Phase II Environmental Site Assessment

Rossville Shopping Center

990-1026 Rossville Avenue
Staten Island New York

EBI Project No. 1219000387

October 28, 2019

Prepared for:

Muss Development
118-35 Queens Blvd
Forest Hills, New York 11375

Prepared by:

EBI Consulting
environmental | engineering | due diligence

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October 28, 2019

Mr. Jeff Kay
Muss Development
118-35 Queens Blvd
Forest Hills, New York 11375

Subject: **Phase II Environmental Site Assessment**
Rossville Shopping Center
990-1026 Rossville Avenue, Staten Island New York
EBI Project No. 1219000387

Dear Mr. Kay:

Per the Proposal and Standard Conditions for Engagement approved by yourself on October 11, 2019, EBI Consulting (dba EBI Consulting, hereinafter "EBI") is pleased to submit this Phase II Environmental Site Assessment (ESA) for the above-referenced property (herein referred to as the Subject Property).

This report is addressed to Muss Development and such other persons as may be designated by Muss Development and respective successors and assigns. This report is for the use and benefit of, and can be relied upon by Muss Development or any affiliates; initial and subsequent holders from time to time of any debt or debt securities secured, directly or indirectly, any participation interest in such debt; any indenture trustee, servicer, or other agent acting on behalf of such holders of such debt and/or debt securities; rating agencies; and the institutional providers from time to time of any liquidity facility or credit support for such financings, and their respective successors and assigns.

The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgments and are founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either express or implied.

The conclusions of this report are based on soil, soil vapor, and groundwater analytical data prepared by Alpha Analytical, soil screening results obtained utilizing a field screening instrument, and field observations recorded by EBI personnel.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

Thank you for the opportunity to prepare this report, and assist you with this project. Please call us if you have any questions or if we may be of further assistance.

Respectfully submitted,
EBI CONSULTING

Kenneth Lukas
Author/Project Engineer

Jim Klinder
Reviewer/Senior Project Management
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The Environmental Professionals listed above performed this Phase II ESA in general conformance with the ASTM E1903-11 Standard Practice for Phase II ESAs. The listed individuals meet the qualifications for individuals completing or overseeing all appropriate inquiries and possess sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the existence of environmental conditions on the property. Any work completed on this Phase II ESA by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional.

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APPENDICES

1.0 INTRODUCTION

Per our Proposal and Standard Conditions for Engagement, EBI Consulting (EBI) is pleased to submit our Phase II Environmental Site Assessment (ESA) report on the property located at 990-1026 Rossville Avenue in Staten Island New York (the Subject Property). Kenneth Lukas of EBI Consulting investigated the Subject Property on October 21, 2019.

1.1 BACKGROUND

EBI was requested to conduct a Phase II ESA to evaluate the potential impact to the Subject Property from the following recognized environmental concern identified in EBI's (September 25, 2019) Phase I ESA report:

- *Kariss French Cleaners is located at 1002 Rossville Avenue within the Rossville Shopping Center. The cleaners which is owned by Larry S. has been an onsite dry cleaning operation for 30 years. According to the owner, they have always performed onsite dry cleaning using Perchloroethylene, which is also called tetrachloroethylene, PERC, or PCE. The existing closed-loop Fibrimatic 4th generation machine was installed in between 1999 and 2003. The recent inspection of the facility was in 2008, but no details involving the inspection were available through the regulatory database report. The concrete floor within the tenant space did not showed no signs staining and/or floor deterioration. Also, no floor drains were present on the floor, except within the back boiler room. According to Mr. Doug King, Property Manager of over 15 years, no environmental testing has been performed at the Subject Property involving the onsite dry cleaner. Based upon Kariss French Cleaners performing onsite dry cleaning for 30 years without any subsurface investigations to determine if this operation has affected the Subject Property, this is considered a recognized environmental condition (REC).*

1.2 STATEMENT OF OBJECTIVES

The primary objective of this Phase II ESA is to evaluate potential impact to the Subject Property from the recognized environmental conditions (RECs) identified in the Phase I ESA prepared by EBI (September 25, 2019) to provide sufficient information regarding the nature of the contamination, if present. This information is intended to assist in making informed business decisions about the property, and where applicable, provide the level of knowledge necessary to satisfy the innocent purchaser defense under CERCLA. The investigation focused on the existing dry cleaning facility.

EBI completed the following tasks to achieve the objectives of this investigation:

- Core Down Drilling LLC contacted the local utility locating service New York 811 (Ticket #192850060 & 192850064) before undertaking subsurface explorations on-site.

- Advanced four borings by direct push drilling methods to a maximum depth of 24-deep below ground surface (bgs).

- Collected four-foot soil cores, field screened the vapor headspace of the soil cores for total ionizable volatile organic compounds (VOCs) using a photoionization detector (PID), and described the physical characteristics of the soil samples on boring logs.

- Selected up to two soil samples per boring, prepared, and submitted the samples under chain-of-custody documentation to a New York-certified independent laboratory for analysis of chlorinated volatile organic compounds (CVOCs) by EPA Method 8260.

- Collected grab groundwater samples from temporary wells inserted into the completed exterior soil borings.

- Collected sub-slab soil vapor samples from the area beneath the former PERMAC dry cleaning plant machine prepared and submitted the samples to a state-certified laboratory for analysis of CVOCs only via EPA Method TO-15.

- Prepared this summary of pertinent information obtained during this investigation including accompanying illustrations and appendices, along with EBI's findings and preliminary conclusions regarding the presence or absence of contamination in soils and groundwater beneath the Subject Property in the areas investigated.

1.3 LIMITATIONS AND ASSUMPTIONS

This report was prepared for the use of Muss Development. It was performed following ASTM E1903-11, accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information obtained during the subsurface investigation. EBI renders no opinion as to the presence of potential contamination in the areas not investigated. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the Subject Property should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared under the proposal approved by Muss Development and with the limitations and assumptions described below, all of which are integral parts of this report. No other warranty, expressed or implied, is made.

Limitations

1. The observations described in this report were made under the conditions stated herein. The conclusions presented are based solely upon the services described, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the client. The work described in this report was carried out under terms and conditions in our proposal.
2. In preparing this report, EBI has relied on certain information provided by state and other referenced parties, and on information contained in the files of federal, state or local agencies available to EBI at the time of the assessment. Although there may have been some degree of overlap in the information provided by these various sources, EBI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during these environmental services.
3. Observations were made of the Subject Property and structures on the Subject Property as indicated within this report. Where access to portions of the Subject Property or structures on the Subject Property was unavailable or limited, EBI renders no opinion as to the presence of oil or hazardous materials (OHM) in that portion of the Subject Property or structure. EBI renders no opinion as to the presence of OHM or the presence of indirect evidence relating to OHM where direct observation of the interior walls, floor, or ceiling of a structure on a Subject Property was obstructed by objects or coverings on or over these surfaces. No representations concerning insulating material is expressed or implied.

4. EBI did not perform testing or analyses to determine the presence or concentration of asbestos, radon, or lead at the Subject Property unless specifically stated otherwise in our report. Similarly, no investigation of dust or air quality was conducted unless specifically stated otherwise in our report.
5. The purpose of this report is to assess the physical characteristics of the Subject Property concerning the presence of OHM in the environment. No specific attempt was made to determine the compliance of present or past owners or operators of the Subject Property with federal, state, or local laws or regulations (environmental or otherwise).
6. Except as noted in our report, no quantitative laboratory testing was performed as part of the assessment. Where such analyses have been conducted by an outside laboratory, EBI has relied upon the data provided and has not conducted an independent evaluation of the reliability of this data.
7. Any qualitative or quantitative information regarding the Subject Property, which was not available to EBI at the time of this assessment may result in a modification of the representations made herein.
8. It is acknowledged that EBI judgments shall not be based on a scientific or technical test or procedures beyond the scope of the services or beyond the time and budgetary constraints imposed by the client. It is acknowledged further that EBI conclusions shall not rest on pure science but such considerations as economic feasibility and available alternatives. The client also acknowledges that, because geologic and soil formations are inherently random, variable, and indeterminate in nature, the services and opinions provided under this agreement with respect to such services, are not guaranteed to be a representation of actual conditions on the Subject Property, which are also subject to change with time as a result of natural or human-made processes, including water permeation. In performing these services, EBI shall use that degree of care and skill ordinarily exercised by environmental consultants or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely at the time the services are rendered and not according to standards utilized at a later date. These services shall be rendered without any other warranty, expressed or implied, including, without limitation, the warranty of merchantability and the warranty of fitness for a particular purpose.
9. The client and EBI agree that to the fullest extent permitted by law, EBI shall not be liable to the client for any special, indirect or consequential damages whatsoever, whether caused by EBI's negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause of causes whatsoever.

Assumptions

1. This Phase II ESA does not address the evaluation of business environmental risks in light of data collected through the Phase II ESA process. Such evaluation is a function of the site and transaction-specific variables, and the user's objectives and risk tolerance. This practice contemplates that the Phase II ESA process was planned and conducted with such variables in mind and that the user will evaluate legal, business and environmental risks in light of known data relating to the particular site and transaction, and in consultation with legal and business advisors as well as the Phase II Assessor.

2. The ASTM E1903-11 does not define the threshold levels at which target analytes pose a concern of significance to the user. Users may apply this practice not only in light of applicable regulatory criteria and relevant liability principles, but also to meet self-defined objectives.

3. The scope of work for this Phase II ESA is site-specific and context-specific. The assessment process defined by ASTM E1903-11 is intended to generate sound, objective, and defensible information sufficient to satisfy diverse user objectives.

4. No Phase II ESA can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for chemical testing may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process, and even when exercised following objective scientific principles, uncertainty is inevitable. Additional assessment beyond that which was reasonably undertaken may reduce the uncertainty.

5. Even when Phase II ESA work is executed competently and following ASTM E1903-11, it must be recognized that certain conditions present especially difficult target analyte detection problems. Such conditions may include, but are not limited to, complex geological settings, unusual or generally poorly understood behavior and fate characteristics of certain substances, complex, discontinuous, random, or spotty distributions of existing target analytes, physical impediments to investigation imposed by the location of utilities and other human-made objects, and the inherent limitations of assessment technologies.

