
- The final report is legible, contains all the supporting documentation required by the project, and is in either the standard format or in the client-required format.

8.0 REFERENCES

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USEPA, 1987. Data Quality Objectives for Remedial Response Actions Activities: Development Process, EPA/540/G-87/003, OSWER Directive 9355.0-7, Washington, D.C.

USEPA, 1999a. Compendium Method TO-15, Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). January 1999.

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USEPA, 2004. USEPA Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review, October 2004.

APPENDIX F

PROJECT SCHEDULE

Project Schedule

The relevant milestones associated with this Work Plan are as follows. The schedule shown below is based on the approximate number of weeks following NYSDEC approval of this Work Plan. This schedule is contingent upon EnviroSure, Inc.'s accessibility to the Site, permit approvals, the schedules of our employees and subcontractors at the time of NYSDEC approval

Task	Schedule
Project Kick-off	within 1 week
Subsurface Soil Investigation:	
Geophysical Survey	2-3 weeks
Soil Sampling	2-3 weeks
Soil Analytical results	3-4 weeks
Groundwater Investigation:	
Monitoring Well Installation	3-4 weeks
Groundwater Sampling	4-5 weeks
Groundwater Analytical Results	5-6 weeks
DEC and Team Meeting	6-7 weeks
Remedial Investigation Report Submittal	10-12 weeks
Remedial Action Work Plan	12-13 weeks

APPENDIX G

DER-10 APPENDIX 3C FISH AND WILDLIFE RESOURCES IMPACT ANALYSIS DECISION KEY

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key	If YES Go to:	If NO Go to:
1. Is the site or area of concern a discharge or spill event?	13	2
2. Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3. Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4. Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5. Has the contamination gone off-site?	6	14
6. Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7. Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8. Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9. Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10. Is the lack of resources due to the contamination?	3.10.1	14
11. Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12. Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13. Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14. No Fish and Wildlife Resources Impact Analysis needed.		

APPENDIX H

COMMUNITY AIR MONITORING PLAN

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. A periodic monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total

organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

Note:

CAMP readings will be provided on a weekly basis with all exceedances reported to the Department and NYSDOH the same day or next business day if after hours along with the reason for exceedance, what was done to correct it, and if it was effective. CAMP data collected during the execution of the RIWP will be summarized in a qualitative statement in the body of the Remedial Investigation Report.