6. The Phase II ESA is intended to develop and present sound, scientifically valid data concerning actual site conditions. It shall not be the role of the Phase II Assessor to provide legal or business advice.

1.4 SPECIAL TERMS AND CONDITIONS

This Phase II ESA (the report) has been prepared to assist Muss Development in its underwriting of a proposed mortgage loan on the Subject Property. This report can be relied upon by only the parties stated in the transmittal letter at the front of this report. EBI's liability to a purchaser wishing to use this report is limited to the cost of the report. Amendments to EBI's limitations as stated herein that may occur after issuance of the report are considered to be included in this report. Payment for the report is made by, and EBI's contract and report extends to Muss Development only, per our Project Acceptance/Contract Authorization and Standard Terms and Conditions for Special Studies.

2.0 SUBJECT PROPERTY BACKGROUND

2.1 SUBJECT PROPERTY DESCRIPTION AND FEATURES

Information regarding the Subject Property description, improvements, and operations is summarized below:

PROPERTY DESCRIPTION, IMPROVEMENTS, AND OPERATIONS	
Address	990-1026 Rossville Avenue, Staten Island New York
Location	The Subject Property is located in the northwest quadrant of the intersection of Rossville Avenue and Grafe Street.
Property Owner	Allied Rossville Co
Number of Parcels	one
Total Land Area	1.57 acres
Number/Type of Buildings	One L-shaped building with partial basement
Number of Stories	one
Date of Construction	1990
Area (SF)	25,800
Basement	Partial
Operations	Commercial/Retail
Site Characteristics	The existing L-shaped building is located on the western and northern portions of the property. Areas of the Subject Property surrounding the existing building include the following: asphalt-paved surface parking, located along the southeast side of the building; concrete walkways, located throughout the Subject Property; and minimal landscaping onsite.

2.2 PHYSICAL SETTING

Information regarding the physical settings at the Subject Property and immediate vicinity are is summarized below:

PHYSICAL SETTING DESCRIPTIONS	
Regional Geology	The Subject Property is located within the Embayed section of the Coastal Plain physiographic province, which is characterized by areas of low relief and consists of Cretaceous Coastal Plain sediments, primarily clay, sand, and gravel, that overlie igneous and metamorphic rocks that crop out in Connecticut.
Surficial Features	The Subject Property is located in a relatively flat area, and the general slope of the surrounding region is to the north, northwest (see Figure 2 - Locus Map, which depicts the location of the Subject Property on the Arthur Kill, New York USGS 7.5 Minute Topographic Quadrangle).
Soil Stratigraphy Encountered during the Investigation	Reddish-brown fine to medium SAND some silt and some red shale.
Estimated Direction of Groundwater Flow	Local groundwater gradient is expected to follow surface topography; therefore, groundwater flow near the Subject Property is expected to flow to the northwest. Groundwater depths and flow gradients are best evaluated by a subsurface investigation involving the installation of at least three groundwater-monitoring wells, a survey of well elevations, and precise measurements of hydraulic head. Calculation of groundwater flow directions based on relative differences of hydraulic head on the Subject Property was not included in this scope of work.

PHYSICAL SETTING DESCRIPTIONS	
Depth to Groundwater (encountered during the investigation)	Groundwater was encountered in borings SB-1 and SB-4 at depths of 10-feet and 22-feet, respectively.

2.3 SITE HISTORY AND LAND USE

According to the Phase I ESA prepared by EBI (September 25, 2019), the site history and land use are summarized in the following table:

Period	Site History And Land Use
At least 1891-1910	Undeveloped, wooded land.
1910-1950	Small structure present and partially residential
1950-1990	Undeveloped
1990 to Present	Existing retail plaza.

2.4 ADJACENT PROPERTY LAND USE

Property use in the vicinity of the Subject Property is primarily characterized by residential and a recreational court.

ADJOINING PROPERTIES	
North	The Subject Property is bound to the north by residential structures.
South	South The Subject Property is bound to the south by Grafe Street, followed by residential structures.
East	East The Subject Property is bound to the east by Rossville Avenue, followed by residential
West	The Subject Property is bound to the west by a recreational court.

2.5 SUMMARY OF PREVIOUS ENVIRONMENTAL ASSESSMENTS

EBI was requested to conduct a Phase II ESA to evaluate the potential impact to the Subject Property from the existing dry cleaning facility based on the following recognized environmental concerns identified in EBI's (September 25, 2019) Phase I ESA report:

- *Kariss French Cleaners is located at 1002 Rossville Avenue within the Rossville Shopping Center. The cleaners which is owned by Larry S. has been an onsite dry cleaning operation for 30 years. According to the owner, they have always performed onsite dry cleaning using Perchloroethylene, which is also called tetrachloroethylene, PERC, or PCE. The existing closed-loop Fibrimatic 4th generation machine was installed in between 1999 and 2003. The recent inspection of the facility was in 2008, but no details involving the inspection were available through the regulatory database report. The concrete floor within the tenant space did not showed no signs staining and/or floor deterioration. Also, no floor drains were present on the floor, except within the back boiler room. According to Mr. Doug King, Property Manager of over 15 years, no environmental testing has been performed at the Subject Property involving the onsite dry cleaner. Based upon Kariss French Cleaners performing onsite dry cleaning for 30 years without any subsurface investigations to determine if this operation has affected the Subject Property, this is considered a recognized environmental condition (REC).*

3.0 RATIONALE AND WORK PERFORMED

3.1 RATIONALE

3.1.1 Conceptual Model

The conceptual model is a representation of hypothesized current site conditions, which describes the physical setting characteristics of a site and the likely distribution of target contaminants (in soil, air, groundwater, surface water or sediments) that might have resulted from a known or likely release and the risk they pose to human or ecological receptors. This conceptual model takes into consideration the potential distributions of contaminants concerning the properties, behaviors, and fate and transport characteristics of the contaminant in a setting such as that being assessed. The sampling plan was designed to provide for the collection of potentially contaminated environmental media, if they occur, at locations and depths where the highest concentrations are likely to occur.

Site Environmental Concerns		**Site Physical Characteristics**		**Onsite Environmental Receptors**	
RECs	**COC's**	**Primary Release Media**	**Fate & Transport**	**Potential Exposure Route(s)**	**Potential Human Exposure**
Dry cleaners	Chlorinated Volatile organic compounds (CVOCs)	Soil Groundwater Indoor Air	Soil Soil Vapor Groundwater Indoor Air	Ingestion Inhalation Dermal (direct Contact)	Tenants Site workers Construction workers

COC = contaminants of concern

Assumptions:
1. Assumes the Subject Property retains existing use (Commercial/Retail/Industrial, etc.)
2. Construction Worker exposure is limited due to short exposure duration

3.1.2 Rationale for Soil Boring Placement

The rationale for the placement of the soil borings was based on 1) the suspected areas that the target analytes were first introduced into environmental media as a result of a release, and 2) the likely vertical and horizontal migration of the release.

3.1.3 Chemical Testing Plan

The chemical testing plan was designed to detect the target analytes that are present in, or have been released or potentially have been released to, environmental media at the site, and which are of interest in the context of the particular Phase II ESA and its objectives, the presence of which will be sought and concentrations of which will be quantified through chemical testing.

3.1.4 Deviations from the Work Plan

There were no deviations to the work plan.

3.2 EXPLORATION, SAMPLING, AND TEST SCREENING METHODS

3.2.1 Pre-Drilling Activities

Core Down Drilling LLC requested New York 811 to mark-out the location of Subject Property utilities on October 12, 2019. Clearance for drilling at the Subject Property was granted for after October 18, 2019.

Personal health and safety precautions were followed in accordance with applicable federal and state law or local equivalents and any requirements imposed by the owner, occupant, or field personnel. EBI prepared a site-specific health and safety plan (HASP) and conducted a health and safety meeting with the onsite personnel prior to the drilling activities. No additional pre-drilling activities were performed as part of this investigation.

3.2.2 Soil Borings

A total of four borings were advanced at the Subject Property. External soil borings (SB-1 and SB-4) were advanced using a geoprobe 54dt rig and internal boring were advanced using direct push hand tools (SB-2 and SB-3) operated by Core Down Drilling LLC of Brewster New York. Four-foot soil samples (external) and two-foot soil samples (internal) were collected continuously during the advancement of the borings. Half-foot soil samples were collected continuously during the advancement of the borings. EBI recorded soil sampling information and the physical characteristics of each soil sample onto boring logs presented in Appendix B.

TABLE 3.2.2
SUMMARY OF SOIL BORING DETAILS

Boring ID#	Location	Termination Depth/Reason (feet bgs)	Depth to Groundwater (feet)	Sample ID #/ Depths	Target Analytes/ EPA Method
SB-1/TWP-1	Front of dry cleaner facility - east	11 (groundwater)	10	Soil SB-1 (9.5'-10') Groundwater TWP-1	CVOCs/8260
SV-1/SB-2	Western portion of dry-cleaning facility near machines	5 (equipment refusal)	Not Encountered	Soil SB-2 (1.5'-2') Soil SB-2 (4.5'-5') Soil Vapor SV-1	CVOCs/8260
SV-2/SB-3	Western portion of dry-cleaning facility near rear entrance – chemical storage, loading and unloading	7.5 (equipment refusal)	Not Encountered	Soil SB-3 (1.5'-2') Soil SB-3 (7'-7.5') SV-2	CVOCs/8260
SB-4/TWP-2	Rear of dry cleaner tenant space - west	24 (groundwater)	22	Soil SB-4 (6.5'-7') Groundwater TWP-2	CVOCs/8260

Notes: VOCs -Volatile organic compounds (VOCs) via EPA Method 8260
SB – soil soring / soil grab sample
TWP – temporary well point / ground water sample
(#) – Depth below-grade sample collected.

Sampling locations are illustrated on Figure 3, Boring Location Map.

3.2.3 Field Screening

The vapor headspace of each soil sample was field-screened using a photoionization detector (PID). The PID provides a reading of total ionizable VOCs. The PID was calibrated with an isobutylene standard, to

measure total VOCs as PCE, isobutylene, or other equivalents. The PID has a practical sensitivity of approximately one part per million by volume (ppmV). PID readings should not be considered as exact measurements but as relative readings of VOCs between locations.

PID readings ranged from 0 to 148.2 parts per million (ppm). The PID results are noted in the boring logs provided in Appendix B.

3.2.4 Soil Sampling and Analysis

Selected "grab" soil samples (of approximate 6" intervals) were collected in laboratory-provided sample containers. Each sample was labeled and logged onto a chain-of-custody form, and placed in a cooler with ice for preservation following current Federal EPA SW-846 (3rd ed.). The samples were submitted to an independent qualified laboratory (Alpha Analytical) for analyses. The samples were analyzed for the target analytes noted in Table 3.2.2.

Samples submitted for VOC analysis were also preserved with preservative methanol and deionized water following EPA Method 8260.

To ensure that no cross-contamination between samples occurred, all non-dedicated sampling equipment was decontaminated after the collection of each sample. Sampling equipment was scrubbed with a brush to remove loose material and then washed thoroughly with a laboratory-grade detergent and water to remove all particulate matter and surface film. After washing, each piece and brush was rinsed with clean distilled water. Dedicated sampling equipment such as sampling liners and latex gloves were properly disposed of after the handling of each sample was complete. Samples were then collected using clean disposable gloves and laboratory-provided glassware appropriate for the specified analysis.

3.2.5 Groundwater Sampling and Analysis

Grab groundwater samples were collected from temporary small-diameter PVC well screens installed within the soil borings. Before the collection of groundwater samples, each well was purged of three to five volumes of groundwater or until the groundwater ran clear.

The groundwater samples were collected in clean laboratory-provided containers. Samples collected for VOC analysis were preserved with hydrochloric acid to a pH of less than 2. Each sample was labeled and logged onto a chain-of-custody form, and placed in a cooler with ice for preservation following current Federal EPA SW-846 (3rd ed.). After collection, the samples were submitted to an independent qualified laboratory (Alpha Analytical) for analyses. The samples were analyzed for the target analytes noted in Table 3.2.2.

3.2.6 Soil Vapor Sampling and Analysis

Before the advancement of the interior borings, a temporary soil vapor well was constructed in the locations of borings SB-2 and SB-3 to a depth of 0.5-feet below the surface of the floor slab. A concrete drill with a ¾-inch diameter and three-foot-long drill bit was used to advance the sampling point below the concrete floor slab. The sampling point was constructed by inserting a Vapor Pin® into the slab penetration and connecting dedicated sampling tubing to the point.

Before sample collection, the soil vapor sampling points were purged of a minimum of three volumes to remove existing ambient air from sampling tube and to ensure that a representative sample was collected from the sub-slab vapor.

Each soil vapor sample was collected in a pre-cleaned 1.4-liter summa canister provided by the laboratory. The samples were labeled and logged onto a chain-of-custody form and submitted to an independent qualified laboratory (Alpha Analytical) for analyses of VOCs (PCE and its daughter products) by EPA Method TO-15. The sampling start time, sampling end time, initial pressure, and final pressure readings for the Summa canisters were recorded on forms provided by the laboratory.

3.2.7 Abandonment of Borings

Upon completion of the soil sampling activities, each soil boring was filled with the soil cuttings generated during the sampling activities. The remaining void in each borehole was filled with granular bentonite. The top two to four inches were backfilled with asphalt or concrete, as applicable.

4.0 PRESENTATION OF EVALUATION AND RESULTS

4.1 SOIL ANALYSIS RESULTS

The samples were analyzed for the target analytes noted in Table 3.2.2. The following table presents only the contaminants identified above the laboratory method detection limits:

Table 4.1 – Soil Analytical Results

SAMPLE ID:	NY-UNRES	NY-Commercial	SB-1 (9.5-10)		SB-2 (1.5-2)		SB-2 (4.5-5)		SB-3 (1.5-2)		SB-3 (7-7.5)		SB-4 (6.5-7)	
LAB ID:			L1949367-01		L1949367-03		L1949367-04		L1949367-05		L1949367-06		L1949367-07	
COLLECTION DATE:			10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019	
VOLATILE ORGANICS BY EPA 5035														
Tetrachloroethene	1.3	150	ND		0.095		0.024		ND		**5.3**		**4.7**	
Vinyl chloride	0.02	13	ND		ND		ND		0.014		**0.11**		**2.7**	
1,1-Dichloroethene	0.33	500	ND		ND		ND		ND		ND		ND	
Trichloroethene	0.47	200	ND		0.0079		0.0024		0.00017	J	**0.52**		**0.66**	
cis-1,2-Dichloroethene	0.25	500	ND		0.00017	J	0.00059	J	0.028		**1.9**		**8.4**	
Total VOCs			-	-	0.10307	-	0.02699	-	0.04217	-	7.83	-	16.46	-
GENERAL CHEMISTRY														
Solids, Total (%)			82.6		84.1		88.3		87.7		86.3		84.2	

Notes: All results are shown in milligrams per kilogram (mg/kg)
ND = Non-detected above laboratory detection limits
NA = Not analyzed
J = Estimated concentration
B = Parameter also detected in blank sample
Bold font indicates exceedance of the (applicable standards)
NY-Commercial - New York Commercial Restricted Use Criteria
NY-UNRES: NY - New York NYCRR Part 375 New York Unrestricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

The analytical results revealed concentrations of tetrachloroethene (PCE), vinyl-chloride, trichloroethene (TCE), and cis-1,2-dichloroethene detected in samples SB-3 (7-7.5) and SB-4 (6.5-7). The detected concentrations were above the New York NYCRR Part 375 New York Unrestricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006, and below the applicable New York Commercial Restricted Use Criteria.

Laboratory soil analytical results and complete laboratory data sheets and chain-of-custody documentation are presented in Appendix C.

4.2 SOIL VAPOR ANALYSIS RESULTS

The soil vapor samples were analyzed for a list of CVOCs via EPA Method TO-15. The following table presents only the contaminants identified above the laboratory method detection limits:

Table 4.2 – Soil Vapor Analytical Results

SAMPLE ID:	CAS	EPA VISL Non-Residential	SV-1		SV-2	
LAB ID:			L1949383-01		L1949383-02	
COLLECTION DATE:			10/21/2019		10/21/2019	
ANALYTE		(ug/m3)	Conc	Q	Conc	Q
VOLATILE ORGANICS IN AIR						
Vinyl chloride	75-01-4	93	ND		ND	
1,1-Dichloroethene	75-35-4	29200	ND		ND	
trans-1,2-Dichloroethene	156-60-5	--	ND		ND	
1,1-Dichloroethane	75-34-3	256	202		ND	
cis-1,2-Dichloroethene	156-59-2		161		1.85	
1,2-Dichloroethane	107-06-2	16	ND		ND	
1,1,1-Trichloroethane	71-55-6	730,000	ND		ND	
Trichloroethene	79-01-6	100	**2,560**		4.99	
Tetrachloroethene	127-18-4	1,570	**24,800**		235	

Notes: All results are shown in micrograms per cubic meter (ug/m^3)
ND = Non-detected above laboratory detection limits
Bold font indicates exceedance of the applicable standards
-- = No Standard for Comparison
EPA Non-Residential VISL - Commercial VISL - EPA Vapor Intrusion Screening Level for Non-Residential Target sub-slab and near-surface soil gas October 2018.

The analytical results did not reveal concentrations of CVOCs detected above the applicable EPA VISL for Non-residential use in the soil vapor samples analyzed, with the exception of PCE and TCE detected in sample SV-1.

In addition to the EPA VISL, the detected concentrations of VOCs in the soil vapor samples were compared to the New York Department of Health Soil Vapor Decision Matrices (May 2017). The concentrations of 1,1-dichloroethene, cis-(1,2)-dichloroethene, and TCE are detected above the recommended level for mitigation of 60 ug/m3 on decision Matrix A, and PCE above recommended concentration for migration of 1,000 ug/m3 on Matrix B.

Laboratory soil vapor analytical results and complete laboratory data sheets and chain-of-custody documentation are presented in Appendix C.

4.3 GROUNDWATER ANALYSIS RESULTS

The samples were analyzed for the target analytes noted in Table 3.2.2. The following table presents only the contaminants identified above the laboratory method detection limits:

Table 4.3 – Groundwater Analytical Results

SAMPLE ID:	NY-TOGS-GA	TWP-1		TWP-2		TWP-2	
LAB ID:		L1949367-02		L1949367-08		L1949367-08 R1	
COLLECTION DATE:		10/21/2019		10/21/2019		10/21/2019	
ANALYTE	(ug/l)	Conc	Q	Conc	Q	Conc	Q
VOLATILE ORGANICS BY GC/MS							
Tetrachloroethene	5	ND		**23000**	**E**	**17000**	
Vinyl chloride	2	ND		**2400**		-	-
1,1-Dichloroethene	5	ND		ND		-	-
Trichloroethene	5	ND		**2500**		-	-
cis-1,2-Dichloroethene	5	ND		**18000**		-	-
Total VOCs		-	-	45900	-	17000	-

Notes: All results are shown in micrograms per liter ug/L
ND = Non-detected above laboratory detection limits
NA = Not analyzed
E = Concentration of analyte exceeds the range of calibration curve
Bold font indicates exceedance of the (applicable standards)
NY-TOGS-GA: NY - New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.

The analytical results revealed concentrations of PCE, Vinyl Chloride, TCE, and Cis-1, 2-dichloroethene detected above the New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004, in sample TWP-2.

Laboratory groundwater analytical results and complete laboratory data sheets and chain-of-custody documentation are presented in Appendix C.

5.0 FINDINGS & CONCLUSIONS

We have performed a Phase II ESA at the property at (address) in general conformance with the scope and limitations of ASTM E1903-11 and for the following objectives:

- The primary objective of this Phase II ESA is to evaluate potential impact to the Subject Property from the recognized environmental conditions (RECs) identified in the Phase I ESA prepared by EBI (September 25, 2019) process for the purpose of providing sufficient information regarding the nature and extent of contamination to assist in making informed business decisions about the property; and where applicable, providing the level of knowledge necessary to satisfy the innocent purchaser defense under CERCLA. The investigation focused on *REC(s) at Subject Property*: 1) Existing dry cleaning facility.

Findings

The results of EBI's Phase II ESA revealed:

- On October 21, 2019, EBI conducted a Phase II ESA to assess subsurface conditions in the area of the existing dry cleaners along the western portion of the Subject Property. A total of four soil borings were advanced at the Subject Property. Groundwater was only encountered in two of the borings located in the front and rear of the dry-cleaning facility (SB-1/TWP-1 and SB-4/TWP-2) at depths of 10-feet bgs and 22-feet bgs respectively. All of the soil borings were advanced using direct push drilling methods. The samples were submitted to a New York certified laboratory, Alpha Analytical, for analyses. The soil, groundwater, and soil vapor samples were analyzed for CVOC (PCE and its daughter products) analysis via EPA Method 8260 (soil and groundwater) and via EPA TO-15 for soil vapor samples.

- The analytical results revealed that concentrations of several CVOCs detected above the laboratory detection limits in the soil samples collected. None of the concentrations were detected above the applicable New York Commercial Restricted Use Criteria in soil.

- The soil vapor analytical results revealed concentrations of PCE and TCE in sample SV-1 (24,800 ug/m3 and 2,560 ug/m3, respectively) above the EPA VISL for non-residential use of 1,570 ug/m3 and 100 ug/m3, respectively.

  For comparison purposes, the detected concentrations of PCE and TCE in the soil vapor samples were compared to the NYS DOH Decision matrices (May 2017). The detected concentrations of PCE and TCE in the soil vapor sample SV-1were detected above the RSLs minimum levels trigger the recommendation for mitigation.

- The groundwater analytical results revealed concentrations of PCE, vinyl chloride, TCE and cis-1,2-dichloroethene in sample TWP-2 in exceedance of the applicable NY-TOGS groundwater screening criteria.

Conclusions

- Based on the above information, the Subject Property has been impacted with CVOCs above the applicable groundwater screening criteria and soil gas screening criteria. The impacts are along the downgradient western property boundary along the rear of the dry-cleaning tenant space.

6.0 RECOMMENDATIONS

Based on the findings and conclusions of this Phase II ESA, EBI recommends the following:

- Based on the presence of concentrations PCE identified in sub-slab vapor, EBI recommends the implementation of vapor intrusion mitigation measures, such as the design and installation of a sub-slab-depressurization system (SSDS).

APPENDIX A
FIGURES

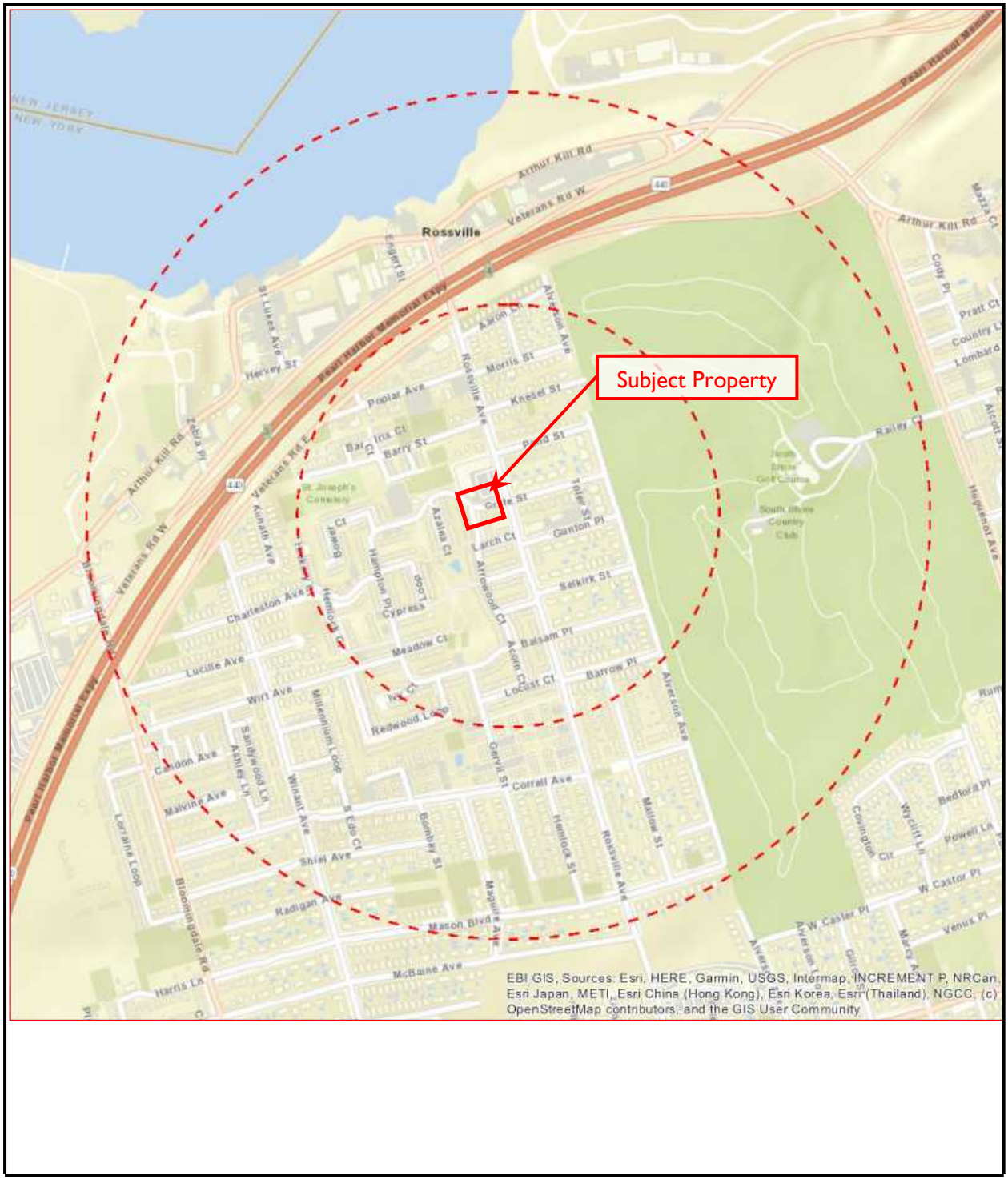

FIGURE 1 – SITE LOCATION MAP

N

Not to scale

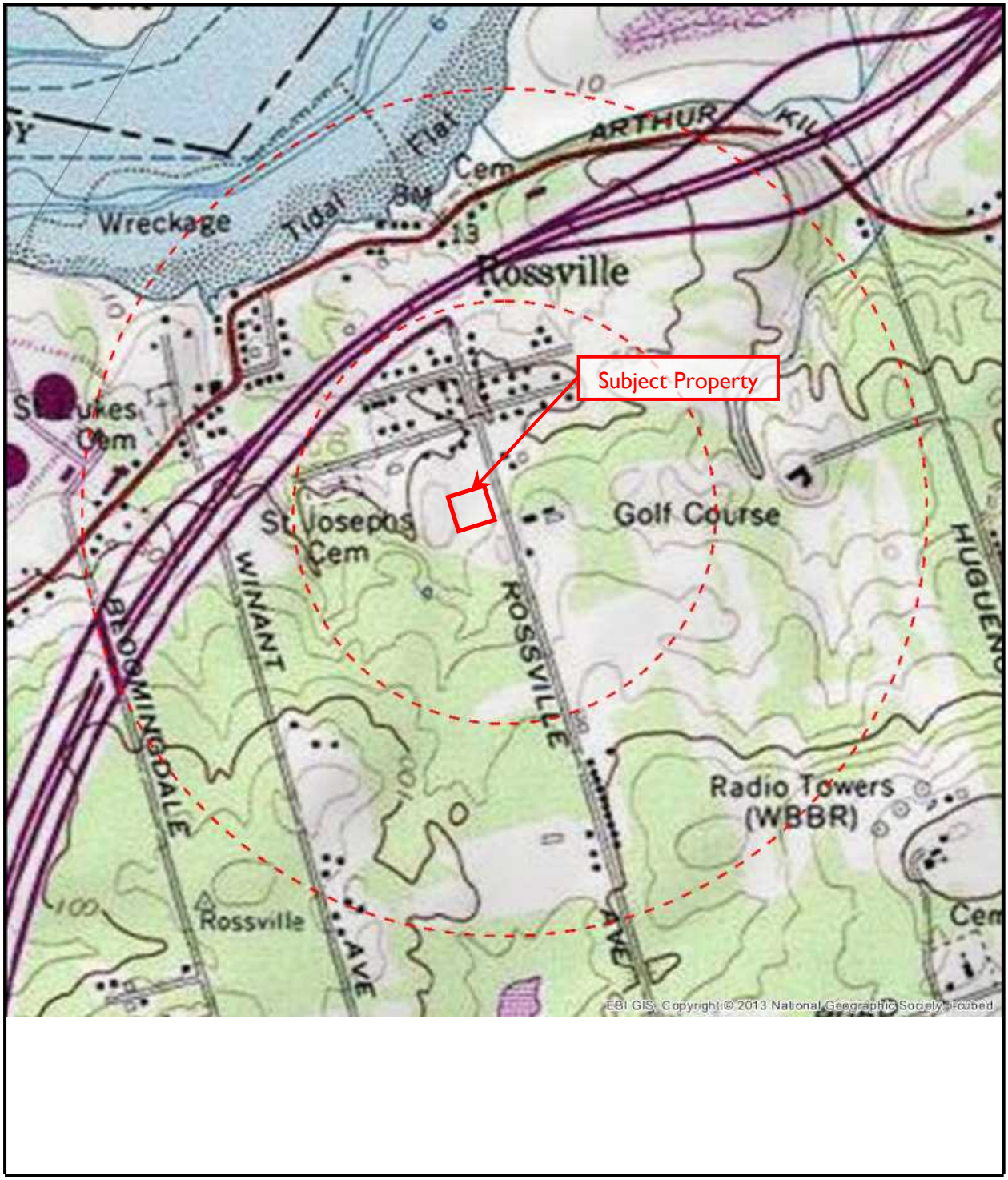

FIGURE 2 – TOPOGRAPHIC MAP

N

Not to scale

FIGURE 3 – SAMPLE LOCATION MAP

N

Not to scale

APPENDIX B
BORING LOGS

EBI Consulting

Boring ID No.: SB-1
Well ID No.: TWP-1
Sheet 1 of 1

Boring Location:	Front of Drycleaner tanant space (east)	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	10	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA	2.5'	SB-1 TWP-1	(9.5-10)	0.0		0.25' asphalt	Temporary well point TWP-1 constructed of 5-feet, 1-inch PVC, 10-slot well screen from 9-11 feet bgs	
1					0.0				
2					0.0		Reddish brown fine to medium SAND some silt, trace red shale rock		
3					0.0				
4					0.0				
5		2'			0.0				
6					0.0				
7					0.0				
8					0.0				
9					0.0				
10		2.5'			0.0		Wet		
11					0.0				
12							Soil boring SB-1_TWP-1 completed to a 11-feet bgs, groundwater encountered ~10 feet bgs		
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - —	Change in Material Type
— — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-30	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SV-1/SB-2
Well ID No.:
Sheet 1 of 1

Boring Location:	Dry cleaning machin area eastern portion of dry cleaner tenant space	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	NE	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA				0.0		0.5' concrete slab		
1		1.5			0.0				
2			SB-2	1.5-2	0.0				
3		1			0.0		Reddish brown fine to medium SAND some silt, traceclay red shale rock		
4					0.0				
5		1	SB-2	4.5-5	0.0				
6							Soil boring SB-2 completed to 5-feet bgs, refusal		
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- - - -	Change in Material Type
———	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-3	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SV-2/SB-3
Well ID No.:
Sheet 1 of 1

Boring Location:	Rear interior portion of drycleaner tanant space (west)	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	NE	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA				0.0		0.5' concrete slab		
1		1'			0.0				
2			SB-3	(1.5-2)	0.0				
3					0.0		Reddish brown fine to medium SAND some silt, trace red shale rock		
4		1.5'			0.2				
5					0.3				
6		1'			0.2				
7		1'	SB-3	(6.5-7)	0.6				
8							Soil boring SV-2_SB-3 completed to 7-feet bgs, refusal		
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - — - —	Change in Material Type
— — — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-30	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SB-4
Well ID No.: TWP-2
Sheet 1 of 1

Boring Location:	Rear of drycleaner tenant space along western property boundary	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	22	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery/ Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0					7.0		0.25' asphalt		
1					12.3		Brown fine-coarse SAND trace gravel		
2		4'			12.4			Temporary well point TWP-2 constructed of 5-feet, 1-inch PVC, 10-slot well screen from 19-24 feet bgs	
3					148.2		Brown fine to medium SAND some Meadow Mat		
4	NA				5.8				
5					42.8				
6		4.5			73.2				
7			SB-4	(6.5-7)	73.4		Reddish brown fine to medium SAND some silt, trace red shale rock		
8					62.0				
9					28.0				
10		4'			27.9				
11					9.8				
12					41.3				
13					18.8				
14		3'			23.4				
15					13.7				
16					15.8				
17					12.1				
18		3.5'			23.7				
19					10.3				
20					10.4				
21					7.4				
22		4'			6.9		Wet		
23					6.8				
24					7.4				
25							Soil boring SB-4_TWP-2 completed to a 24-feet bgs, groundwater encountered ~22 feet		
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - —	Change in Material Type
— — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-30	Very Soft
		31+	Hard

APPENDIX C
LABORATORY ANALYTICAL RESULTS

ANALYTICAL REPORT

Lab Number:	L1949367
Client:	EBI Consulting 6 Barbara Drive Warwick, NY 10990
ATTN:	Kenneth Lukas
Phone:	(631) 456-3972
Project Name:	ROSSVILLE SHOPPING CENTER
Project Number:	1219000387
Report Date:	10/24/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949367
Report Date: 10/24/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1949367-01	SB-1 (9.5-10)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 08:40	10/21/19
L1949367-02	TWP-1	WATER	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 09:30	10/21/19
L1949367-03	SB-2 (1.5-2)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 09:55	10/21/19
L1949367-04	SB-2 (4.5-5)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 10:05	10/21/19
L1949367-05	SB-3 (1.5-2)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 10:20	10/21/19
L1949367-06	SB-3 (7-7.5)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 10:30	10/21/19
L1949367-07	SB-4 (6.5-7)	SOIL	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 11:30	10/21/19
L1949367-08	TWP-2	WATER	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 12:15	10/21/19

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949367
Project Number:	1219000387	**Report Date:**	10/24/19

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:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949367
Project Number:	1219000387	**Report Date:**	10/24/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

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: Cristin Walker

Title: Technical Director/Representative Date: 10/24/19

ORGANICS

VOLATILES

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-01
Client ID: SB-1 (9.5-10)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND

Date Collected: 10/21/19 08:40
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 15:20
Analyst: NLK
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Vinyl chloride	ND		ug/kg	1.0	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
Trichloroethene	ND		ug/kg	0.50	0.14	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	94		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-02
Client ID: TWP-1
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 09:30
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/23/19 20:05
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-03
Client ID: SB-2 (1.5-2)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 09:55
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 21:03
Analyst: JC
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Tetrachloroethene	95		ug/kg	0.47	0.18	1
Vinyl chloride	ND		ug/kg	0.94	0.32	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.22	1
Trichloroethene	7.9		ug/kg	0.47	0.13	1
cis-1,2-Dichloroethene	0.17	J	ug/kg	0.94	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-04
Client ID: SB-2 (4.5-5)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 10:05
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 15:46
Analyst: NLK
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Tetrachloroethene	24		ug/kg	0.60	0.23	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
Trichloroethene	2.4		ug/kg	0.60	0.16	1
cis-1,2-Dichloroethene	0.59	J	ug/kg	1.2	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	93		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-05
Client ID: SB-3 (1.5-2)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 10:20
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 16:11
Analyst: NLK
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Tetrachloroethene	ND		ug/kg	0.41	0.16	1
Vinyl chloride	14		ug/kg	0.82	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.82	0.20	1
Trichloroethene	0.17	J	ug/kg	0.41	0.11	1
cis-1,2-Dichloroethene	28		ug/kg	0.82	0.14	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-06
Client ID: SB-3 (7-7.5)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 10:30
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 21:29
Analyst: JC
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Tetrachloroethene	5300		ug/kg	32	12.	1
Vinyl chloride	110		ug/kg	64	21.	1
1,1-Dichloroethene	ND		ug/kg	64	15.	1
Trichloroethene	520		ug/kg	32	8.7	1
cis-1,2-Dichloroethene	1900		ug/kg	64	11.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	110		70-130

Project Name: ROSSVILLE SHOPPING CENTER
Lab Number: L1949367
Project Number: 1219000387
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-07
Client ID: SB-4 (6.5-7)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Date Collected: 10/21/19 11:30
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/23/19 21:54
Analyst: JC
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Tetrachloroethene	4700		ug/kg	28	11.	1
Vinyl chloride	2700		ug/kg	55	18.	1
1,1-Dichloroethene	ND		ug/kg	55	13.	1
Trichloroethene	660		ug/kg	28	7.6	1
cis-1,2-Dichloroethene	8400		ug/kg	55	9.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	113		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-08 D2 Date Collected: 10/21/19 12:15
Client ID: TWP-2 Date Received: 10/21/19
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/19 11:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	23000	E	ug/l	50	18.	100
Vinyl chloride	2400		ug/l	100	7.1	100
1,1-Dichloroethene	ND		ug/l	50	17.	100
Trichloroethene	2500		ug/l	50	18.	100
cis-1,2-Dichloroethene	18000		ug/l	250	70.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	114		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-08 D
Client ID: TWP-2
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND

Date Collected: 10/21/19 12:15
Date Received: 10/21/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/23/19 20:31
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	17000		ug/l	120	45.	250

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/23/19 11:16
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,08 Batch: WG1299687-5					
Tetrachloroethene	ND		ug/l	0.50	0.18
Vinyl chloride	ND		ug/l	1.0	0.07
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Trichloroethene	ND		ug/l	0.50	0.18
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/23/19 14:29
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05 Batch: WG1299779-5					
Tetrachloroethene	ND		ug/kg	0.50	0.20
Vinyl chloride	ND		ug/kg	1.0	0.34
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
Trichloroethene	ND		ug/kg	0.50	0.14
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/23/19 20:38
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03 Batch: WG1300105-5					
Tetrachloroethene	ND		ug/kg	0.50	0.20
Vinyl chloride	ND		ug/kg	1.0	0.34
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
Trichloroethene	ND		ug/kg	0.50	0.14
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	110		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/23/19 20:38
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06-07 Batch: WG1300107-5					
Tetrachloroethene	ND		ug/kg	25	9.8
Vinyl chloride	ND		ug/kg	50	17.
1,1-Dichloroethene	ND		ug/kg	50	12.
Trichloroethene	ND		ug/kg	25	6.8
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	110		70-130

Project Name: ROSSVILLE SHOPPING CENTER **Lab Number:** L1949367

Project Number: 1219000387 **Report Date:** 10/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/24/19 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1300204-5					
Tetrachloroethene	ND		ug/l	0.50	0.18
Vinyl chloride	ND		ug/l	1.0	0.07
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Trichloroethene	ND		ug/l	0.50	0.18
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,08 Batch: WG1299687-3 WG1299687-4								
Tetrachloroethene	85		82		70-130	4		20
Vinyl chloride	100		100		55-140	0		20
1,1-Dichloroethene	87		89		61-145	2		20
Trichloroethene	90		92		70-130	2		20
cis-1,2-Dichloroethene	96		96		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	122		125		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05 Batch: WG1299779-3 WG1299779-4								
Tetrachloroethene	84		82		70-130	2		30
Vinyl chloride	91		89		67-130	2		30
1,1-Dichloroethene	90		88		65-135	2		30
Trichloroethene	92		91		70-130	1		30
cis-1,2-Dichloroethene	94		94		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		90		70-130
Toluene-d8	94		95		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	92		93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03 Batch: WG1300105-3 WG1300105-4								
Tetrachloroethene	104		105		70-130	1		30
Vinyl chloride	93		92		67-130	1		30
1,1-Dichloroethene	101		101		65-135	0		30
Trichloroethene	109		108		70-130	1		30
cis-1,2-Dichloroethene	108		108		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	119		120		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	114		116		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06-07 Batch: WG1300107-3 WG1300107-4								
Tetrachloroethene	104		105		70-130	1		30
Vinyl chloride	93		92		67-130	1		30
1,1-Dichloroethene	101		101		65-135	0		30
Trichloroethene	109		108		70-130	1		30
cis-1,2-Dichloroethene	108		108		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	119		120		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	114		116		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1300204-3 WG1300204-4								
Tetrachloroethene	89		91		70-130	2		20
Vinyl chloride	100		95		55-140	5		20
1,1-Dichloroethene	100		92		61-145	8		20
Trichloroethene	93		93		70-130	0		20
cis-1,2-Dichloroethene	94		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		109		70-130
Toluene-d8	103		105		70-130
4-Bromofluorobenzene	106		105		70-130
Dibromofluoromethane	109		109		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-01
Client ID: SB-1 (9.5-10)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 08:40
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.6		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-03
Client ID: SB-2 (1.5-2)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 09:55
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.1		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-04
Client ID: SB-2 (4.5-5)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 10:05
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.3		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-05
Client ID: SB-3 (1.5-2)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 10:20
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.7		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-06
Client ID: SB-3 (7-7.5)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 10:30
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.3		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949367
Report Date: 10/24/19

SAMPLE RESULTS

Lab ID: L1949367-07
Client ID: SB-4 (6.5-7)
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil

Date Collected: 10/21/19 11:30
Date Received: 10/21/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.2		%	0.100	NA	1	-	10/22/19 02:33	121,2540G	YA

Lab Duplicate Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949367

Report Date: 10/24/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-07 QC Batch ID: WG1298921-1 QC Sample: L1949374-01 Client ID: DUP Sample						
Solids, Total	67.8	66.8	%	1		20

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949367
Report Date: 10/24/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1949367-01A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-01B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-01C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-01D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L1949367-02A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1949367-02B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1949367-02C	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1949367-03A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-03B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-03C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-03D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L1949367-04A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-04B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-04C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-04D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L1949367-05A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-05B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-05C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-05D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L1949367-06A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-06B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-06C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-06D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949367
Report Date: 10/24/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1949367-07A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L1949367-07B	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-07C	Vial water preserved	A	NA		3.6	Y	Absent	21-OCT-19 22:46	NYTCL-8260HLW(14)
L1949367-07D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L1949367-08A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1949367-08B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1949367-08C	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949367
Project Number:	1219000387	**Report Date:**	10/24/19

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: DU Report with 'J' Qualifiers

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949367
Project Number:	1219000387	**Report Date:**	10/24/19

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.

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.

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.

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. 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 method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949367
Project Number:	1219000387	**Report Date:**	10/24/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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
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.
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.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/21/19

ALPHA Job #: L1949367

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

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

Client Information

Client: EBI
Address: 6 Barbara Dr. Warwick NY 10990
Phone: 6314563972
Fax:
Email: KLukas@ebiconsulting.com

Project Information

Project Name: Rossville Shopping Center
Project Location: 990-1026 Rossville Ave. Staten Island
Project #: 1219000387
(Use Project name as Project #)
Project Manager:
ALPHAQuote #:

Turn-Around Time

Standard
Rush (only if pre approved)
Due Date: 10-24
# of Days:

Deliverables

ASP-A
ASP-B
EQuIS (1 File)
EQuIS (4 File)
Other

Billing Information

Same as Client Info
PO #

Regulatory Requirement

NY TOGS
NY Part 375
AWQ Standards
NY CP-51
NY Restricted Use
Other
NY Unrestricted Use
NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
NJ
NY
Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

VOCs (PCE and daughter products)

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs	Sample Specific Comments	Total Bottle
49367-01	SB-1 (9.5-10)	10-21-19	840	SO	KL	X		
-02	TWP-1		930	GW	KL	X		
-03	SB-2 (1.5-2)		955	SO	KL	X		
-04	SB-2 (4.5-5)		1005	SO	KL	X		
-05	SB-3 (1.5-2)		1020	SO	KL	X		
-06	SB-3 (7-7.5)		1030	SO	KL	X		
-07	SB-4 (6.5-7)		1130	SO	KL	X		
-08	TWP-2		1215	GW	KL	X		

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	10-21-19 1437	MAPA	10/21/19 1437
	10-21-19 1437		10/21/19 1700
	10/21/19 2140		10/21/19 2140

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1949383
Client:	EBI Consulting 6 Barbara Drive Warwick, NY 10990
ATTN:	Kenneth Lukas
Phone:	(631) 456-3972
Project Name:	ROSSVILLE SHOPPING CENTER
Project Number:	1219000387
Report Date:	10/23/19

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: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949383
Report Date: 10/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1949383-01	SV-1	SOIL_VAPOR	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 08:18	10/21/19
L1949383-02	SV-2	SOIL_VAPOR	990-1026 ROSSVILLE AVE., STATEN ISLAND	10/21/19 08:20	10/21/19

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949383
Project Number:	1219000387	**Report Date:**	10/23/19

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:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949383
Project Number:	1219000387	**Report Date:**	10/23/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on October 18, 2019. The canister certification results are provided as an addendum.

L1949383-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 10/23/19

AIR

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949383
Report Date: 10/23/19

SAMPLE RESULTS

Lab ID: L1949383-01 D
Client ID: SV-1
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/22/19 22:58
Analyst: RY

Date Collected: 10/21/19 08:18
Date Received: 10/21/19
Field Prep: Not Specified

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								
Vinyl chloride	ND	9.60	--	ND	24.5	--		47.98
1,1-Dichloroethene	ND	9.60	--	ND	38.1	--		47.98
trans-1,2-Dichloroethene	ND	9.60	--	ND	38.1	--		47.98
1,1-Dichloroethane	50.0	9.60	--	202	38.9	--		47.98
cis-1,2-Dichloroethene	40.7	9.60	--	161	38.1	--		47.98
1,2-Dichloroethane	ND	9.60	--	ND	38.9	--		47.98
1,1,1-Trichloroethane	ND	9.60	--	ND	52.4	--		47.98
Trichloroethene	477	9.60	--	2560	51.6	--		47.98
Tetrachloroethene	3650	9.60	--	24800	65.1	--		47.98

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	103		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	101		60-140

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949383
Report Date: 10/23/19

SAMPLE RESULTS

Lab ID: L1949383-02
Client ID: SV-2
Sample Location: 990-1026 ROSSVILLE AVE., STATEN ISLAND
Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/22/19 21:41
Analyst: RY

Date Collected: 10/21/19 08:20
Date Received: 10/21/19
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	0.467	0.200	--	1.85	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	0.929	0.200	--	4.99	1.07	--		1
Tetrachloroethene	34.7	0.200	--	235	1.36	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	102		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	100		60-140

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387
Lab Number: L1949383
Report Date: 10/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/22/19 14:38

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): 01-02 Batch: WG1299220-4								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER

Project Number: 1219000387

Lab Number: L1949383

Report Date: 10/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1299220-3								
Vinyl chloride	98		-		70-130	-		
1,1-Dichloroethene	98		-		70-130	-		
trans-1,2-Dichloroethene	92		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
cis-1,2-Dichloroethene	104		-		70-130	-		
1,2-Dichloroethane	97		-		70-130	-		
1,1,1-Trichloroethane	84		-		70-130	-		
Trichloroethene	98		-		70-130	-		
Tetrachloroethene	95		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949383
Report Date: 10/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1299220-5 QC Sample: L1949383-02 Client ID: SV-2						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.467	0.476	ppbV	2		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	0.929	0.964	ppbV	4		25
Tetrachloroethene	34.7	34.6	ppbV	0		25

Project Name: ROSSVILLE SHOPPING CENTER

Lab Number: L1949383

Project Number: 1219000387

Report Date: 10/23/19

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
L1949383-01	SV-1	0402	Flow 1	10/18/19	304883		-	-	-	Pass	144	156	8
L1949383-01	SV-1	2036	2.7L Can	10/18/19	304883	L1946760-09	Pass	-28.0	-5.1	-	-	-	-
L1949383-02	SV-2	0316	Flow 1	10/18/19	304883		-	-	-	Pass	144	159	10
L1949383-02	SV-2	2029	2.7L Can	10/18/19	304883	L1946760-09	Pass	-28.5	-2.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/09/19 20:24
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
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: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
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: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
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	102		60-140
Bromochloromethane	104		60-140
chlorobenzene-d5	102		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/09/19 20:24
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1946760

Project Number: CANISTER QC BAT **Report Date:** 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
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								
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
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1946760
Report Date: 10/23/19

Air Canister Certification Results

Lab ID: L1946760-09
Client ID: CAN 2297 SHELF 5
Sample Location:

Date Collected: 10/08/19 09:00
Date Received: 10/08/19
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								
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	104		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	104		60-140

Project Name: ROSSVILLE SHOPPING CENTER
Project Number: 1219000387

Lab Number: L1949383
Report Date: 10/23/19

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(*)
L1949383-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1949383-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949383
Project Number:	1219000387	**Report Date:**	10/23/19

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:	ROSSVILLE SHOPPING CENTER	**Lab Number:**	L1949383
Project Number:	1219000387	**Report Date:**	10/23/19

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.

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.

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.

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 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
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.
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

ALPHA ANALYTICAL — CHAIN OF CUSTODY

PAGE 1 OF 1

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

Date Rec'd in Lab: 10-22-19

ALPHA Job #: L1949383

Client Information

Client: EBI
Address: 6 Barbara Dr. Warwick NY 10990
Phone: 6314563972
Fax:
Email: klukas@ebiconsulting.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Rossville Shopping Center
Project Location: 990-1006 Rossville Ave Staten Island
Project #: 1219000307
Project Manager: JKlinder@ebiconsulting.com
ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved)
Date Due: 10-24-19 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 #: EBI

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-15 Cubes	TO-15 SIM	APH Subset Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
49383-01	SV-1	10-21-19	805	818	-26.4	-3.5	SV	KL	1.6	2036	0402	X					
02	SV-2	10-21-19	805	820	-30.2	-3.42	SV	KL	1.6	2029	0316	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
	10-21-19 1437	MUNA	10/21/19 1437
	10-21-19 1437	2 coolers 2.7°	
2 coolers 0.1°C		AAL	10-22-19 0130

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.

Form No: 101-02 Rev: (25-Sep-15)

APPENDIX D
PROFESSIONAL QUALIFICATIONS

EBI Consulting
environmental | engineering | due diligence

Kenneth Lukas, E.I.T.
Project Engineer
Burlington, MA 01803
Mobile: 631.456.3972

Summary of Experience

Mr. Lukas is a Project Engineer specializing in Phase I and Phase II Environmental Site Assessments in the commercial real estate, telecommunications, and environmental health and safety industries. Mr. Lukas's experience includes five years of field work and report preparation associated with NYDEC and NJDEP sites, under the guidance of an LSRP. Mr. Lukas has conducted numerous pre-acquisition/due diligence environmental assessments for a wide range of properties throughout New York and New Jersey. These assessments have been performed to evaluate site conditions, potential off-site liabilities, historic site and vicinity usage, environmental control systems, and site remediation costs in order to advise prospective buyers, lenders, current operators, and owners of potential and existing environmental concerns. Sites inspected include multi-family residential, commercial, retail and industrial properties.

Relevant Project Experience

Phase II Subsurface Investigations: Mr. Lukas has completed several Phase II and Phase III subsurface investigation and remediation projects, with extensive field and project management experience associated with the following: soil, groundwater, soil vapor, and surface water monitoring; UST closure; monitoring well abandonments; operation and maintenance of groundwater pump and treat systems; and construction site air monitoring. Mr. Lukas has prepared project schedules, work plans, soil management plans, NJDEP Site Investigation Reports, Remedial Action Work Plans, Remedial Investigation Reports, and Response Action Outcomes reports.

Pre-development Phase II Environmental ESA and Waste Characterization Sampling, Manhattan New York: Completed field work including groundwater well installation and monitoring, geological soil borings, and sub slab/near slab soil vapor point installation and sampling. Assisted in the completion of a Soil Management Plan (SMP), and conducted community air monitoring during trucking and off-site disposal of varying levels of impacted soil.

Groundwater Monitoring for long term NJDEP site Remediation, Montville New Jersey: Developed a sampling schedule and managed a field crew for the collection of multiple rounds of groundwater sampling, to determine large scale air sparge system and pump and treat system effectiveness.

Sub slab Depressurization System pilot Test and OM&M: Completed sampling and OM&M of three active sub-slab depressurization systems to mitigate vapor migration from beneath the sub-slab into the building's interior space.

Education

Bachelors of Science, Environmental Resources Engineering, S.U.N.Y. College of Environmental Science and Forestry, Syracuse NY

Professional Training/Affiliations

40 hour HAZWOPER training certification- 29 CFR 1910.120

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James Klinder, LSRP
Senior Project Manager
Stanhope, NJ 07874
Mobile: 201.220.2679

Summary of Experience

Mr. Klinder is a Licensed Site Remediation Professional (LSRP) in the state of New Jersey with 20 years of Environmental Consulting experience in New Jersey, New York, Pennsylvania and Maryland. Mr. Klinder has served as project manager for several hundred Phase I and Phase II environmental assessments required for financial and real estate transactions, including those properties in New Jersey subject to the Industrial Site Recovery Act (ISRA).

Mr. Klinder has extensive experience as both Project Manager and Site Health and Safety Officer for major urban development projects and Brownfields redevelopment sites along the Hudson River waterfront and abroad. Responsibilities included initial site characterization, development and coordination of all onsite environmental activities, health and safety supervision of construction personnel, and post-development biennial certifications, if warranted.

As a Senior Project Manager at EBI, Mr. Klinder's duties include initial site characterization, development, and coordination of all onsite environmental activities.

Relevant Project Experience

Preliminary Assessments and Environmental Site Assessments

Performed numerous Preliminary Assessments in accordance with New Jersey Technical requirements and Environmental Site Assessments per ASTM Phase I ESA guidelines for various entities including the real estate community, regional and local financial institutions, and insurance companies in New York, New Jersey, Pennsylvania, and Maryland.

Site Investigation - Designed and implemented detailed soil and groundwater quality investigations involving the installation and sampling of test pits, soil borings, and ground water monitoring wells to assess the extent of onsite contamination and determine hydraulic parameters. Performed vapor intrusion assessments and investigations via sub-slab and indoor air sampling.

Site Remediation – Developed and implemented remediation work plans including source removal, installation of pumping/treatment systems, engineering and/or institutional controls, and routine monitoring and reporting. Performed UST closure activities in accordance with all local, state, and federal regulations. Closure activities included permitting, UST removal oversight, soil removal/staging, post-excavation soil sampling, clean fill deliveries, and reporting.

Regulatory Compliance - Maintained regulatory compliance for several facilities that utilize extraordinarily hazardous substances in accordance with the New Jersey Toxic Catastrophe Prevention Act Program Rules using air dispersion modeling, risk assessments, risk management programs, and annual reporting.

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James Klinder, LSRP
Senior Project Manager
Stanhope, NJ 07874
Mobile: 201.220.2679

Selected Projects:

- Kuser Road Redevelopment, Soil and Groundwater Remediation, Landfill Evaluation, Hamilton, NJ (LSRP)
- Shire Road, Drum Dump Soil and Groundwater Remediation, New Holland, NJ (LSRP)
- Niagara Falls Redevelopment, Environmental Due Diligence for Numerous Sites Spanning Several City Blocks, Niagara Falls, NY
- Riker's Island Central and Main Facilities, Bronx, NY
- Seward Park Redevelopment Due Diligence, Manhattan, NY
- 1127 Flatbush Avenue Redevelopment, New York, NY
- Orange and Rockland Non-MGP Sites, Goshen, West Warwick, Ringwood
- Orange and Rockland Utilities – Goshen, Warwick, Lovett, New Hempstead Substations
- Con Edison Laconia Substation, Bronx, NY
- New Jersey Turnpike Interchange 8, Soil, Groundwater, and Surface Water Remediation, East Windsor Township, NJ
- Pan Graphics Soil, Groundwater, Surface Water Remediation Sites, Lodi and Garfield Facilities, NJ
- Thorlabs Redevelopment Sites – Newton and Andover, NJ
- Former Flintkote Facility, LNAPL, PCB, Soil and Groundwater Remediation, East Rutherford, NJ
- Tinton Falls Plaza Site, Chlorinated Solvents Remediation, Tinton Falls, NJ
- Tiger Run Service Stations – Tenafly, Ridgewood, Fairfield, Paramus, NJ (LSRP)
- Hess Terminal – Edgewater, NJ
- Farmland Dairies, Toxic Catastrophe Prevention Act Compliance for Extraordinarily Hazardous Substances, Wallington, NJ
- Quaker Harbor Petroleum Corp., Soil and Groundwater Remediation, Burlington, NJ (LSRP)
- 250 Hanover Road, Shooting Ranges Soil and Groundwater Remediation, Hanover, NJ (LSRP)
- Cargo Logistics, Soil and Groundwater Remediation, Soil Vapor Intrusion Investigation, Edison, NJ (LSRP)
- Charles Bahr & Son, Inc. Lumber Yard and Heating Oil Business, Soil and Groundwater Remediation/Redevelopment Project, Verona, NJ (LSRP)
- Sun Valley Plaza Redevelopment Project, Historic Fill Site Investigation and Remedial Action, Florham Park, NJ (LSRP)
- 398-406 Forest Ave, Pesticides/Arsenic/Lead Remediation, Paramus, NJ (LSRP)
- Kingston Pointe Redevelopment, Soil Remediation/Capping, North Bergen, NJ
- Camelot Cove Redevelopment, Soil Remediation/Capping, North Bergen, NJ
- Port Imperial North Redevelopment, Soil Remediation/Capping Weehawken, NJ
- Port Imperial Ferry Corporation, Soil Remediation/Capping, Weehawken, NJ
- Liberty Plaza Redevelopment Site, Randallstown, MD

Education

B.A., Environmental Studies/Geology, Edinboro University

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James Klinder, LSRP
Senior Project Manager
Stanhope, NJ 07874
Mobile: 201.220.2679

Professional Affiliations
Association of Environmental & Engineering Geologists (AEG)
Association of Environmental Professionals (AEP)
National Environmental Policy Act (NEPA) Professional

APPENDIX E
ADDITIONAL INFORMATION (DELETE IF NOT NEEDED)

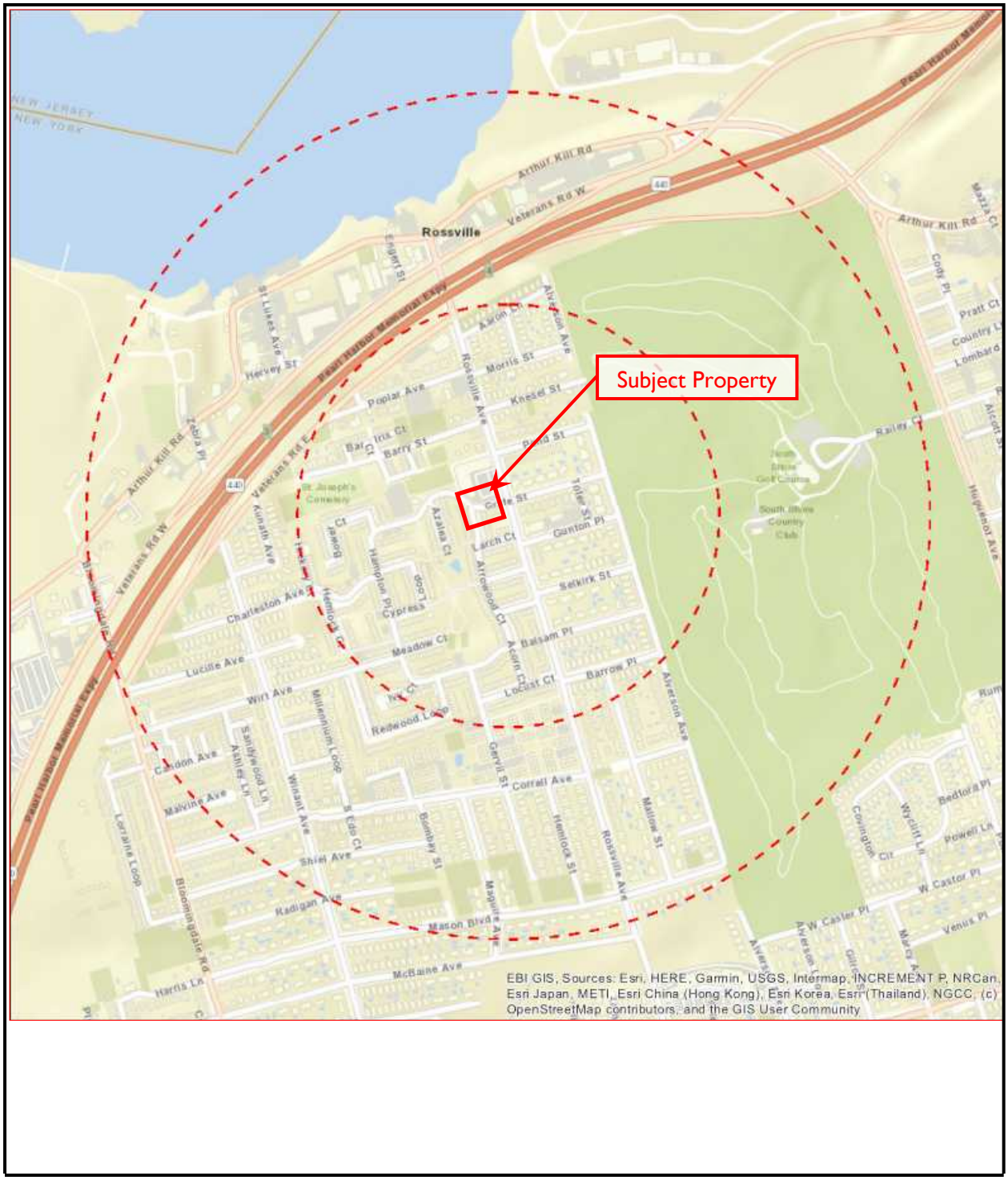

FIGURE 1 – SITE LOCATION MAP

N

Not to scale

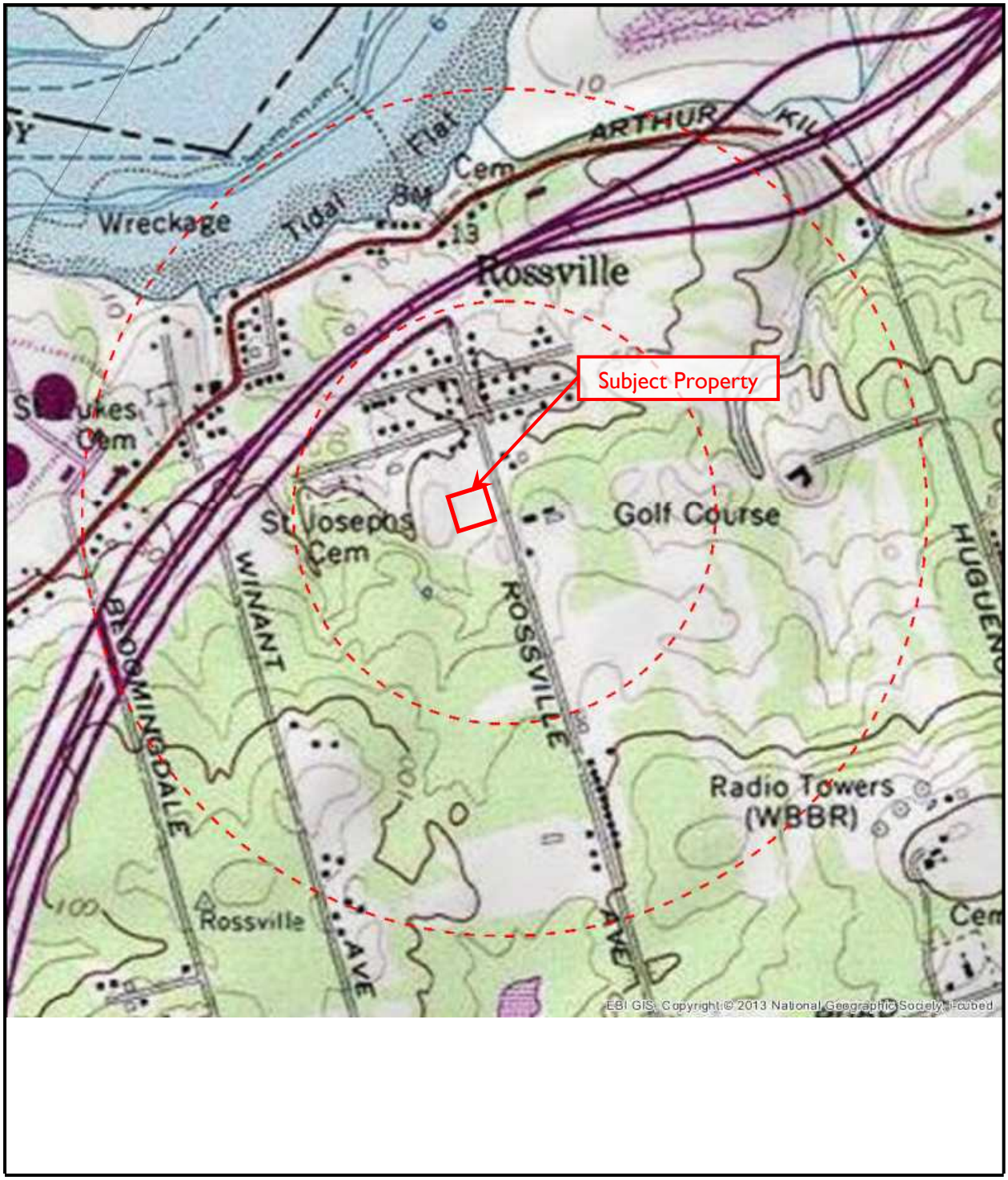

FIGURE 2 – TOPOGRAPHIC MAP

N

Not to scale

FIGURE 3 – SAMPLE LOCATION MAP

N

Not to scale

APPENDIX B
BORING LOGS

EBI Consulting

Boring ID No.: SB-1
Well ID No.: TWP-1
Sheet 1 of 1

Boring Location:	Front of Drycleaner tanant space (east)	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	10	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA	2.5'	SB-1 TWP-1	(9.5-10)	0.0		0.25' asphalt	Temporary well point TWP-1 constructed of 5-feet, 1-inch PVC, 10-slot well screen from 9-11 feet bgs	
1					0.0				
2					0.0		Reddish brown fine to medium SAND some silt, trace red shale rock		
3					0.0				
4					0.0				
5		2'			0.0				
6					0.0				
7					0.0				
8					0.0				
9					0.0				
10		2.5'			0.0		Wet		
11					0.0				
12							Soil boring SB-1_TWP-1 completed to a 11-feet bgs, groundwater encountered ~10 feet bgs		
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - —	Change in Material Type
— — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-30	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SV-1/SB-2
Well ID No.:
Sheet 1 of 1

Boring Location:	Dry cleaning machin area eastern portion of dry cleaner tenant space	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	NE	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA				0.0		0.5' concrete slab		
1		1.5			0.0				
2			SB-2	1.5-2	0.0				
3		1			0.0		Reddish brown fine to medium SAND some silt, traceclay red shale rock		
4					0.0				
5		1	SB-2	4.5-5	0.0				
6							Soil boring SB-2 completed to 5-feet bgs, refusal		
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- - - -	Change in Material Type
———	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-3	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SV-2/SB-3
Well ID No.:
Sheet 1 of 1

Boring Location:	Rear interior portion of drycleaner tanant space (west)	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	NE	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0	NA				0.0		0.5' concrete slab		
1		1'			0.0				
2			SB-3	(1.5-2)	0.0				
3					0.0		Reddish brown fine to medium SAND some silt, trace red shale rock		
4		1.5'			0.2				
5					0.3				
6		1'			0.2				
7		1'	SB-3	(6.5-7)	0.6				
8							Soil boring SV-2_SB-3 completed to 7-feet bgs, refusal		
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - — - —	Change in Material Type
— — — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

Cohesionless Density		Cohesive Consistency	
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	M/Stiff
30-49	Dense	9-15	Stiff
50+	Very Dense	16-30	Very Soft
		31+	Hard

EBI Consulting

Boring ID No.: SB-4
Well ID No.: TWP-2
Sheet 1 of 1

Boring Location:	Rear of drycleaner tenant space along western property boundary	ET Project Manager:	Project Number: 1219000387
Ground Elevation:		Dated Started: 10/21/2019	Dated Completed: 10/21/2019
Depth to First Water:	22	Drill Type: Direct Push	Borehole Dia: 2-inches
Depth to Static Water:	NA	Drill ing contractor:	
Stabilization Time:	NA	Drilling Company: Core Down Drilling LLC	
Sampler	Notes:	Driller's Name: Joe Beluccii	
Type: Continuous Core		Boring logged by: K. Lukas	
Hammer: N/A		Owner/Client Rep.: Doug King	
Fall: N/A			

Depth (feet)	Blow Counts	Recovery/ Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0					7.0		0.25' asphalt		
1					12.3		Brown fine-coarse SAND trace gravel		
2		4'			12.4			Temporary well point TWP-2 constructed of 5-feet, 1-inch PVC, 10-slot well screen from 19-24 feet bgs	
3					148.2		Brown fine to medium SAND some Meadow Mat		
4	NA				5.8				
5					42.8				
6		4.5			73.2				
7			SB-4	(6.5-7)	73.4		Reddish brown fine to medium SAND some silt, trace red shale rock		
8					62.0				
9					28.0				
10		4'			27.9				
11					9.8				
12					41.3				
13					18.8				
14		3'			23.4				
15					13.7				
16					15.8				
17					12.1				
18		3.5'			23.7				
19					10.3				
20					10.4				
21					7.4				
22		4'			6.9		Wet		
23					6.8				
24					7.4				
25							Soil boring SB-4_TWP-2 completed to a 24-feet bgs, groundwater encountered ~22 feet		
26									
27									
28									
29									
30									

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%
- — - —	Change in Material Type
— — —	Change in Deposit Type

Penetration Resistance ("Blow Counts")

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		31+	Hard